

The background of the entire page is a vibrant, abstract pattern of tropical leaves. The leaves are rendered in various colors including deep purple, teal, lime green, and orange, with some leaves having a dark outline. The pattern is dense and layered, creating a sense of depth and texture.

COMMENTARY

THE NATIONAL UNIVERSITY OF SINGAPORE SOCIETY

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SGP 4.0: AN AGENDA

**Commentary:
Volume 27, 2018
SGP 4.0: An Agenda**

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To foster a lifelong relationship with NUS and the wider graduate community

At NUSS, a lifelong relationship with NUS and the wider graduate community is achieved through two mutually reinforcing thrusts:

- promoting the interests of its members and NUS; and
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As the foremost graduate society, NUSS strives to promote the interests of its stakeholders by providing appropriate platforms for all to socialise, build networks, improve connectivity and exchange ideas through a multitude of recreational, academic, political, social and cultural activities.

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Editor's Introduction

SGP 4.0: An Agenda

Gillian Koh

Gillian KOH is Deputy Director (Research) at the Institute of Policy Studies, which is part of the National University of Singapore (NUS) where the area of civil society and its development is one of her research interests. An NUS alumna herself, she is proud to be a member of NUSS.

SGP 4.0: An Agenda

Commentary is a journal published by the National University of Singapore Society (NUSS) that seeks to stimulate intellectual development not only of its members but the broader Singaporean public too. Volume 27 is being published at a time when the country is witnessing a changing of the guard in government.

The current prime minister (PM), its third, and son of the founding one, Lee Hsien Loong, has long indicated that he is building up what is termed “the fourth generation (4G)” of leaders which itself will be led by his successor.

In the run up to the May 2011 general election, PM Lee said he was recruiting people in their early forties to form the core of that younger set of leaders.

After the September 2015 general election, he stated that this 4G team will be ready to take over from him and his peers after the next general election which must be called by April 2021 at the very latest.

He has also said time and again that he will hand over the mantle of premiership by the time he turns 70 years old in year 2022.

A month ago, on 23 November 2018, it was announced that Mr Heng Swee Keat would be first Assistant Secretary-General of the ruling People's Action Party (PAP) which makes him the presumptive successor to PM Lee.

These moves are in the spirit of the dictum of the PAP, which has been in power since self-government when Singapore was still a British colony in 1959, that the core of political leadership must be of about the same generation as the majority of its citizens; the ground should be able to identify with its leaders and vice versa.

More importantly, from its point of view, this ensures that the policy orientation as well as the political approach of the Government gels with the worldview of the majority in Singaporean society.

This political transition to the 4G leaders in Singapore is taking place in the midst of a shifting global order. The global neoliberal regime of recent decades that upholds the notion that the free market best serves its participants both economically and socially, has helped Singapore thrive as an open, trading nation. It is not clear how long more that system will hold.

The leadership renewal also coincides with a time of great technological disruption in industry which will reshape the nature of work, determine the decline and rise of business sectors, precipitate an overhaul of the landscape of media and communications, as well as redefine social and political affiliations.

Furthermore, after three generations of successful socio-economic development, this process of leadership succession

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comes at a time when there is a rising tide of concern about the distribution of the rewards of that success.

There is a worry that, all things being equal, social stratification is taking root – those from families that have done well have greater resources by which to reinforce that success and those that have not, will fall further behind.

This is likely to be reinforced by the technological disruption referred to earlier unless greater intervention is injected into the economic system – that technology will be driven by, serve and reward the “cognitive elites” best, and leave us to wonder what will become of those who are not as well-endowed be it for want of resources or opportunities in their lives.

What can the Government do to assure Singaporeans that where they begin in life does not define their destiny; that those who are determined to do better than their parents or their community whatever they perceive that to be, will succeed?

This 27th volume of *Commentary* features the views of Singaporean academics, public intellectuals and civic leaders on what they think are the most important challenges that the 4G leaders will have to address and what they believe should be the guiding governance philosophies and other policy considerations as they do so.

In their domains of expertise and interest, these authors help us to recognise that there are policy dilemmas to be resolved and strategic choices to be made in crafting Singapore under this 4G leadership or 4.0 in short form.

Commentary Volume 27 begins with the section on Politics and the lead essay by veteran journalist Han Fook Kwang. While he recognises that Singapore has been an exceptional city-state because it has been led by exceptional leaders of the past, he asks if the younger cohort of leaders faces the threat of groupthink given that its members have the same backgrounds – they tend to be ex-civil servants and former military top-brass. If the global and domestic policy contexts are changing, do these 4G leaders have the wherewithal to abandon old policy dogma or will they fall into the trap of seeking to maintain status quo having been products of it.

Han argues that perhaps the best way to avoid that danger is to look to the citizenry instead. Provocatively, he says, “A strong resilient people with the right values and sense of community may be a better bet for the future than one overly dependent on good leaders given our stage of development. Leaders can come and go, and the great ones are as much a stroke of good fortune as anything else. But if a people develop the instincts for survival, the benefits will be longer lasting.”

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Kenneth Paul Tan too recognises the threat of the ossification of the policy frameworks but identifies a more insidious scenario that arises from the natural extension of the neoliberal meritocracy that has been at play in Singapore over the past 53 years of its life. While those who have made good or are in the “winners’ circle” believe that this was the result of their superiority and hard work, everyone else is caught up in self-doubt; they “helplessly and grudgingly come to accept their failures as a result of their own shortcomings”, Tan imagines. This erodes a sense of community, solidarity and moral responsibility.

Unlike Han, Tan says that “all that needs to happen is for a charismatic demagogue to take advantage of visceral feelings of hardship and resentment, with a view to mobilising a collective sense of victimhood directed against a demonised establishment.” Singapore will splinter unless this new generation of leaders learn to think and think afresh, allow for the spirit of creativity and optimism to guide them and become transformational in what they do. They must not allow old state dogma masked as pragmatism to tie them down; market fundamentalism to blunt moral courage; and some vacuous notion of the “middle ground” to be a crutch to authentic deliberation and engagement on the real policy issues facing the country and its citizens. Tan appeals for a “thoughtful pragmatism” to take over SGP 4.0. But

how do we, as agents of change in government or as citizens achieve that?

Here, Alvin Pang, a poet and social changemaker provides us the intellectual tool with which to flip that mental switch on. He explains how the usual and dominant narratives (tales we tell ourselves) rely on the technique of “foreshadowing”. We understand things in the present or at the end of a story as having been signalled as inevitable by their appearance in the past. He explains that in light of this hindsight, what has happened today becomes all too easily attributable to specific events or actions in the past. This “lulls us into having a distorted, backwards view of time”.

Far more transformational, creative and energising is the alternative notion of “sideshadowing” that is probably more true to life. This is where it is possible that characters introduced somewhere in the story may never be mentioned again; an action that seemed charged with import turns out to have no impact on the community at hand; laws and conventions are detailed but never enforced; words uttered with feeling between two rivals may be forgotten by the end of the story, Pang explains.

This mindset allows us to recognise that there are a range of outcomes that we face all the time and that we should not, as Pang puts it, “overdetermine the nature of cause and effect”; to indulge in fatalism. This provides room for

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autonomy and agency; for generative thinking and exciting new “side stories” of achievement to emerge.

These three essays provide the critical intellectual struts for the domain-specific chapters that follow. In the second section on Foreign Relations, Parag Khanna helps us uncover our special national brand of diplomacy which he feels can be put to good effect in fostering greater understanding, peace and cohesion in our region while Peh Shing Huei reminds us of the need for new generative thinking when it comes to adapting to perhaps the most significant geopolitical shift of our times here in Asia – the revival of China.

The third section on Technology and the Economy discusses in very accessible chapters what the new fourth Industrial Revolution of robotics and artificial intelligence (AI) could mean for Singapore, its business leaders, policymakers, labour and citizens. Charlie Ang provides an optimist's overview of those developments for the economy as well as society and describes what he thinks must be a holistic policy approach to harnessing them – from Economy 4.0 to Education 4.0, Talent 4.0 to Society 4.0. The agenda is clear but he is also clear that it requires (and there's the two words again), “transformational leadership” to ensure these benefit Singapore.

Lawrence Liew who heads a government

body promoting AI, makes more pointed recommendations on the best approach to adopting Industry 4.0 nationally in the second essay of this section. These are to always start with taking an open source model in the selection of software so that the adoption of solutions can be as universal and mass-based as possible; to be bold and agile which means that industry should try new things fast to fail fast and learn fast; and finally, to recognise that there is need to provide broad, almost universal social or skills training support so that as many Singaporeans as possible can be trained in the new technology and see their future in it rather than be anxious and wish it away.

We all know that Singapore is not an island unto itself but instead critically depends on regional and international markets in order to thrive. David Skilling reminds us of the real implications of being a small economy in the midst of the changing trade conditions and technological disruptions. He highlights valuable lessons from other small advanced economies he feels can apply to SGP 4.0.

They are first, to build deep value chains in selected clusters of industries in Singapore so that there is a critical mass of productive activity that is difficult to replicate elsewhere; second, to enhance the regionalisation of Singapore firms; and third, to keep committed to generating inclusive, quality growth.

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Skilling notes, “Many small advanced economies explicitly combine a commitment to flexible, open markets, comprehensive social insurance, active labour market policy, and high quality education. This has contributed to a compressed income distribution even in the context of globalisation and technological change.” To avoid the spectre of the sort of disgruntlement that Tan describes, this point of managing income and wealth inequality bears repeating.

The next two chapters provide important follow-up to the second point that Skilling raises. Sanchita Basu Das who is an expert on the ASEAN region and has been writing extensively on the digital economy highlights the opportunities that lie out there. While the dispersion of Industry 4.0 is happening at different paces in different countries, she highlights how Singapore has already been investing and promoting the use of smart technology and industry at home, and in the region. The chapter provides a useful update on the progress towards e-commerce and the emergence of a network of 26 smart cities across Southeast Asia which forms the beachhead into this new economic order.

The chapter that records a conversation with Kurt Wee, President of Singapore's Association of Small and Medium Enterprises has with *Commentary Volume 27* discusses the need to invest even more in the old world kind of

networks – those among Singaporean businessmen across the region who can advise leaders of small and medium-sized enterprises (SMEs) seeking to make the leap into new markets.

Wee believes that the community-building effort can benefit from the support of enterprising civil servants of the promotion body for the sector called Enterprise Singapore but the broader context in Government has to be that the 4G leaders avoid being conservative and instead are bold and imaginative in envisioning the future of Singapore SMEs.

The final section of this year's journal is titled “Society”. The first essay is contributed by one of Singapore's most seasoned social workers, Gerard Ee. Ee has pioneered an “assets-based”, social capital-driven approach to social development and we are privileged to have him explain the paradigm to us.

Instead of seeing the needy as disadvantaged and dependent, Ee has built a community among them by helping them uncover how they can give of themselves, pool their resources, competencies and time to address each other's needs.

Ee writes, “Leadership, in this light, is about convening gatherings where people from different socio-economic backgrounds and ethnicity can understand each other better and co-create solutions. The different gifts and

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relationships among constituents should be mapped, inventories should be set-up and updated regularly; these gifts and relationships should be celebrated, activated and treasured as assets a community can draw upon to solve its own problems or enrich its life." He challenges the 4G leaders to play such a role and sets out key conditions under which they might be succeed in doing so.

Lydia Lim, another veteran journalist to contribute to *Commentary Volume 27*, records that there is in fact a yearning among citizens, especially young citizens for their political leaders to treat them as "adults". In a moving essay about Singaporeans' striving to be heard, to act independently and know that there is faith in their ability to contribute and have a stake in the country, Lim says that the fundamental leadership challenge facing the 4G leaders is for them to "shift away from an old command and control model and towards a new mode of engagement, which involves empowering individuals to be active citizens... individual citizens' desire to speak up and challenge the status quo should not be regarded as a threat but as a source of strength. It reflects their willingness to step up and claim the right and responsibility of being independent - rather than dependent - citizens, who take ownership of Singapore's future, in good times and bad."

Good, active, resilient citizens, those with a strong sense of national identity

need that time, space and faith in themselves in order to emerge. Sometimes it seems that it is the political leaders that stymie that growth especially when citizens feel ready, but the 4G leaders can do things differently. That's the hope for sure.

And, there cannot be better encouragement than to read about how a group of young volunteers has taken it upon themselves to be partners of support to a community of residents; to help them settle into their new rental flat estate in Cassia Crescent from their old ones in Dakota Crescent and Sims Drive. They do not just talk the talk but they sacrificially walk the talk, devising interesting programmes to provide practical assistance that empowers these residents to lead the lives they wish for.

Careful not to take over work that is already or ought to be the responsibility of formal social service organisations, and also not to create forms of dependency among beneficiaries, they run one programme called *Twinkle Wishes* which provides end-of-life support to residents, increasing awareness and access to planning instruments such as Advanced Care Planning and the Lasting Power of Attorney. This helps residents use these instruments to ensure that their end-of-life wishes will be honoured.

The authors, Lim Jingzhou and Rocky Howe, who are members of the Cassia Resettlement Team are quick to say that

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their work has benefitted them and helped them grow; they now better understand the different social challenges different people face - from housing to ageing to healthcare; challenge existing narratives and policy approaches; and they say, "develop a sense of agency that tells us we can believe in our ability to care for others and advocate social change".

They appeal to the 4G leaders to welcome open and transparent engagement on the shared social concerns, so that such civic action that builds communities of care as well as a sense of belonging can thrive in SGP 4.0.

Laavanya Kathiravelu offers a thoughtful essay on what more we can all do – state and society – to enhance the sense of social inclusion of the almost invisible transient migrant workers in our midst. While they perform much needed duties and this is increasingly recognised, Kathiravelu asks if it is possible for us to provide better welfare mechanisms, to deal with overwork and lack of representation of Singapore's low-waged, low-skilled foreign workers against errant employers as well as abuse wherever these might arise. She also asks if temporary migrants could be integrated into mainstream Singaporean society through their inclusion in neighbourhood-level activities. This she argues, would be for mutual benefit in the many ways that she sets out in the chapter.

The final chapter of the journal touches on how Singaporeans relate to nature. In an age where the effects of climate change that have resulted from human activities are more acutely felt, Leong Ching describes Singaporeans' environment identity as one that extracts natural resources to maintain human comfort and quality of life.

She cites a survey conducted by Singapore's National Climate Change Secretariat in 2013, where it was found that while 70.2 percent of Singaporeans were concerned about climate change, and 78.5 percent believed that they would be adversely affected it, only 39.2 percent felt that individuals were mainly responsible for taking action, while a larger proportion felt that it was up to the Government, businesses, or non-government organisations to do so.

Leong says this shows that "while Singaporeans are certainly aware of the threat of climate change, a majority do not feel personally culpable or moved to take action". 4G leaders will find it a challenge to shift policy towards environmental sustainability. The irony of course, would be that the environment that we use for our comfort will in turn put our human existence in peril, but it is difficult, it would appear, to get Singaporeans to believe that they can make a difference through their actions as citizens of a small island state.

What is the story we wish to write about

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SGP 4.0 ecologically? If we do our part towards sustainability, will it not strengthen the moral basis on which we appeal to the rest of the world to play their part?

SGP 4.0 is most certainly not a foregone conclusion but a vision, and several unfolding “side-stories”, written by us and the leaders we give our consent to act on our behalf. *Commentary Volume 27* provides a wide range of views to form an agenda for change – change towards inclusion, empowerment, and an energised government and citizenry. We thank all the authors for contributing to the volume. I thank the NUSS publication team for their invaluable support in getting it out to you, the reader. We hope you find its contents as stimulating and inspirational as we have.



Politics

The 4G Question: Whither Exceptional Singapore

Han Fook Kwang

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The 4G Question: Whither Exceptional Singapore

It is all quiet on the leadership transition front in Singapore. That is how the fourth generation (4G) leaders would like it. Leave them alone to decide who among them will become leader, they requested, after questions were raised about the progress of the search for a successor to the current premier.

In a statement on 4 January 2018, they said:

The younger ministers are keenly aware leadership succession is a pressing issue and that Prime Minister (PM) Lee Hsien Loong intends to step down after the next general election. We are conscious of our responsibility, are working closely together as a team and will settle on a leader from amongst us in good time.¹

It was the first time the group, which included three ministers said to be front-runners in the selection, had spoken out about the task before them. Going by the deafening silence on the issue since then, their message seemed to have been heard and heeded.

Even PM Lee avoided talking about it in the 2018 National Day Rally when in the past he had referred to it as one of the country's most important issues.

The unspoken rule is to make it a quiet, orderly and no-surprise handover. And, that was indeed the case when on 23 November 2018 Mr Heng Swee Keat was made the ruling party's new first assistant secretary-general. His fourth generation peers said there was consensus that he was the first among equals which signalled that he is in line to succeed PM Lee in due course. Singapore's third leadership transition has been a relatively quiet one. It wasn't always like that.

The first change from founding Prime Minister Lee Kuan Yew to Goh Chok Tong was in fact quite eventful. Even though Goh seemed the obvious choice based on the appointments he held, Lee dropped a bombshell at the National Day Rally in 1988 when he declared to a nationwide audience that Goh had not been his first choice to succeed him.

He followed it up a few days later with even more surprising comments, saying Goh was not as decisive a leader as his first choice – then Finance Minister Tony Tan – and that he was “wooden” in his public communication. In the event, Goh persevered, his colleagues rallied around him, and he was inaugurated PM in 1990.

As for the second handover to the younger Lee in 2004, it was a totally predictable affair but the talk then was

¹Tham, Yuen-C and Toh, Elgin, “4G ministers say they will settle on a leader ‘in good time’; Ong Ye Kung says he has someone in mind”, 4 January 2018, *The Straits Times*.

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all about the father-son relationship. The elder Lee had to answer repeated questions about cronyism and what it meant for Singapore to have two Lees in the Cabinet.

So, what issues surround the current transition? So far, they have been pretty standard fare, with most of the questions centred around who might be the man and whether he will be up to the job. But even the who question has raised little excitement largely because none of the three – Finance Minister Heng Swee Keat, Trade and Industry Minister Chan Chun Sing and Education Minister Ong Ye Kung – seem to have made a deep impression on the public.

That is partly because of their relative inexperience, with Heng and Chan elected in 2011 and Ong in 2015. It also has to do with the similarities of their background – all were in the public service with Chan serving in the military.

As a result, no one stands out exceptionally. But there is a third and more important reason: The leaders have repeatedly emphasised teamwork as opposed to individual performance. PM Lee Hsien Loong has himself noted that it would be “unrealistic and impossible” to find a single candidate with all the qualities needed. He said:

What is important is the team. If among the team’s members they have enough of these qualities, are able to cooperate and together, drive Singapore forward, lead the country – this is the most crucial... We have to find a competent team that can work closely together...²

This emphasis on the team raises an important issue. Singapore’s leadership transition is always based on a generational change at the top, with most of the new leaders coming from the same cohort replacing their elder colleagues.

It is pertinent therefore to raise questions about the group as a whole – what drives the current generation of leaders, what are the values they hold and how were their thinking and attitudes shaped in their formative years?

For Singapore, these questions may be more important than questions about individual qualities given the way the leader is selected and the focus on the team. In the first transition, Goh’s cohort was a unique group of technocrats with no experience in politics, handpicked to join the party and parachuted into senior positions in the Government after they were duly elected.

² Cheong, Danson, " Singapore's 4G leadership not just about who will be next PM, but about a capable team: PM Lee Hsien Loong", 12 April 2018, *The Straits Times*.

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The senior Lee was determined to replace his ageing cohort with these young men based on their ability to perform in their previous jobs, never mind their political inexperience. They were reluctant politicians, and by all accounts, no one wanted to become the prime minister after him.

But someone had to do the job, and Goh became the chosen one. As he has said many times, he did not want it, but when asked, he stepped up, out of a sense of duty and responsibility. Other team members had the same approach to the job, and they were thus able to gel together with no political infighting or jostling for the top post. Singapore's first leadership transition was by all accounts successful, and it set the template for future handovers.

But as with copies, you have to ask if the underlying conditions are the same for the replication to work or if circumstances have changed to require a new approach. There are signs it may not be working as well as before.

The main worry is that the current group lacks diversity, with most of the 4G leaders (as these fourth generation leaders are called) – including all three of the leading contenders – coming from the public service in some way or other.

Groupthink is an ever lurking danger but even more so given the stage

of development we are at. Research suggests that a homogeneous group tends to come to decisions too quickly. American psychologist Samuel Sommers has concluded that such groups agree on likely scenarios too early in the discussion because members make the same assumptions.

It is a self-perpetuating problem as private sector individuals might in turn be discouraged from joining a group when they see it comprises largely ex-civil servants and military top-brass who think alike and know the system inside out.

There is also a tendency for a closed group to preserve the status quo because they are heavily invested in it. As a result, they can become overly risk averse and resistant to change.

Team-Centred Leadership Needs Diversity

These problems become magnified when leadership is team-centred.

If the team is all-important – as the leaders have repeatedly stressed – it is even more critical to make sure it comprises people with diverse backgrounds who can offer different perspectives, and are willing to voice their contrarian views.

But in Singapore, ministers seldom, if ever, depart from the party line in public, almost always speaking with one voice

The 4G Question: Whither Exceptional Singapore

even on the most contentious issues. No one knows how robust their internal discussions are and if individual ministers might have differing views.

It further reinforces the perception of sameness and homogeneity in its ranks.

To its credit, the 4G leaders recognise this. In the President's Address earlier in May this year which sets out their thinking, they said:

...the new leaders are conscious that Singapore is at quite an advanced stage of development. We may feel that we have more to lose now. We may be tempted not to go for bold changes, but instead be content to tweak things at the margins. That would be the wrong approach.³

But on leadership succession, the ruling party does not have an alternative way and is unlikely to make any major change to its approach, boldly or otherwise.

It raises a wider question that goes beyond leadership renewal: Can Singapore afford not to consider alternative approaches in its economic and political development; to alter its formula for success if the circumstances require it?

Or is it too set in its ways, unable to

respond fast enough to a rapidly changing world. This is the critical question as the country attempts to make the leap forward in the next phase of its development.

Two changes in particular will test the country and its leaders. The first is technology especially in the digital world and the second, geopolitical shifts in the balance of power in this part of the world.

The digital revolution has disrupted many traditional businesses in retail, transport, education, media and manufacturing. Singapore's economic growth has slowed down in recent years as it struggled to restructure to a more innovative, higher productivity economy, with local companies that are able to compete with the world's best.

As for geopolitical change, China's rise and America's relative decline will test Singapore leaders' ability to navigate the changing landscape nimbly, to protect the country's interest.

As a small country, it has only a small voice. But that voice will become even smaller if it is unable to replicate its past success and its economy shrinks in importance compared to its neighbours.

Success begets success, from the economic to the political. Failure can

³ Kwang Kevin, "Singapore leaders must not be 'content to tweak things at the margins': Halimah Yacob", 7 May 2018, *Channel NewsAsia*.

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similarly do the same, and a downward spiral can gather momentum quickly. If Singapore is unable to replicate its exceptional performance of the first 53 years of its nationhood, the implications go beyond the economic. Can it continue to be exceptional?

Can Singaporeans be an Exceptional People

Exceptional leadership will be hard to come by for the reasons cited above.

Singapore's pioneer leaders were a unique product of the circumstances of the time, unlikely to be repeated again.

On the other hand, some may argue that a country's fate depends as much if not more on its people than its leaders. This is even more so given where Singapore stands today – an economy that is operating at the cutting-edge of technology, a people who are well-educated and well-travelled.

A strong resilient people with the right values and sense of community may be a better bet for the future than one overly dependent on good leaders given our stage of development. Leaders can come and go, and the great ones are as much a stroke of good fortune as anything else.

But if a people develop the instincts for survival, the benefits will be longer-lasting.

Can Singaporeans be an exceptional people, innovative and enterprising, daring to question the status quo, to venture out of their comfort zones, not be overly dependent on the Government, and able to bounce back from adversity?

They have the potential to be – with a meritocratic education system that is among the best to be found, with abundant opportunities to develop their abilities and a system that is open to the world. There is one caveat: An innovative, enterprising people must be allowed space to express themselves freely, to venture into new areas, in business, the arts, and in politics. They cannot be over-protected, sheltered and controlled, made to believe there is one way to lead their lives and organise themselves. Singapore risks being such a society.

Most Singaporeans believe there is one set route to success – do well in school, get married, buy a new house with a 30-year loan, get a steady dependable job and stay out of trouble.

There is nothing wrong with this approach. The problem arises if everyone does it the same safe, risk-free way. The issue is exactly that mentioned by the 4G leaders – a society that has achieved so much in so short a time, afraid to make mistakes and to lose it all. If both leaders and the people have this attitude, Singapore will lose its exceptionalism and dynamism.

The 4G Question: Whither Exceptional Singapore

Will Singapore leaders be bold enough to allow the people more space in civic, commercial and political life to find new ways to grow and thrive?

Will Singaporeans be bold enough to seize the opportunity in this brave new world?

A Singapore that is no longer exceptional will have to come to terms with a new reality: It will change the political and social compact between leaders and the people, which has depended on leaders delivering exceptional performance.

What will the new relationship be? Of all the disruptions facing Singapore in the future, this might be the most challenging.

Politics

A Thoughtfully Pragmatic Singapore

Kenneth Paul Tan

Kenneth Paul TAN, an Associate Professor at the National University of Singapore's (NUS) Lee Kuan Yew School of Public Policy since 2007, served the School's fourth Vice Dean for Academic Affairs from 2013 to 2017. From 2000 to 2007, he taught at the NUS' University Scholars Programme and Political Science Department. Since 2000, he has received more than 10 teaching awards, including the Outstanding Educator Award in 2009, the most prestigious teaching honour bestowed by the University.

The central pre-occupation of his research has been to challenge conventional theorisations of liberalisation by passing them through the contemporary lens of the Singapore experience. His work constitutes a critical, qualitative, and interpretive analysis of the tensions that emerge from Singapore's transition from a developmental state to a neoliberal global city, explored through various interconnected dimensions.

He has published in leading international scholarly journals and his books include *Singapore: Identity, Brand, Power; Governing Global-City Singapore: Legacies And Futures After Lee Kuan Yew; Cinema and Television in Singapore: Resistance in One Dimension; and Renaissance Singapore? Economy, Culture, and Politics.*

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In the next decade, Singapore's most challenging problems will likely result from two mutually-reinforcing global trends. They are neoliberal globalisation and authoritarian populism.

To avert dystopian futures that can result from being stuck in the intersection of these two trends, Singapore must turn away from debased and irrelevant forms of pragmatism to more thoughtful forms. That is to say, Singapore needs to embrace a pragmatism that is not, ironically, trapped within dogmatic assumptions about nature and circumstance, that does not amount to blind faith in the market, and is not simply addressed to a middle ground construed as a simplistic calculation of some imagined numerical majority's preferences.

Instead, for Singapore to be resilient in the face of these destructive global trends, its pragmatism needs to be transformative, animated by the exercise of philosophical judgement, energised by creativity and optimism, enabled by civic skills and democratic capabilities, and freed from the crippling effects of a politics of paranoia and mistrust.

Neoliberal Globalisation and Authoritarian Populism

Neoliberal globalisation, a global trend since the 1970s, has seen the vigorous promotion of markets in countries around the world through policies of

privatisation, liberalisation, deregulation, and free trade.

In many countries, including Singapore, this has not led to a rolling back but a strengthening of the state. Singapore's Government is now even more technocratic, managerial, business-minded, elitist, and – one might argue – authoritarian as it asserts greater, more sophisticated, and technologically-assisted social control to advance the economic growth agenda.

Prioritising economic growth by making the local labour force conducive to the profit-making agenda of the international business elite can have a debilitating impact on democracy and the more socially progressive and egalitarian goals of a country. Culturally, neoliberalism can also degrade a society's values or make it near impossible to forge new ones. For example, a sense of community, solidarity, and moral responsibility can easily break down into a crude form of economic Darwinism.

Such a society encourages selfish and competitive individualism, celebrates individuals who have succeeded according to the narrow and sometimes superficial terms of the market, and demonises those who have fallen through the cracks as being completely at fault for their own failure.

Such a society, whose perverted belief in meritocracy has obscured the social,

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cultural, and economic forces that bestow systematic advantages to some while limiting opportunities for others, can generate egotistical winners convinced of their own superiority and hard work, and of how much they deserve their winnings, which are never enough.

Outside the winners' circle, people helplessly and grudgingly come to accept their failures as a result of their own shortcomings, increasingly blind to the malfunction of social mobility.

With the intensification of globalisation and the widely anticipated technological disruptions to the economy in city-state Singapore, income, wealth, and other social inequalities will widen and deepen further. The cost of living will continue to rise and more groups of Singaporeans will be, or at least feel, poor in a dense city ranked among the world's wealthiest.

These trends will have a negative effect on social, physiological, and psychological well-being. And yet, instead of endeavouring to ensure social security and a dignified life for all by redistributing the nation's resources more generously and ingeniously, policymakers seem determined to continue to hoard the nation's wealth in the dogmatic belief that more generous assistance will lead to laziness and dependency. They seem determined to keep Singapore's labour costs attractively cheap for foreign investors and to advise its people to live

frugally, an approach that is aligned with the austerity that neoliberal globalisation demands.

If these conditions persist, Singapore is headed for a future when its already multicultural society will become polarised or fractured in more complicated and problematic ways, with generalised trust and social capital becoming a rapidly depleting resource.

Such conditions provide fertile ground for authoritarian populism to take root. All that needs to happen is for a charismatic demagogue to take advantage of visceral feelings of hardship and resentment, with a view to mobilising a collective sense of victimhood directed against a demonised establishment.

The demagogue rallies a mass following and assumes political leadership by making irresponsible and unfeasible promises they cannot keep, while quietly drawing personal benefit from the tenaciously neoliberal regime.

The public sphere as a space for deliberating on matters of public morality is reduced to distractive moral panics raised against typical scapegoats such as foreigners, minoritised racial and sexual groups, unwed mothers, and teenaged gangs.

This space is also flooded with hypocritical uses of nationalistic fervour, stoked in the interest of scapegoating

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political opponents and even those who simply offer alternative and critical perspectives that the regime regards as inconvenient.

This could happen to Singapore.

The Degradation of Pragmatism

One could argue convincingly that a pragmatic approach to governance and policymaking has, in fact, been at the heart of the Singapore success story, particularly in the decades after Independence.

In the Singapore context, pragmatism referred to a practical, dynamic, problem-solving, results-minded culture, relatively free of the rigidities that came with ideological dogma and moralistic proscriptions, unless “ideology” or “moralism” served an instrumental purpose to achieve some desired outcomes.

Such a culture, infused into the mindset of resourceful, creative, and effective political leaders and policymakers alike, enabled Singapore to take big strides in its development agenda, progressing quickly to become an advanced industrial society. Indeed, the Singapore experience of development and governance has today become a model that many other developing and advanced countries have attempted to emulate.

And yet, it is precisely this spectacle of

success and dogged commitment to the tried and tested methods to achieve it that can, tragically, lead to a downturn in Singapore’s fortunes. Pragmatism, having led Singapore to success, now gives way to formulaic application, bureaucratic and careerist incentives, and heightened arrogance that dismisses alternative views that are unsolicited. And this, in spite of the fact that the same material success has shaped succeeding generations of more sophisticated, well-educated, well-travelled, entrepreneurial, and even public-spirited Singaporeans who now make up a much more variegated society that is much less inspired by mono-logical and top-down national narratives of danger, survival, and success.

In this new society, other values and less tangible and materialistic public goods such as equality, cultural vibrancy, natural heritage, and emotional and spiritual wellness compete with the pre-eminence of economic growth, social cohesion, and political stability, enshrined in the official national narrative.

There are at least three specific ways in which Singapore’s pragmatism has started to degrade. The first has to do with the “realist” aspect of pragmatism. The Government is thought to be realistic in the way it accepts the world as it is and looks for technical solutions around pre-given conditions. For example, it believes that racial identities are primordial so forging a national identity must build

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upon pre-given racial identities. Another example is the Government's belief that Singaporeans will abuse more generous redistributive programmes.

These have become state dogmas. But worse, they prevent the leadership from taking a more transformational approach, which can elevate people's imaginations and aspirations beyond the limits of the mundane, thereby gradually modifying the constraints of the present to open up radically new opportunities for Singapore.

This requires patience, which Singapore-style pragmatism, always seeking instant results, does not have. For instance, the Government would rather import foreign talent and the super-rich to secure instant success for Singapore, than to authentically nurture home-grown talent; that would take just too much time. Trickle-down economics – a dogma of neoliberal globalisation that asserts that everyone will benefit to some degree – is usually the justification given for this approach.

Secondly, Singapore's pragmatism is degrading into blind faith in the market. Market fundamentalism is at the heart of neoliberal globalisation. At one level, this has involved reducing national deliberation into technocratic decisions achieved through some variant of cost-benefit analysis. In a sense, this is an abdication of deep and conscientious judgement in favour of a mechanistic means to attain decisions that do not

require much imagination or courage. At its worst, the approach reduces all that is valuable to monetary considerations.

At another level, subjecting all spheres of human activity to the logic of the market transforms, and may even corrupt, these spheres. The criticisms surrounding very high salaries to attract the most talented Singaporeans to join the ministerial cabinet is not only about the quantum of these salaries, but also about the way that thinking about public service through the hard logic of the market degrades and may irreversibly corrupt the public service itself. This will have a bearing on the type of people who will be attracted to Singapore's public service in the future.

Thirdly, Singapore's pragmatism is degrading into some vacuous notion of a "middle ground", construed as a simple calculation of an imagined numerical majority's preferences. The widespread notion of a silent majority (assumed to be supportive of the Government) and a vocal minority (assumed to be publicly audible, usually pushing rudely for change, but largely unrepresentative) attests to this simplistic notion of "democracy" in Singapore.

Authoritarian populism encourages this way of thinking and offers leaders the option of summoning the spectre of a silent majority whenever they face uncomfortable opposition. The Government's very odd refusal to abolish

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anti-gay legislation to appease what they call a “conservative majority”, while giving assurances to progressive Singaporeans that it will not act upon these laws, points not only to its lack of transformational leadership, but possibly also to a populist politics of distraction.

Thoughtful Pragmatism

Faced with challenges augmented by neoliberal globalisation and authoritarian populism, Singapore needs to go beyond a more conservative goal of national integration and aim, instead, for national resilience.

Pragmatism of a kind worked well for developing Singapore. But this pragmatism is slowly degrading into a fig leaf hiding neoliberal dogmas that can not only erode community and moral responsibility, but also encourage populism in the absence of social capital and strong civic and democratic institutions. Furthermore, evolving circumstances demand new ways of thinking, which a degraded pragmatism is incapable of facilitating.

Thus, Singapore needs not only to reclaim the pragmatism of its early decades, but also to re-purpose it for the present.

A new thoughtful pragmatism would be transformative, not satisfied with accepting old limitations as eternally unchangeable. It would be animated by the exercise of deep and collective

philosophical judgement, rather than a superficial and automatic calculus of costs and benefits, measured in terms of dollars and cents.

It would be energised by creativity and optimism, rather than drained by a self-defeating and sometimes politically disingenuous insistence on Singapore not being ready for anything. It would be enabled by civic skills and democratic capabilities, whose development have been arrested by a paternalistic state comfortable with infantilising Singaporeans as consumers rather than citizens. And it would be freed from the crippling effects of a hyperbolic politics of paranoia and mistrust, which always assumes the worst of everything and everyone.

Singapore is unlikely to succeed in becoming thoughtfully pragmatic without the immediate and active participation and even leadership of the ruling People’s Action Party. It will need to bring together diverse voices and perspectives in confidence, empathy, mutual respect, and good faith under a big tent, where difficult questions may be addressed without fear or condescension. The process will necessarily be slow and unevenly successful. From a position of strength today, Singapore can still undertake these risks to build that big tent.

However, the temptation confronting the Government will be to harden up in the

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face of critical alternatives as more challenging circumstances make its performance legitimacy a more elusive prospect. But this would make Singapore anything but resilient.

To build capacity for a more thoughtfully pragmatic big-tent Singapore, education will have to play a significant role. Alongside the need to prepare students for jobs and the future economy, education must also treat preparation for active citizenship with equal importance.

This goes beyond simply re-thinking the current programmes in civic education (as challenging as that task already is). Schools and higher education institutions will need to focus consciously on fundamental skills of reasoning, critical thinking, argumentation, and cross-cultural communication across the curriculum, with a view to equipping future citizens with the ability and confidence to engage with one another in a renewed public sphere that Singapore so desperately needs.



Politics

Notes Towards Singapore's Untold Future

Alvin Pang

Alvin PANG is an author, poet, translator and essayist whose writing has been published worldwide in more than twenty languages, including Swedish, Macedonian, Croatian and Slovene. A Fellow of the Iowa International Writing Program and a board member of the International Poetry Studies Institute, he is listed in the *Oxford Companion to Modern Poetry in English* (2nd Edition, 2013). He was Singapore's Young Artist of the Year (Literature) in 2005. For his national and international contributions, he was also conferred the Singapore Youth Award (Arts and Culture) in 2007, and the JCCI Foundation Education Award in 2008.

He is a founding director of The Literary Centre – a non-profit initiative that promotes interdisciplinary capacity, multilingual communication, and positive social change. A former teacher, civil servant, journalist, columnist and web developer, he has contributed commentary to *The Straits Times* on technology, culture, society and other issues; he remains active as a speaker, mentor and consultant in Singapore and abroad. A doctoral candidate with RMIT University, he is also a consulting editor with over 12 years' experience leading research and practitioner-oriented publications, particularly in the public sector.

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By most indicators of human development, Singapore has done exceptionally well over its 53 years of independence. Despite our unique constraints and context, many in the world continue to look to Singapore for possible models or lessons to help illuminate the paths to their own process of development. But the pressing question before Singaporeans today is not how we have come this far, but what lies ahead of us: How do we, as a nation understand, come to agreement about, and engage with, the possibilities of the future?

Sideshadowing: The Narrative is not Fixed

Whenever we regard the future, we are in the realm of story: of narrative, projection and expectations about how one event or action is supposed to lead to another outcome.

The American literary critic Gary Saul Morson, looking at fictional narratives, has argued that the common trope of foreshadowing – in which a character, action or event introduced early in a story turns out to be significant later on – lulls us into having a distorted, backwards view of time.¹ Things in the present (or at the end of a story) become signalled as inevitable by their appearance in the past. In light of this hindsight, what has

happened today becomes all too easily attributable to specific events or actions in the past – a mental habit we carry over into our view of history. A similar fallacy underlies arguments that a course of action is a “slippery slope” which must, inexorably, lead down an undesirable path.

Morson argues, however, that some narratives, such as the novels of Dostoevsky, can offer a much more arbitrary and hence more true-to-life account. This is where characters introduced in one chapter may never be mentioned again; an action that seems charged with import turns out to have no impact on the community at hand; laws and conventions are detailed but never enforced; words uttered with feeling between two rivals may be forgotten by the end of the story.

He coins the term “sideshadowing” to describe this explicit indication of the dense, un-chartable multiplicity of possible outcomes that confront us every day. It serves as a reminder not to over-determine the nature of cause and effect, nor undervalue the role of factors we are unaware of or have no control over such as the vagaries of chance. But for an apparently trivial element (the weather, an illness, an accident), wars have been won or lost; discoveries made or missed. Lofty initiatives announced with much

¹ Morson, Gary Saul. “Sideshadowing and Tempics”. *New Literary History*, Vol. 29, No. 4, 1998, pp. 599–624.

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fanfare may go nowhere and be quietly shelved; promising contenders may miss their chance; a single family's grief could stir broader unrest.

Morson's insight suggests not just that there are alternative histories which might have plausibly become the reality we know, but that the same messy cloud of possibilities continues to be with us always. The story could change any time — because there are in fact many stories constantly in play at once.

It behooves us to be open-minded, inclusive and vigilant; to allow for and to articulate the ubiquitous presence of the improbable, the likelihood of discrepancy, and the possibility of failure. We can never be too sure what will matter.

Now, risk managers, scenario planners and analysts of complexity do try to account for these elements: so “black swans”, “wildcards” and “weak signals” have entered the parlance of policy discourse.

It has become a truism in policy circles (since at least the late 1980s) that the world has become much more volatile, uncertain, complex and ambiguous.

In this light, Singapore has not been laggard: Our Government was an early adopter of foresight approaches to help anticipate and prepare for the future. It

has brought in sophisticated tools, efforts and capabilities to apprehend and manage the intricacies of running an open, globalised economy, and sought to engage with a populace that is well-educated, increasingly vocal and articulate, and hails from an ever broader spectrum of backgrounds and affiliations.

Such is their accomplishment that we have become accustomed to depending on the Government's competence, foresight and commitment to secure our shared future. We assume that they know how the story will play out. We trust that they will make the necessary preparations for our continued national success, as we go about our own pursuits.

But is it sufficient for the public sector, however well-intended or prepared, to be the only segment of society which is less surprised, more future-ready, or better able to imagine the possibilities?

Paths are not Inevitable

Morson's concept of sideshadowing has another important implication for the way we think about trends that affect society. For instance, the technological revolution and its anticipated impact on society has often been discussed as if it were an inexorable force — a digital and robotic tsunami that will sweep aside jobs and revolutionise societies whether we like it or not. But thinkers such as Peter Shergold and Gary Bolles have pointed out that it is not inevitable

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that technological transformation has to be at the expense of human well-being.²

Technological advances need not foreshadow doom. They are instead an invitation and challenge to use new knowledge, tools and opportunities more mindfully. Alongside the popular narrative about artificial intelligence and robots taking over are real gains in tech-enabled approaches and policies that ease human suffering, or augmentative tools which help people carry out tasks that would be difficult for either human or machine to excel in. But these are not certain to be the winners of the tech race, either. The paths are not yet set, and what societies and those who govern them choose to adopt will still make a telling difference.

To take an example, there is more than one way to go cashless as a society – an approach based on the widespread use of credit cards would have a different spread of risks from, say, one based on proprietary stored-value e-wallets. In another example, big data analytics may seem to offer a master-tool by which public behaviours appear to be fully captured and quantified – but it takes wisdom to appreciate which new insights are revealed, and which

might have been missed in doing so.

Such choices are not merely a matter of technical expertise, but also of trade-offs, vested interests, values, aspirations and collective will.

We will need to make many important choices together as a society. First, buy-in matters. A well-crafted policy meant to tackle a complex issue may fail to achieve its aims if the public is unable to appreciate the nuances behind its reasoning, accept its trade-offs, or find broad agreement with its premises.

Second, a community is more resilient if its members have a sense of shared purpose and the devolved autonomy and agency to step up readily when it is needed. So it becomes important to continually nurture a sense of shared ties and common understanding across a wide range of stakeholders.

Finally, while policy must be made on the aggregate, it has to be experienced by the individual. It is our diverse, meaningful differences, brought fully to the table, that afford us the breadth of perspective, commitment and sense of local context needed to be responsive, effective and compassionate. This unlocks outcomes that blunt, broad public action alone cannot easily achieve.

² Shergold, Peter. "Public Service 4.0 What might it look like?" January 2018, *ETHOS*, Issue 18, p.4. Also: Bolles, Gary. "The Digital Work Economy and Our Human Future". January 2018, *ETHOS*, Issue 18, p. 36.

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Building consensus: Where is the commons now?

The work of civic inclusion, education, discourse and co-creation will not be accomplished overnight: it is part of the ongoing task of building a nation. However, the task of establishing common ground for discussion and eventual consensus has become more daunting with global shifts in media engagement. Recent Nielsen surveys report that readership of Singapore's national newspapers (in both print and digital forms) has fallen dramatically: from 72 percent of the population surveyed in 2012 to 62 percent in 2015, 58.2 percent in 2016 and 55.9 percent in 2017.³ For sundry reasons that still need to be fully examined, we are peeling away from the old, communal nodes that used to offer up a shared national vocabulary of public discourse. This, at a time when we need more than ever to make visible and bring together the different voices found in our society. How can any consensus be established, by anyone, under these conditions?

It could be precisely because Singaporeans have found – thanks to the Internet – new avenues catering to our diverse but hitherto under-served interests that we have left the old staples behind. It is not realistic to expect the newspapers to be all things to all people. But the work of connecting Singaporeans so we can think about our future together must continue, though through other means. In order to make up for this important decline in common ground, we may have to step up other channels of shared engagement, across the public, private and civic sectors. The challenge of finding workable ways to

keep our people in touch with each other, based on thorough, balanced and accurate information, will occupy not just Singapore but many societies around the world for years to come.

Thinking about the Future: Who, How, Why

There are therefore, three dimensions I suggest we consider as we imagine Singapore's future together: Representation, Means and Purpose. Or: Whose Singapore; How, Singapore; Why Singapore? I will sketch out just some of the many ways these questions might be approached.

³ "TODAY's readership rises, bucking newspaper trend", 4 November 2016, *TODAY Online*, <https://www.todayonline.com/singapore/todays-readership-rises-bucking-newspaper-trend>. Also: "Digital news consumption in Singapore on the rise; The Straits Times remains most-read English paper: Nielsen survey", 2 November 2017, *The Straits Times*, <https://www.straitstimes.com/singapore/digitalnews-consumption-in-singapore-on-the-rise-the-straits-times-remains-most-read>.

Notes Towards Singapore's Untold Future***Whose Singapore?***

With Singapore becoming more diverse in character, it may be time to rethink which voices we regard as relevant to our national discourse. For instance, hundreds of thousands of non-Singaporeans from all walks of life now share our island home: they may or may not see their future here, but they are co-users of our infrastructure, and their interactions with each other and with Singaporeans can have a profound impact. Economically and culturally, the Singapore Story of the present and future seem incomplete without accounting for their influence and contributions.

On another note, the lively public discussion of social and income inequality, sparked by Teo You Yenn's *This Is What Inequality Looks Like* suggests some readiness to confront side-stories that do not readily conform to a prevailing national narrative of untrammelled success. These are encouraging signs of civic maturity, even if they may surface uncomfortable questions about the social contract between government and people.

Yet, even as Singaporeans appear to be drawn to new clusters of identity or affiliation that do not readily map onto former notions of communal groupings in our society, it is important to note that none of these groups are monolithic in nature. Be it the arts community, LGBT groups, senior citizens, faith-based

institutions or ethnic associations, there are important divergences of individual circumstances, opinion, motive or conviction that cannot be readily generalised by broad strokes.

This is true also for those who have taken sides on hot button issues such as National Service deferment, the withdrawal of gay-themed books from the National Library, or the question of repealing or retaining Section 377A, the law that criminalises consensual gay sex between men.

We should be careful neither to dismiss the views of a vocal segment of any group, nor take them as representing the position of the entire community. Surveys, polls, big data and other numbers may offer aggregated trend information, but these are often contingent, and need to be unpacked further. For this reason, lone voices may sometimes offer insights that qualify, contextualise or nuance public issues.

The question of who we mean when we say "we" in Singapore (this essay included) will remain of import in future as our complex, plural society evolves. The alternative – to assume there is a broad, homogeneous consensus without actually building one – risks not only disquiet but counterproductive fatalism, apathy or defiance.

Diverse representation need not mean the proliferation of policy headaches.

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While policies may look to become more nuanced in design, or personalised in deployment, there can also be opportunities to redefine society in ways that are inclusive and generative, rather than solely in terms of contention.

An example, in the field of Singaporean literature: Our writers have begun to collaborate across language communities, as well as with their foreign counterparts based here. From French translators to Bangladeshi migrant worker poets, this is most certainly happening. In their own way, they are expanding definitions of what a Singaporean creation means.

How, Singapore?

By and large, those who have founded their lives here mean to do well by Singapore. But there will be different visions and versions of what that translates into, and these differences will have to be recognised and negotiated. For instance, while meritocracy should prevail as a guiding principle in governance, there are calls for a broader notion of what merit entails, beyond material or technical accomplishment.

Such questions will not be settled simply by say, recruiting for the public sector from a wider range of backgrounds – these considerations frame not only the

talent we look for, but also the actual policies made, how they are made, and the way in which they are implemented. This applies to realising meritocracy across all fields.

Khoo Teng Chye, Executive Director of the Centre for Liveable Cities, has described how “productive fights” over major decisions, such as whether or not to build the Mass Rapid Transit system back in the 1960s and 1970s, broadened and sharpened thinking among policymakers and also made the public aware of the terms, constraints and trade-offs involved.⁴ Since contestation is likely to persist in future, we have to find ways to have constructive disagreements that could improve our collective imagination and understanding.

It will not be enough for any one sector in society, be it public or private, to skill up for the future: the different sectors will have to work together to accomplish ambitious goals for Singapore. The public has much to contribute, but may also need help to develop the right muscles for civil civic discourse.

The ability to facilitate such conversations, not just once and for all in a major national exercise but as a matter of course for every significant public initiative, could be decisive for Singapore in future. These conversations

⁴ Khoo, Teng Chye. “Liveable and Sustainable Cities: A Framework”. *Centre for Liveable Cities, Singapore and Civil Service College Singapore*, 2014. pp.22-23.

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are likely to become easier as we learn to speak and work together in an atmosphere of trust. It will also have spillover benefits even in areas where the Government need not be involved. The unproductive alternative may be growing mistrust, disaffection, and a sharpening of battle lines even for relatively non-tendentious issues.

Why Singapore?

Tools and competencies are only of value relative to their purposes. An important conversation on the future, for the future, will be about what Singapore stands for, and why it remains our best home even as other flourishing cities around the world become ever more attractive. Alongside the narrative of continued economic prosperity and material comfort, there have to be other story-strands — of a sense of belonging; of a resolutely multicultural, diverse society of equals; of a country that can balance advancement with compassion and imagination, just to name some examples. Those who are mobile, need a reason to stay; those who are not, need a reason for hope.

It is precisely because Singapore is too young in history that we should not prematurely close off the many side-stories that are circulating as part of our active, open society. We are not done with our growing. The future is a story we have yet to tell, but must tell together.

Foreign Relations

Singapore: Asia's Diplomatic Hub

Parag Khanna

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Since the 1990s, it has been an axiom of geopolitics that World War III, should it occur, would take place in Asia, the zone of power transition with numerous outstanding disputes among great and rising powers. Across the region, military budgets are surging, while warships, coast guards and fighter jets scramble to assert control over contested terrain or the oceanic commons.

In recent years, we can think of the tensions that have risen between China and Japan over the disputed Senkaku/Diaoyu Islands (a string of uninhabited rocks equidistant from Japan, China and Taiwan), inflamed both by China's regional ambitions and the discovery of large oil and gas reserves under the islands. Meanwhile, the Korean Peninsula has become the world's most dangerous flashpoint over the past seven decades. Despite the 2018 summits between the leaders of South and North Korea, Moon Jae-in and Kim Jong-un respectively, and the latter's summit with American president Donald Trump in Singapore, there is scant evidence of North Korea's denuclearisation. Other major fault lines include China and India's dispute over Arunachal Pradesh (which Beijing calls "South Tibet"), India and Pakistan's unsettled claims over the status of the province of Kashmir, and, of course, the hotly contested Spratly and Paracel Islands in the South China Sea (claimed by numerous Asian countries).

The world has come to take for granted

that Singapore is a beacon of stability in an inherently dangerous region. It was founding Prime Minister Lee Kuan Yew's vision that Singapore assert its interests yet be geopolitically neutral. But can Singapore do more in the coming generation as the need for Asian diplomatic acumen rises to unparalleled heights? This is the challenge and opportunity facing the nation's fourth generation or 4G leadership as it assumes authority over the country's domestic and foreign affairs.

Leadership in "Technocratic Peace"

With Asia's geopolitical destiny resting on the decisions of major powers, the world has been lucky that deterrence, economic integration and a shared distaste for the past two centuries of Western domination have prevented Asia's major powers from crossing the point of no return and unleashing major conflict. But rather than simply hope luck does not run out, the solution to these tensions is to steadily press for genuine and durable settlement on peaceful terms – a cause Singapore can tactfully promote.

Ending interminably hot or cold wars requires a different approach to diplomatic mediation than the ad hoc crisis management that has been the norm in these and other conflicts. Indeed, there is a significant leap from traditional mediation to outright settlement. Mediating conflict without a settlement

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is like turning down the temperature on a pressure cooker without switching it off: the food inside will eventually burn. The temperature can also be turned back up, causing the top to eventually blow off. By contrast, settling a conflict is like turning the stove off, removing the pressure cooker and getting on with sharing the meal. Strategists focused on alliance management and force posture would be well-served to take a step back and remember that military manoeuvring is not an end in itself. More fundamental than preparing for war is eliminating the need for it in the first place.

If we want global peace, then, we need a more culturally-neutral and hard-headed approach that I call “technocratic peace theory”. It is a hypothesis that independent arbitration is better suited to resolving last century’s conflicts among hostile states. This is not, of course, a predictive model. The underlying suggestion, however, is that in a world of diverse regimes, conflicting interests and rising tensions, the best safeguard against war is direct diplomatic negotiations aimed at lasting settlement – not a blind faith that either political evolution or American military balancing will forestall conflict in perpetuity.

It is in that sense that one bold idea is that Singapore’s technocratic approach to domestic governance can be extended to the geopolitical arena. Our leaders should capitalise on the nation’s experience and reputation for pragmatic,

outcome-focused governance to lead in establishing practices of “technocratic peace” in the region. It is true that Singapore’s leaders must navigate the tension between ASEAN centrality and deference to regional political sensitivities on the one hand and commitment to international principles such as the rule of law on the other. Yet all Asian parties also appreciate the rising stakes and the need for Asians to devise solutions to their own problems.

One area around which Asian nations can converge and the 4G leaders can further build on is Singapore’s role as an arbitration hub, either in the settlement of outstanding geopolitical tensions or in fostering legal innovations around commercial cooperation in disputed domains. Independently-managed negotiations provide a novel precedent worthy of emulation. Recall current Ambassador-at-Large, Tommy Koh’s role in the formulation of the UN Convention on the Law of the Sea or UNCLOS, for example. His conviction that such conciliation processes have the advantage of not being adversarial legal proceedings – such as at the International Court of Justice – was realised in 2017, when, after a conciliation process under the auspices of UNCLOS, Australia and East Timor accepted a package of proposals offered by a five-person commission that provided for maritime boundary delineation and revenue-sharing from a large gas field straddling their respective territories. Rather than

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long-drawn out legal proceedings with appeals, the Australia-East Timor conciliation agreed to a deadline of one year to reach a settlement – and did so.

A new arbitration process, equal parts political and legal, could bring about the necessary mediation, facilitation and binding resolution mechanism needed to move from militarised dispute to boundary settlement to joint development.

A similar approach can be applied to the South China Sea dispute, which has reached a legal and political impasse. The logical way forward would be to convene a panel of commissioners comprising delegates from claimant states plus a number of independent members who are set a time-bound mandate to produce a comprehensive solution. Given its recent history of hosting high-level summits and the opening of an office of The Hague Permanent Court of Arbitration, Singapore would be an optimal choice of venue for the proceedings.

Asia's geopolitical flux promises an indefinitely unpredictable period ahead, and Singapore under its 4G leaders must be prepared to respond accordingly. For decades, Singapore has practised a shrewd multi-alignment, not choosing sides but maximising the mutual benefits of relations with all powers. Going forward, Singapore should capitalise upon its strength as a neutral go-

between, especially in a region plagued by nationalist politics. This will become only more important as the world shifts to a new multipolar normal.

In that position, Singapore has been a leading investor in China while also hosting American aircraft carriers, and relations with Malaysia have evolved from bitter divorce and rivalry to sensible cooperation. In the past several years alone, Singapore has also twice shown what a reliable neutral diplomatic venue it is, hosting the much-anticipated 2015 meeting between Chinese President Xi Jinping and then Taiwanese President Ma Ying-jeou, and the June 2018 historic encounter of Trump and Kim.

Should a new security architecture emerge in Northeast Asia to manage Korean reunification and tensions between China, Japan and Korea, it would give genuine momentum to the notion that Asians can solve Asian problems. But the South China Sea and Indo-Pacific theatres will put that proposition to the test – especially if Northeast Asian peace leads to a reduction in America's naval footprint in the region. It is here that Singapore should step forward more boldly.

Presently, in these maritime domains, it is China that has a strategy while the United States (US), ASEAN member states and India have only tactics. China has militarised islands and shoals while coercing the Philippines and Vietnam to

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cancel oil and gas exploration in their sovereign waters. Meanwhile, the US has conducted ad hoc freedom of navigation operations and ASEAN has failed to develop a united front.

While Singapore is not a legal party to these disputes, there is nothing more foundational to its success than its geography on the Strait of Malacca. As regional tensions escalate with no common vision for a peaceful solution emerging, Singapore should fill the diplomatic vacuum, whether by proposing or planting fresh ideas. Strategically, Singapore's high defence spending can also aid regional collective security by fostering and hosting inclusive maritime patrols involving all ASEAN Regional Forum (ARF) members (such as China, Japan, the US, India, South Korea and the European Union).

A multipolar world can be an unstable landscape of security dilemmas and proxy competitions à la Europe before World War I, or it can be a stable balance of power in which sufficient distance among poles and respect for their spheres of influence generates a dynamic equilibrium. If we want this kind of lasting global stability, we must permit technocrats to make the peace first. In this respect, Singapore can, and should, step forward as leaders of a nascent technocratic peace movement.

Positioning for the Belt – and the Road

While geopolitical stability is crucial for

Singapore to maintain its economic momentum, maintaining economic momentum regionally will also be key to geopolitical stability. The rise of ASEAN, India and other economies of the greater Indian Ocean region even to as far as Africa presents an important opportunity for Singapore to diversify its trade beyond traditional partners in East Asia. While the US and China ratchet up trade tensions, Singapore is right to have been keen on the rapid passage of the CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership) agreement as well as negotiations towards the RCEP (Regional Comprehensive Economic Partnership), both helping to ensure openness in multidirectional value chains.

Singapore's strong commercial ties with the Gulf countries and Europe also set the stage for expanded free trade deals between ASEAN and the Gulf Cooperation Council (GCC) as well as the European Union. These geographies represent the western anchors of China's Belt & Road Initiative (BRI) that will define the coming generation of Eurasian geoeconomics. Singapore's prowess in infrastructural services is already well-known and in high demand in both the development and management of industrial parks and ports. And as Asia's premier financial services centre, Singapore can further capitalise on Asia's economic reforms and privatisation to attract investment into the region's capital markets, stock exchanges and high-growth companies.

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As a labour-constrained nation, Singapore will need many more of its citizens, overseas community, and permanent residents to serve as unofficial commercial ambassadors of the nation. Rather than focus only on how to keep talent within the country, we must train and incentivise Singaporeans to explore educational and commercial opportunities not only in the US or the United Kingdom, but also in off-the-beaten path destinations that are rising in importance with the tide of new geo-economic initiatives like the BRI.

Furthermore, to thrive amidst stiffening geo-economic competition, Singapore must continue to sharpen domestic strategies even as it looks outward, raising its game at home to keep its edge. The Committee on the Future Economy (CFE) convened by the Government from October 2016 to February 2017 rightly argued that all firms in every sector should make productivity-enhancing investments to boost efficiency. Staying competitive will also require balancing pressures to raise the spending of national reserves versus raising taxes such as a wealth tax or the goods and services tax (GST). Singapore has reached a stage of development where high growth rates are not an end in themselves, but improving quality of life for all requires utilitarian policies that target benefits at the bottom half of earners. After all, their consumption is most likely to circulate within the domestic economy and contribute to

inclusive growth.

Threading these needles fairly, cost-effectively, and using the latest technologies and standards will be the principal socio-economic challenge facing the 4G leaders. The hallmark of staying competitive in the 21st century is responsiveness – both to the needs of the populace and also the complexity of the times. Singapore stands no risk of falling from First to Third World, but it does have to confront these and other significant issues decisively. This is important for domestic governance as it is for geopolitical survival.

On the Need to Promote Asia's Technocratic Peace

Policy design is as crucial and urgent in foreign policy as it has been in domestic affairs, and Singapore cannot trust that others will come up with the necessary ideas to preserve its own interest in openness and stability. The allure and beauty of Asia lies in its historical and cultural richness, as well as the enduring strength of its diverse racial and religious identities. Its greatest strength, however, can also become its great weakness. After all, the region's fault lines are more often than not exacerbated, or even the outcome of, the nationalistic politics of race, religion and culture. It is here that Singapore stands out for its neutrality, tolerance, pragmatism and secularity. Positioned correctly, Singapore can serve as the diplomatic hub for a diverse, but integrated, Asia.

Foreign Relations

Singapore's 4G Leaders' China Challenge

Peh Shing Huei

PEH Shing Huei is a journalist and author of several bestselling books. He was based in China with *The Straits Times* as its bureau chief in Beijing from 2008 to 2012. His book on China's transformation, *When the Party Ends: China's Leaps and Stumbles after the Beijing Olympics*, won the Singapore Literature Prize in 2016. He is a regular commentator on China affairs, with opinion editorial contributions carried in the *South China Morning Post*, *Channel NewsAsia* and the *TODAY* newspaper among others.

He has written seven books, including the latest *Tall Order: The Goh Chok Tong Story* and *Neither Civil Nor Servant: The Philip Yeo Story*. He is a founding partner of content consultancy, The Nutgraf. He is a political science graduate from the National University of Singapore and Columbia University in New York.

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Two weeks after the annual Budget debate in Singapore's Parliament, then Second Defence Minister Ong Ye Kung left for Russia in early April 2018 to attend the 7th Moscow Conference on International Security. Among his key meetings in the Russian capital was one with his counterpart from China – the Chinese Minister of National Defence, General Wei Fenghe. Given the uneasy relationship between Singapore and Beijing after the Terrex incident in late 2016, Singapore's Ministry of Defence (Mindef) thought it was useful to issue a media release angled on the meeting with Wei, accompanied by a photo of Ong and Wei shaking hands. The Mindef release said:

Both ministers reaffirmed the warm and friendly relations between Singapore and China, and welcomed opportunities to deepen bilateral defence cooperation.¹

Days later, it was the turn of then Minister in Prime Minister's Office Chan Chun Sing to engage China. He made a three-day working visit to the country, with stops in prominent cities in western China: Chengdu, Chongqing and Lanzhou. It was his latest visit in his role as minister in charge of the Chongqing Connectivity Initiative (CCI), the third Singapore and China government-to-government

project after Suzhou Industrial Park and Tianjin Eco-City.

A month after that, in late May 2018, Finance Minister Heng Swee Keat made his way to China, covering the coastal cities of Shanghai, Nanjing and Beijing. He stressed that the financial sector was key to taking bilateral relations to greater heights and that Singapore was willing to "continue to work closely with China" to find new ways to bring about the internationalisation of the Chinese currency.

On their own, each of the above three trips might not mean much. But taken together, a picture emerges – one which signals the centrality and importance that the next generation of Singapore leaders accords ties with China. All three ministers, Ong, Chan and Heng, were frontrunners to succeeding Prime Minister Lee Hsien Loong, with Heng being the likely one after it was announced in November 2018 that he is to be the ruling party's very first assistant secretary-general. In the two months after the most important Parliament session of the year, all three made visits or reached out to China. Such an approach is encouraging. There is no doubt that China is fast becoming the biggest player in Asia, if not the world, in almost all arenas, including diplomacy,

¹ "Mr Ong Ye Kung Reaffirms Defence Relations with China", 4 April 2018, Ministry of Defence, Singapore, https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2018/april/04apr18_nr.

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economics, technology and even pop culture and sports. For Singapore's fourth generation or 4G leaders, living with a dominant China is a given. So it is just as well that they square up to Beijing sooner rather than later.

A Prickly Beijing

Yet, this bilateral relationship is becoming more difficult. After the Beijing Olympics and the Great Financial Crisis of 2008, an increasingly resurgent China has found less incentive to "hide capabilities" as once pronounced by Deng Xiaoping. The two events were critical markers, said China's former ambassador to Japan Chen Jian in his book *Diplomacy – Leads to World Harmony*.

Two major events occurred in 2008, changing how the people of China and the United States look at themselves and each other. The two events are China's Olympic Games and financial tsunami in the US. On the one hand, the successful hosting of the Olympics in Beijing demonstrated to the world the prosperity of China after 30 years of reform and opening up; showcased the patriotism of the Chinese people; and illustrated the capabilities of the Chinese Communist Party's leadership. On the other hand, the outbreak of the financial tsunami and

the US' inability to shake off the shadows of decline allowed the world to reappraise its only superpower. The US is beginning to degenerate. China is looking like it will surpass Japan and catch up with the US. It will become the world's next superpower, and such recognition has been floating, fermenting and spreading around the world.²

Tsinghua University's Sun Liping, one of China's most influential thinkers and adviser to Chinese leader Xi Jinping, argued that the Olympics marked a degeneration in Chinese politics. He wrote in a short essay in 2013:

I've long thought that the impact of the Beijing Olympics on China was very deep, much more than a matter of dollars and cents. The highly cautious attitude (of the leadership) in facing such a grand event of this kind profoundly impacted China's historical path even afterward. The Olympics marked the beginning, it can be said, of the ascendance of the stability preservation regime in China. Looking back now, it might be that the Olympics were something we did that we ought not to have done.³

In short, China after the financial crisis was not only seen by the rest of the world

² Chen, Jian, *Diplomacy Leads to World Harmony*, (China Intercontinental Press, 2013).

³ Sun, Liping, "The Third Stage in the Failure of Power" 11 March 2013, <http://chinamediaproject.org/2013/03/27/lu-wen-and-the-decade-of-failed-power/>

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as a major global power in politics and economics, it also began to view itself as one. Beijing was beginning to regard itself as a world superpower, a status which it believed should come with renewed, even enhanced, respect and deference.⁴

Right about this time, Singapore's latest leadership renewal kicked in, with many of the 4G leaders joining politics. In the 2011 General Election, Ong, Chan and Heng all stood for elections for the first time, with the latter two winning their contests and made Cabinet ministers almost immediately. Ong lost his maiden electoral fight but won four years later at the next general election. He was also made a minister quickly after that. The 4G leaders entered politics at a time when China was increasingly muscular and they would feel the brunt of it.

A nasty sneak preview came during the annual ASEAN Regional Forum (ARF) in July 2010 in Hanoi, Vietnam. At the summit, 12 nations tabled the South China Sea dispute for discussion, a move which China was not in favour of. It preferred to negotiate one-on-one with other claimants of the disputed waters. An irate Chinese delegation led to then Foreign Minister Yang Jiechi saying during the forum: "China is a big country and other countries are small countries and that is just a fact." While some news reports said after the incident that Yang

was looking at his then Singapore counterpart George Yeo when he uttered those words, the account has been challenged by Yeo, who said it was not directed at Singapore. Yet, in the subsequent years, China's growing lack of tolerance for small Singapore's behaviour would suggest size indeed does matter to Beijing.

Annus Horribilis

Much of it would come together in 2016, possibly a year when ties between Singapore and China reached its lowest point. Three incidents between the two countries pockmarked the year, which was when Singapore was the coordinator for ASEAN-China Dialogue Relations. First, in June that year, foreign ministers of ASEAN and China had gathered in southern Yunnan province to discuss the South China Sea dispute. A joint press conference was supposed to be held at the end of the meeting by Singapore's Foreign Minister, Vivian Balakrishnan, and China's Foreign Minister, Wang Yi. Balakrishnan would be representing ASEAN. But a failure to reach a consensus on the South China Sea led to Wang holding the press conference on his own. Balakrishnan left, ostensibly to catch a flight. It was a loss of face for China, although Wang tried to downplay the slight publicly, insisting the meeting went well.

⁴ Peh, Shing Huei, *When the Party Ends: China's Leaps and Stumbles after the Beijing Olympics*, (Straits Times Press, 2013).

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Balakrishnan would issue a statement noting “the serious concerns” expressed by the ASEAN foreign ministers over the developments on the ground.

Second, in September 2016, China's *Global Times* newspaper published a report saying the Singapore delegation tried to raise the South China Sea issue during the Non-Aligned Movement (NAM) summit held in Venezuela. The report said that Singapore attempted to include in the summit's final document an endorsement of an international tribunal's ruling on claims to the South China Sea. The story said:

During and after the meeting of foreign ministers, Singapore continued to stir up problems and openly challenged the chair nation Venezuela's ruling, which again drew clear opposition from many countries. To satisfy its own interests, Singapore had been pestering [other states] during negotiation and meetings. It dragged meetings into late night many times, which caused discontent among other countries.⁵

The report was challenged by Singapore's

ambassador to China Stanley Loh, who said that the proposal to include the South China Sea was the consensus position of all 10 ASEAN members. Loh wrote in his letter:

We are disappointed that an established newspaper published this irresponsible report replete with fabrications and unfounded allegations with no regard for the facts.⁶

The Chinese government appeared to back the *Global Times* report. When asked about the issue during a regular press conference, a Chinese foreign ministry spokesman Geng Shuang said an “individual nation” had insisted on including South China Sea issues in the NAM final document. “The facts are clear,” he said. “Some individual state(s) insisted to include one-sided content related to South China Sea in the final document, but it was not supported by most NAM member countries. China hopes related state(s) respect China's position and the agreement reached with ASEAN countries.

Third, the year would end on a dramatic note when nine armoured

⁵ “Blow-by-blow account of the China-Singapore spat over *Global Times*' South China Sea report”, 28 September 2016, *South China Morning Post*, <https://www.scmp.com/news/china/diplomacy-defence/article/2023364/blow-blow-account-china-singapore-spat-over-global>.

⁶ “Full text of Ambassador Stanley Loh's letter to *Global Times* Editor-in-Chief Hu Xijin, in response to an article by *Global Times* (Chinese)”, 21 September 2016, Ministry of Foreign Affairs, Singapore, https://www.mfa.gov.sg/content/mfa/overseasmission/beijing/consular_services/consular_updates/2016/201609/global_times.html.

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vehicles belonging to Singapore were seized in Hong Kong in November. They were used by the Singapore Armed Forces in Taiwan as part of “Operation Starlight”, Singapore’s long-held military exercises on the island which mainland China regards as a renegade province. Most observers saw the move as Beijing attempting to kill two birds with one stone. On the one hand, it sent a warning to Taiwan that it was able to further strangle its narrowing international space. On the other hand, it was tangible punishment of Singapore for its less-than-friendly stance on the South China Sea in 2016. The vehicles were returned to Singapore two months after they were impounded.

The sour year of 2016 was completed with the postponement of the annual China-Singapore Joint Council for Bilateral Cooperation, which is the highest-level forum between the two countries. It was the first time the meeting was delayed since its inception in 2004. While relations between Singapore and China have since rebounded from the low of 2016, it remains useful to keep the events of the year in mind. Going forward, such turbulence in bilateral relations is likely to be more common than expected, and the persistent discomfort is a trend which Singapore’s 4G leaders must get used to.

A New Normal

This “new normal” in Sino-Singapore ties is what I have loosely classified as the third era in bilateral relations between the two countries.⁷ The first two can be labelled as “Mao” and “post-Mao”, after the late dictator of the People’s Republic of China (PRC), Mao Zedong. In the first, which began with the founding of PRC in 1949 to 1978 when Mao was in charge, relations between the pair of new nations were mostly distant, cold, with neither playing a big part in the other’s affairs. Both countries did not recognise each other. It was during this period that Singapore started “Operation Starlight” in Taiwan. At that time, Beijing was keen to increase the loyalty of overseas Chinese to China and did not recognise the existence of an independent Singapore up to 1970. Singapore feared China’s influence and support for pro-communist elements in its country. To China, Singapore and its leaders were seen as instruments of Western powers.

In 1978, the second era began. Two years after the death of Mao, new Chinese paramount leader Deng Xiaoping visited Singapore and met then Singapore Prime Minister Lee Kuan Yew. It led to a fresh chapter in relations, where Singapore was viewed

⁷ Peh, Shing Huei, “The New Normal of Singapore’s Relations with China”, 6 October 2016, *Channel NewsAsia Online*.

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as a friend and even a role model in China's reform and opening up. Overall, trade spiked and exchanges boomed and this era reached a peak in the celebration of 25 years of diplomatic relations in 2015. Then Singapore President Tony Tan Keng Yam summed up the golden era: "Our pioneer leaders, particularly Mr Lee Kuan Yew and Mr Deng Xiaoping, laid a strong foundation for the bilateral relationship in the 1970s. Over a short span of 25 years, our relations have flourished and the friendship between our two peoples has never been stronger." It was an era built by Lee Kuan Yew and cemented and solidified by his successors Goh Chok Tong and Lee Hsien Loong. The trio of leaders reaped the benefits of their deft diplomacy, and could largely maintain a "business as usual" approach to Sino-Singapore ties across almost four decades. It would be problematic if the 4G leaders adopt the same stance.

Things have changed, and in this new normal, the comfort and ease of the old, honed by decades of habits, will cease to exist. In this new era, expect only a more pushy China, tighter room for Singapore to manoeuvre and an increased frequency in disputes both large and small. There are three main factors which led to this transition. First, the death of Lee Kuan Yew in 2015. He built a personal friendship with two generations of PRC leaders – Deng and Jiang Zemin – and was

regarded by both Beijing and Taipei as an honest and sincere broker in cross-strait relations. Such a status has passed down to the successors of Deng and Jiang, including current Chinese President Xi Jinping. When Lee died, Chinese state media gave extensive coverage rarely seen for foreign leaders, especially those from non-communist states. Such a unique status is not transferable. Some of the goodwill stored by him for over four decades, across five generations of Chinese leaders, is following him to the grave. Even though Lee stepped down as prime minister in 1990, he remained active in international affairs in first his role as Senior Minister and later Minister Mentor of Singapore. That allowed Goh and Lee Hsien Loong to benefit from having such an exalted "special envoy" to China during their administrations. The 4G leaders will not enjoy this.

Second, as mentioned above, Sino-Singapore ties cannot escape the megatrend of an increasingly powerful and assertive China. Beijing will challenge the America's dominance in Asia, and there will be more instances where smaller nations in the continent are forced to choose between the two giants. Singapore's 4G leaders must have the wits to be able to withstand the pressure of being caught between a superpower and an aspiring one, while cleverly finding space for the tiny country.

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Third, China and Singapore now have a persistent issue to tussle with – the South China Sea. China lays claim to almost all of the sea and although Singapore is not a claimant state, its strong push for freedom of navigation in the waters has created much friction with Beijing. The problem will not go away any time soon. The South China Sea is as much China's backyard as it is Singapore's. ASEAN's unavoidable role in the issue further locks Singapore into this quarrel with Beijing. After all, membership in the 10-nation bloc is a central feature of Singapore's foreign policy. It is no coincidence that much of the *annus horribilis* in Sino-Singapore relations largely revolved around the South China Sea.

These three factors account for a new normal in relations between Singapore and China, presenting a severe challenge to Singapore's 4G leaders. The playbook of the past is largely outdated and they must draft a new diplomatic strategy without the cover of Lee Kuan Yew, in an era of an assertive China with South China Sea writ large in relations between Beijing and ASEAN. The younger Singaporean leaders are keen to do as well as their predecessors. Heng said in a speech in Nanjing University in June 2018:

The cooperation of our two countries reflects our longstanding and close

friendship. Singapore is undergoing leadership renewal and transiting into 'fourth-generation leadership'. The younger leaders in Singapore will build on the strong foundation that past and current leaders have built with China over the years. Former vice-premier Zhang Gaoli has described Singapore's Deputy Prime Minister Teo Chee Hean as an old and good friend.⁸

It is our hope that as the younger leaders in Singapore step up to the helm, new friends will also become old friends and good friends." If the 4G leaders are able to pull it off, it could prove to be their generation's biggest diplomatic coup.

⁸ Heng, Swee Keat, "Reflections on Singapore - China Relations, Leadership and Governance", 4 June 2018, *Ministry of Finance*, https://www.gov.sg/~sgpcmedia/media_releases/mof/speech/S-20180604-1/attachment/Min%20Heng%20Speech%20at%20Nanjing%20University%204%20Jun%2018.pdf

Technology and Economy

Singapore 4.0 – How Do We Get There?

Charlie Ang Hwa Leong

Charlie ANG Hwa Leong is a Business Futurist, Innovation Strategist and Disruption Expert. As a Business Futurist, he analyses, explains and imagines the future, especially how technology will impact, disrupt and empower businesses, industries, professions and economies. As an Innovation Strategist, he helps organisations and leaders to imagine, innovate and transform in the 4th Industrial Revolution.

He is the Founding President of The Innovators Institute, Ambassador of SingularityU Singapore which is the local chapter of Singularity University and Adjunct Advisor at International Data Corporation. He is also a Co-founder and Non-Executive Director of Nation Builders, which is a collaborative and creative platform for constructive citizenship.

He received his Bachelor of Science (First Class) Honours in Computer Science from University of Manchester, United Kingdom and Master in Business Administration degree from the NUS Business School. He was trained in strategic futures thinking, design and innovation at Singularity University (in Silicon Valley), Oxford University's Saïd Business School and Stanford University.

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Merely a century ago, the world was in a severe state of rupture. The preceding scientific and industrial revolutions energised early capitalism, exalted human thought and caused the eruption of nationalism across Europe. Eventually, these forces culminated in two world wars in the first half of the 20th century and the development of modern institutions, trade and norms in the latter half to cope with new realities. A technological revolution ignites a full-fledged revolution in economics, politics, and society. The same happened with the Agricultural Revolution, which gave rise to food production, primitive industries and settled civilisations.

Today, we are at it again. We are at the dawn of the Intelligence Revolution, where non-biological intelligence in the form of self-learning machines, servant robots, smart things, autonomous vehicles and digital avatars are being unleashed onto the human realm.¹ Again, these emerging technologies will generate tectonic shifts, disrupt business and economics like underwater currents, impact governments like tsunami waves, and transform international relations like floods soaking the land.

Yet this time, it will also be different because it will not take millennia, centuries or even decades to feel the

widespread effects of this revolution; merely years. This Intelligence Revolution or more commonly referred to as the Fourth Industrial Revolution will perturb the dynamics of global economy, the equilibrium of geo-political power and the tenets of modern society. After all, these intelligent technologies are poised to improve healthcare outcomes, reduce traffic accidents and decrease consumer costs but at the same time, shift the factors of production away from manpower to machines and raise capital owners' share of gains. These shifts will provide exciting opportunities but also pose profound challenges for countries, corporations and citizens.

It is against this backdrop that I wish to highlight the most critical issues that face Singapore's fourth generation, or 4G political leadership over the next two decades. On the domestic front, we know we are confronted by a rapidly greying society, high cost of living and rising political consciousness. Around us, the ascent of Asia, climate crisis and growing religiosity are external mega-shifts to navigate. However, these are "slow burners" that will play out over longer periods and are known-knowns or at most, known-unknowns, each with a somewhat limited scope of possibilities. Technological disruption, on the other hand, presents many known-

¹Ang, Charlie, "What Singaporeans must know about 'innovation economy'", 17 May 2013, *Singapore Business Review*, <https://sbr.com.sg/economy/commentary/what-singaporeans-must-know-about-innovation-economy>.

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unknowns (“wildcards”) and unknown-unknowns (“black swans”). And, disruptions, by definition, strike in a flash when you least expect it. Just ask the oil-exporting countries or Kodak, Borders and Blockbuster, which went from boom to bust within a decade of a new technology emerging to disrupt their businesses.

In this essay, I will raise the technological risks – two wildcards and a black swan – and opportunities that our 4G leaders may face, and propose ways to manage them.

Wild Cards and Black Swans

The first wildcard is the prospect and extent of technological unemployment. In other words, the massive loss of jobs caused by rapid technological change.² At risk are not just low-skilled blue-collar work but even white-collar knowledge jobs. McKinsey Global Institute ranks the Automation of Knowledge Work as second in the list of 12 technologies in terms of disruptive potential, impacting over 230 million knowledge workers and US\$9+ trillion in employment costs worldwide.³ There are numerous studies by reputable international institutions that estimate this risk with varying

degrees of likelihood and impact.

Should technological unemployment render a significant portion of today’s workforce obsolete, wealth and income disparity will surely swell. Disgruntled and displaced workers or those deemed to be a “useless class” as acclaimed historian-futurist Yuval Harari calls them, might then opt for overzealous opposition parties to vent their despair, fight for unemployment handouts or some form of universal basic income. If not managed well, this could trigger a freak election outcome and an unexpected transition of power in Singapore.

Even if the Elected President holds the second key to the national reserves as a critical safeguard mechanism for these resources, a populist government of the day might prioritise immediate spending over longer term investments, and shut our doors to complementary foreign talent while at it. This would erode our overall competitiveness and deflate investor confidence, which took decades to build up.

If we think Singapore gets on top of this issue, other countries might not be so lucky. The international landscape could become wildly turbulent, with unstable,

² Ang, Charles, “Disruption of Economies: Are we ready for it?”, 2 January 2018, *SME Advisor Issue 141 Web*, https://issuu.com/smeadvisor/issue/141_web/82.

³ Manyika, James, Chui, Michael, Bughin, Jacques, Dobbs, Richard, Bisson, Peter, and Marrs, Alex, *Disruptive technologies: Advances that will transform life, business, and the global economy*, May 2013, *McKinsey Global Institute*, <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/disruptive-technologies>.

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populist and inexperienced regimes rising to power whether through election outcomes or outright revolutions. We could see the repeat of Brexit, President Trump’s shock victory or Arab Spring on a global scale and in our own Southeast Asian neighbourhood. In such a scenario, we would be facing a more malevolent geopolitical environment.

The second wildcard is the extent to which the United States of America (US) and China become runaway superpowers in artificial intelligence (AI) and whether that would translate into an unassailable economic advantage over the rest of the world. Like electricity, AI is an omni-use technology that can be deployed in commercial, military, governmental and social domains and in many industries, including in manufacturing, financial services, logistics, transport, agriculture, energy, education, healthcare and defence.

Countries and their companies can attain sustained economic supremacy if they possess leading edge, proprietary AI capabilities. The infusion of superior AI technologies into national industries, exported products and digital platforms is likely to be the next source of national competitive advantage. McKinsey foresees that “Leading AI countries could capture an additional 20 to 25 percent in

net economic benefits, compared with today, while developing countries might capture only about 5 to 15 percent.”⁴

There are signs that the US and China, home to the largest AI companies, are indeed breaking away from the pack in the accelerating AI arms race. It should be worrying for the rest that the dual network and learning effects (where more data lead to better AI models, which raise their efficacy and in turn, leads to more users being on the system and then more data placed in it) result in a self-perpetuating cycle that will further propel the early leaders ahead. Singapore must exploit its unique position to join this AI race or risk losing its economic edge.

Black swans are, by definition, speculative and remote scenarios. Here I would like to paint a black swan scenario of “multiple realities syndrome” to illustrate the sort of unknown-unknowns that could be highly disruptive. The next generation immersive reality devices – Internet glasses, brain-computer interfaces, personal AI assistants, digital avatars, telepresence robots and even chip implants – could combine and create multiple concurrent realities for the user. To the individual, the physical, digital and virtual worlds would be seamlessly fused into an altered state of hybrid

⁴ Bughin, Jacques, Seong, Jeongmin, Manyika, James, Chui, Michael, and Joshi, Raoul, “Notes from the AI frontier: Modeling the impact of AI on the world economy”, September 2018, *McKinsey Global Institute*. <https://www.mckinsey.com/featured-insights/artificial-intelligence/notes-from-the-frontier-modeling-the-impact-of-ai-on-the-world-economy>

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consciousness. At one moment, the mind could be teleported into a remotely-controlled robot thousands of miles away and in a flash, it could be switched back to the real in-body presence. We can live in an augmented interface with fanciful embellishes of the surroundings, accompanied by an omnipresent digital AI companion.

Today, an average person already spends over four hours using digital devices so in the not-too-distant future, it is conceivable that an adult is always connected, wears an immersive device most of the waking hours and lives multiple realities described above in a typical day. At the edges, a growing segment of society becomes chronically addicted to the sensory pleasures of the virtual world. They operate their sterile lives through devices without stepping out of their homes and withdraw from social circles completely.

Their increasing reliance on a personal AI assistant as primary filter of information creates an invisible bubble that information providers such as product marketers, news agencies and government departments struggle to penetrate. What's more, decisions will be

guided, or even automated by their ever-helpful digital assistants. What to buy, where to eat, who to date, or even which candidate to vote for? Some might even choose to marry their AI assistants. Unlike human equivalents, their looks, voice and personality can be perfectly customised to resemble the dream spouse or a celebrity. As a result, the quality of their "multiple lives" depends more on fresh software upgrades provided by the technology giants than the new policies of the Government. If too many people are afflicted with this digital addiction, would societal degeneration, political apathy and economic stagnation follow? This is not unlike the Chinese opium plague of the 19th century and present-day drug overdose crisis in the US.

The Gold Rush of 21st Century

The Fourth Industrial Revolution is the Gold Rush of the 21st century. McKinsey Global Institute estimates that disruptive technologies will generate US\$14-33 trillion of economic value per year by 2025.⁵ PwC projects that AI alone could increase global GDP by US\$15.7 trillion in 2030, more than the current output of China and India combined.⁶ The benefits though, will not be evenly distributed.

⁵ Manyika, James, Chui, Michael, Bughin, Jacques, Dobbs, Richard, Bisson, Peter, and Marrs, Alex, "Disruptive technologies: Advances that will transform life, business, and the global economy", May 2013, *McKinsey Global Institute*, <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/disruptive-technologies>.

⁶ "Sizing the prize: PwC's Global Artificial Intelligence Study: Exploiting the AI Revolution", 2017, *PwC*, <https://www.pwc.com/gx/en/issues/data-and-analytics/publications/artificial-intelligence-study.html>.

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Countries, companies and citizens that upgrade their capabilities, make the right investments and adopt new mindsets now, will capture an outsized share of the upside. Laggards risk economic and workforce disruption and, possibly political and social upheavals.

Singapore is well-poised to capitalise on this. Our highly educated and diligent workforce, technocratic, competent and long-term planning Government, efficient and innovative economy, unique tripartite partnership as well as ample financial resources provide the necessary ingredients to become the model 4.0 economy, society and nation.⁷ But, we will need a strategic vision and coherent strategy that takes into account issues like those in the two wildcard and one black swan scenarios discussed.

National 4.0 Strategy

A comprehensive and integrated 4.0 strategy must include developing deep capabilities, attracting investments, nurturing talent and increasing the rate of commercialisation markedly. However, while these industry development plans are necessary, they are, on their own, insufficient for us to thrive in the new world. The steam engine and electricity did not just energise the production and movement of goods but re-organised the

entire way of work, politics and society and, was exploited to power the world wars.

Similarly, intelligent technologies will not merely elevate business to a higher plane but will completely reshape contemporary systems, structures and societies. In other words, our 4.0 national strategy cannot be a plain economic strategy but must incorporate diplomatic, research, social, financial, educational, manpower and defence strategies. Only by advancing these strategies in tandem can we hope to successfully navigate the economic turbulence, societal storms and political minefields of the Fourth Industrial Revolution.

I propose four key imperatives to guide our transition to the Singapore 4.0 model. First, the Grand Strategy which is an integrative, pre-emptive and whole-of-nation approach in making the transition from a 3.0 version to a 4.0 model, with deliberate strategies, experimental ideas and anti-fragility safeguards. To succeed, the government cannot only aim to have citizen-passengers on this bus but in fact, we need the people sector to co-pilot something that is more akin to a plane flying through the storm.

With specific regard to the economy, or Economy 4.0, I suggest that innovation and investment be directed at the

⁷ Ang, Charlie, "Preparing for Singapore 4.0", 9 December 2017, *The Straits Times*, <https://www.straitstimes.com/opinion/preparing-for-singapore-40>.

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intersection of three key concerns and opportunities – applying emerging advanced science and technology, reducing environmental impact and improving people’s quality of life. Targeting this sweet spot will generate the highest level of value creation, so all support should be directed at industries, entrepreneurs and products that address this intersection. In the international AI scene, a binary star system anchored by the US and China is fast emerging. Should Singapore aspire to be a third AI centre of the world, a neutral hub for global companies to develop AI capabilities and exchange data?

The next sector to look into is the educational system or Education 4.0. While Singapore’s education system is globally admired, we have to update it to produce 4.0 talents when they enter the workforce. Talent 3.0 are managers who can execute efficiently according to proven playbooks. Talent 4.0 are innovators who can re-invent the world for the better and design new playbooks for business, government and society. To be able to exploit the Gold Rush of the Fourth Industrial Revolution, talent has to be entrepreneurially-minded and innovatively-skilled.⁸

This means that schools must integrate entrepreneurial and innovative

conditioning into the mainstream curriculum.⁹ A child entering Primary 1 today is likely have a working span from 2030-2100, assuming a life span of 120 years and a 70-year career. During this long period, the future professional will have to invent her career repeatedly in interval of years or even manage multiple careers at the same time, assuming she is not made obsolete by constantly advancing technologies. In the face of this highly disruptive future, it is not only beneficial, but essential for students to develop entrepreneurial conditioning and innovative mindsets early in life. Students of tomorrow must not only be challenged by their ability to acquire knowledge but also to synthesise, improvise and apply it to solve real world problems or serve business needs.

Finally, to Society 4.0. The effects of the technological revolution on society cannot be over-stated. Over the next 50 years, with the advancement of general AI, brain-computer integration, human longevity, nanotechnology and bio-engineering, humanity itself could be transformed beyond recognition. In the more immediate term, the threat of a jobless future could undermine political stability, tear the social fabric and weaken national cohesion. “The effect of today’s technology on tomorrow’s jobs will be

⁸ Ang, Charlie, “I, not Robot; I am smarter”, 12 June 2015, *The Straits Times*, <https://www.straitstimes.com/opinion/i-not-robot-i-am-smarter>.

⁹ Ang, Charlie, “Preparing Children For An ‘Only the Innovators Survive’ Future”, <http://www.wise-qatar.org/prepare-children-innovator-future-charlie-ang>.

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immense—and no country is ready for it” was the headline of an article *The Economist*. The good news is that Singapore is better prepared than most.

An updated social compact will be necessary for the whole nation to steer itself through the technological storm, but, it cannot be constructed overnight and by Government alone.

Through public consultations, a shared vision of the future, common understanding of the opportunities and challenges ahead, and broad consensus of the strategies that are needed, must be forged. The people must be sensitised to and prepared for the unprecedented magnitude and rate of change. In a non-linear process of transformation, proven theories and approaches may no longer work. The government must be ready to conduct bold experiments, formulate fresh guiding principles and devise 4.0-ready strategies.

In summary, the future will be extremely exciting and disruptive. We need transformational leaders who can mobilise our people and resources to re-imagine our economy, Government and society together. Let’s create Singapore 4.0!

Technology and Economy

SGP 4.0 – Singapore in the Artificial Intelligence Era

Laurence Liew

Laurence LIEW is the Director for AI Industry Innovation at AI Singapore and is driving the adoption of artificial intelligence (AI) by the Singapore ecosystem through the 100 Experiments and AI Apprenticeship programmes. A visionary and serial technopreneur, he identified and introduced Singapore's enterprises to Linux and open source in 1999 as the first RED HAT partner in Asia Pacific; High Performance Computing (HPC) Cluster and Grid computing from 2001 by deploying most of the initial HPC clusters in A*STAR, National University of Singapore (NUS), Nanyang Technological University and Singapore Management University, and architecting and operating Singapore's first Grid platform – IDA's National Grid Pilot Platform; and Open Source Analytics in 2011 with Revolution Analytics. Revolution Analytics was acquired by Microsoft in 2015.

He is Chairman, AI Standards Technical Committee, ITSC, Advisor to SGTECH AI+HPC Chapter; and member of the Technical Workgroup for IMDA National ICM Technology Roadmap – Track T4 (AI and Data, and Blockchain). Between 2013 and 2015, he was a Working Group Member of the National Infocomm Media Masterplan 2025.

He graduated from the National University of Singapore with First Class Honours in Engineering, and also holds a Masters in Knowledge Engineering from the same university.

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Singapore 4.0 – the AI (Artificial Intelligence) Lap – will bring about exciting new opportunities but also challenges. Opportunities, which if seized at the right time will lead to great rewards and prosperity for Singapore. Challenges, which if not addressed may break our society and country. The new fourth generation or 4G leaders need to be not only politically savvy, but they also need to be business and technology-savvy. More importantly, they need to take intelligent and calculated risks to grasp the opportunities and challenges of “The Second Machine Age”, which is a term coined by experts on the AI era, Erik Brynjolfsson and Andrew McAfee.

State and Society’s Response to Technological Change

The steam engine brought about the Industrial Revolution, and the Big Data age of the Information Revolution over the past two decades introduced us to companies such as Google, Facebook and Alibaba. But it will be AI that revolutionises the compact between government and its people; between industries and its workers.

Singapore has seen this kind of transition herself as factories, which used to hire thousands of workers have shifted their operations to lower-cost countries in the last decade. Globalisation and automation streamlined operations and made them easily portable across countries, often independent of the

education level of the workers.

However, in the past, this displacement happened mainly to factory or other blue-collar workers. Not so in the Age of AI where the disruption will affect what we still think of as sophisticated and white-collar jobs. For example, AI systems can read X-rays and MRIs (magnetic resonance images) faster and as accurately as a human radiologist; search, compile and produce legal case summaries in seconds compared to lawyers who may take days; sieve through thousands of documents and transactions to detect fraudulent transactions in audits; compute a client’s risk profile to price an insurance premium in near real-time; advise a bank client on what shares or stocks to trade and/or invest in; and handle voice support calls that respond to customers’ simple, routine, FAQ-type questions.

On the other hand, for each of these challenges, there are new opportunities. For example, the radiologist can now focus on complex cases and reduce error rates; lawyers can now focus on analysing cases and being creative in planning how to win them; auditors can focus on complex human-to-human investigations supported by insights from the AI system; insurance companies can lower their risks, create more interesting products and offer more cost-effective policies based on individual risk profile instead of a generic profile; bank advisors can provide a more personal approach and

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focus on difficult or premium customers; and call operators will be relieved of responding to routine questions and can focus on difficult questions or those that require human empathy.

Most of the jobs mentioned above entail completing multiple tasks unlike those of production-line workers. In other words, AI will remove the routine, mundane and predictable tasks and allow us to focus on higher-order and higher-value tasks. A good example would be your humble SPAM engine, which is AI-driven and has helped save millions of hours from VIAGRA4U and DEAREST ONE.

We cannot stop the advance of AI, nor should we avoid it. We need to learn how to harness and even excel at AI to maximise the advantage Singapore can have in embracing it. At the same time, we have to try to minimise the negative impact of the displacement of jobs and workers. Some studies have shown that more jobs will be created by AI than jobs lost to it. Some of those jobs will require the worker to have AI skills and hence a higher level of education, but most will not.

The blue, white and grey-collar workers who do jobs that are in-between the first two categories, will need to learn how to race with machines and not against them. They will need to learn how to leverage AI tools to increase their own productivity and value; to position themselves as AI-enabled and AI-ready workers, engineers,

executives and managers.

Some examples of companies that use data and AI to power their businesses include Netflix and Youtube. Closer to home, AI Singapore has within the last one year engaged with companies that are keen to undertake an AI project, including building up their own AI talent. Some of these companies are Surbana Jurong, Defence Science and Technology Agency (DSTA), Singtel, Daimler South East Asia and Johnson & Johnson. We expect to support them with up to 200 AI engineers via our AI Apprenticeship Programme initially. If Singaporeans are open enough to embrace technology and ride the wave, there will always be new job and career opportunities.

In that vein, the start-up ecosystem we have in Singapore must be one of those engines for the creation of new industries, businesses and jobs. So, it is imperative that the 4G leadership finds ways to strengthen the start-up ecosystem and encourage the creation of startup companies whether in deep tech or otherwise.

What are some other issues that will emerge with the development of AI as we try to ensure positive outcomes for jobs, wages and people?

Universal Basic Income

There have been calls by various groups globally for governments to implement

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policies like Universal Basic Income (UBI), which guarantees any adult an income regardless of whether they are employed. Another group of policies are on managing robot or AI taxes.

While it is unlikely that Singapore will adopt UBI anytime soon given the strong anti-welfarist orientation of the Government, we already have policies and government programmes which, if you peel away the acronyms like CITREP, TESA and SkillsFuture, represent a limited form of UBI.

For example, today, in AI Singapore which I am part of, we have the AI Apprenticeship Programme mentioned earlier which is a nine-month programme of self-directed learning and hands-on training in skills to build and operate AI systems. The programme is funded by The Info-communications Media Development Authority's (IMDA) TESA programme and AI Singapore. The apprentices have their tuition and course fees waived, and are paid a stipend of between S\$2,500 and S\$3,500 per month. The stipend allows them to focus on learning a new skill and not worry about meeting daily expenses.

This approach of funding training costs, which ranges from a 70 to 100 percent subsidy and the provision of a stipend for some specific programmes is Singapore's version of UBI. The Singapore approach is measured; we do not freely provide this "UBI" – you get "UBI" only if you agree

to upgrade or re-skill yourself.

This has proven to be a powerful policy and it has allowed our precious tax dollars to be spent on nudging as many as possible towards acquiring new skills and knowledge.

Software Intellectual Property

In taxpayer-funded research, we need to review research and development (R&D) policies specifically where the intellectual property (IP) generated is software, and question policies where universities and research institutes hold on to taxpayer-funded research while making Singapore companies pay royalties for the licence to use them. It feels like these companies are being taxed twice.

Our IP policies, at least with respect to software R&D, are still based on the legacy model of closed source development where the source code is not released to anyone except under a fee-paying agreement, that is, through royalties or other commercial agreements.

However, the open source model of development and innovation have changed the economics of IP exploitation. In the open source model, the source code is shared freely with anyone under a friendly licence such as BSD, MIT or Apache 2.0. In particular, the Apache 2.0 licence is commercially friendly and has gained wide adoption.

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The Apache 2.0 licence allows anyone to freely use, modify, distribute and sell a software licensed under the Apache Licence without worrying about the use of software, including patents. This is because the licence explicitly grants developers the copyright and patent of the derivative software. The rights given are perpetual, worldwide, irrevocable, but also non-exclusive.

Just look at examples such as Apache Spark, developed by UC Berkeley under a friendly open source licence, and subsequently commercialised by some of the students and original developers. Spark is now the de facto standard for big data processing and storage, and has created hundreds of thousands of jobs worldwide.

Or at Google’s Tensorflow, the most popular AI framework today which can be used for free. It has created numerous start-ups and the economic benefits that accrue are enjoyed not just by Google, but also by the whole ecosystem.

The advantage of the open source model is clear in the two examples above – people everywhere like free and good software. If the software is good, it will be adopted as the standard. Companies can then commercialise the adoption, and often the companies that succeed in commercialisation do include the original developers. After all, it is very difficult for an external party to come in and

“own” the software if they are not part of the original development team or community. This community safeguard is stronger than any licence.

Back to Singapore – how much of our taxpayer-funded research has been exploited and commercialised to the likes of Spark and Tensorflow? Are our researchers in the best position to exploit the IP that has been created? Would it not be better if taxpayer-funded IP were in the hands of entrepreneurs via friendly open source licences? It will allow them to commercialise the IP in a faster and bolder fashion. It is not that our technology is not world-class. On the contrary, many are at the top across several fields. However, it is our legacy IP policies that have prevented researchers from being able to see the adoption of their IP by a critical mass of users. Instead, these languish in folders in the legal departments of some offices.

Be Agile, Be Bold

Singapore admittedly has lost its technological edge in a few areas like e-payments and digital courts. In contrast, China’s Supreme Courts already recognise blockchain-based evidence as being legally-binding. It is only recently that the Government here has embraced Agile IT development practices and open source technology. This, after the industry has been pushing for the adoption of Agile and open source technology since 2000. While it is

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understandable to want stable and proven systems, there are many areas, especially in information technology, where some risks need to be taken and where we innovate fast and fail faster.

We need the 4G leadership to allow agencies like GovTech and its partners to experiment, to fail and to learn from failure and iterate again; to allow universities to experiment with innovative ways of training the next generation of engineers, developers, management, thinkers and makers.

We need the 4G leadership to allow government agencies to be bold and experiment; to take risks with Singapore start-ups. The IMDA Accreditation scheme, which validates and accredits our local start-ups and SMEs, provides a green lane for them to access to government projects. This is the right move, but we can be bolder and allow agencies wider leeway to work with our Singapore local start-up companies.

What will the situation look like when that transformation is complete? Would we be able to view “SGP 4.0” as an upgrade, an improvement, or a paradigm shift altogether? Will it be achieving something that is long overdue?

A transformation is complete when the butterfly transforms from egg to larva to pupa and finally to adult butterfly. However, for a country like Singapore, there can never be a complete

transformation. Just like we encourage Singaporeans to adopt a mindset of lifelong learning, the 4G leadership must adopt a mindset of lifelong evolution and transformation for Singapore. Our transformation will never be complete since technology never stops evolving. It will mean that we must continue to evolve, transform and adapt too.

Technology and Economy

Economic and Business Development in Singapore and the World: A Small Economy Perspective

David Skilling

David SKILLING is the founding Director of Landfall Strategy Group, a Singapore-based economic advisory firm that provides insights on global economic, political, and policy developments to governments, firms and financial institutions. He serves clients in Australasia, Asia and Europe, bringing distinctive perspectives on the changing global economic and political environment, with a particular focus on how these developments impact on small advanced economies.

He also writes regularly on global economic and political issues, including in *The Straits Times*, *the Wall Street Journal*, *Project Syndicate*, *The Times*, *Foreign Affairs*, *Neue Zürcher Zeitung*, and *the Nikkei Asian Review*.

He recently served as Senior Advisor to the Permanent Secretary of the Ministry of Foreign Affairs and Trade in New Zealand. Prior to founding Landfall Strategy Group in 2011, he was an Associate Principal with McKinsey & Company in Singapore, as well as a Senior Fellow with the McKinsey Global Institute. Before joining McKinsey, he was the founding Chief Executive of the New Zealand Institute, a privately-funded, non-partisan think-tank. Until 2003, he was a Principal Advisor at the New Zealand Treasury, advising on various strategic economic policy issues.

He has a doctorate in Public Policy, and a Master in Public Policy degree, from Harvard University, as well as a Master of Commerce degree in Economics from the University of Auckland. David was named as a Young Global Leader by the World Economic Forum in 2008.

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Singapore's economic performance has been remarkable over the past several decades, converging rapidly towards the global income frontier. From 30 percent of the per capita income of the United States (US) in 1965, Singapore moved to 110 percent by 1995 and 150 percent in 2017. Singapore sustained average growth rates in its gross domestic product (GDP) of over 5 percent in the decades from the 1970s until the Global Financial Crisis (GFC) a decade ago.

This economic success has been based on a particular economic model – positioning Singapore as a regional and global hub for global firms, talent and capital. As measured by exports and foreign direct investment, Singapore is one of the most open economies in the world. This intense global engagement was supported by strong growth in the labour force, due to its relatively youthful demographic profile then as well as significant migration inflows.

After over 50 years of this strong catch-up growth, however Singapore needs to respond to an emerging series of new challenges (and opportunities). Although GDP growth rates are running at around 4 percent in the first half of 2018, much of the post-crisis growth experienced after the GFC has been muted by Singapore's standards. And looking ahead, the domestic and external environment is likely to be less supportive of Singapore's economic performance.

A Brave New World?

Several emerging structural dynamics will impact on Singapore's outlook over the next decade and beyond. This discussion considers the structural drivers of slowing GDP growth, the changing external environment, and the impact of disruptive technologies and business models.

Structural growth slowdown

Singapore's trend GDP growth rates have slowed markedly over the past few decades. This is a common pattern across economies as they approach the income frontier. Looking across the current group of advanced economies, GDP growth rates of around 2 to 3 percent on average are common. This gives a baseline for what Singapore can expect. There are fewer "catch-up" opportunities, and economic performance has to come from innovation-led productivity in the Singapore economy.

Reinforcing this structural growth slowdown is weakening growth in Singapore's labour force. Since 2000, about 60 percent of Singapore's headline GDP growth has come from labour force growth and the remaining 40 percent from labour productivity growth.

However, Singapore's labour force will likely grow less rapidly than the average

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over the past 20 years. The Monetary Authority of Singapore estimates that the resident working-age population – citizens and permanent residents between the ages of 15 and 64 will begin to shrink from around 2020. And the number of work permits (and other forms of foreign entry into the workforce) has been tightened as an act of conscious economic and social policy. This slowdown is already evident: hours worked and employment contracted in 2017.

As growth rates reduce, the quality of growth becomes more important. Looking around other small advanced economies, many are able to generate strong economic and social outcomes and a dynamic, resilient economy even with growth rates in the 2 percent range. The key is productivity-driven growth.

A changing external environment

Since Independence, Singapore has benefited substantially from a supportive international economic and political environment, that is, intense globalisation undergirded by the rules-based system as well as relative geopolitical stability in the Asian region. Singapore has also been active in positioning itself to benefit from globalisation, signing free trade agreements and engaging actively in regional integration efforts - from the ASEAN Economic Community to the

recent Comprehensive and Progressive Agreement for Trans-Pacific Partnership.

But there are deep pressures emerging on the international economic and political system. The “America First” approach of the Trump Administration is sceptical of the international rules-based system, pursuing a more bilateral approach, pulling out of agreements like the original formulation of the Trans-Pacific Partnership, and questioning the value of institutions such as the World Trade Organization. And the US has begun to impose tariffs and investment restrictions on China - raising the risk profile around the international trade system.

China’s approach to economic policy is also causing stresses in the system, from the nature of market access of foreign firms into China to the industrial policy in the Made in China 2025 Plan. Over the next decade, there is rising potential for consequential trade tension between China and the US.

More broadly, there is growing evidence of a greater intersection between international economic and political relationships. Note, for example, recent Chinese economic pressure on countries such as South Korea and Norway, after bilateral diplomatic tensions. And the exemptions granted by the US to the recent steel and aluminium tariffs (imposed on national security grounds)

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were related to the political relationship these countries had with the US.

These tensions are likely to lead to a more fragmented global trade and economic system. Small economies like Singapore are particularly exposed to these dynamics because of their large external sectors as well as their absence of raw political power. Small economies are more comfortable in a rules-based environment. The risk with the emerging environment is that small economies are more likely to be squeezed by larger economic and political powers. It will be a more complex environment for small economies to navigate.

Disruptive technologies

A wide range of emerging technologies – such as robotics, autonomous vehicles, 3D printing and the Internet of Things (IoT) – are set to have a disruptive impact on labour markets, firms, and overall economies. Disruptive technological change is not new, but this is now happening at a scale and speed that is unprecedented.

Singapore is well-placed to take advantage of these opportunities as well as to manage the risks. The World Economic Forum (WEF) recently ranked Singapore as one of the best positioned economies to capture value from disruptive technology. Singapore has high levels of human capital and skills, with

workers able to upgrade and adapt to new ways of working. This is supported by active government initiatives around skills-upgrading (SkillsFuture as well as through the formal education system).

In addition, the Singapore Government has identified various elements of disruptive technology as a strategic policy priority and an example of this being the Smart Nation Initiative. Singapore is leading with policy and regulatory innovation in areas such as fintech, autonomous vehicles and drones.

These technologies provide a valuable way of pursuing the productivity agenda and compensating for slower labour force growth. Technologies such as automation and the IoT provide ways for firms to strengthen their competitive positions in international markets. And disruptive technologies will also have a meaningful impact on domestic sectors, such as construction and retail. At the same time, these technologies are likely to have a disruptive impact on labour markets, creating and destroying many jobs and changing the nature of occupations for many.

Learning from Other Small Advanced Economies

These challenges are coming together at the same time to create a more complex environment for policy-making. Although Singapore continues to generate strong

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outcomes, a determined policy response is needed to respond to a changing domestic and external context.

In this regard, there is much that Singapore can learn from other small advanced economies, from the Nordics and Switzerland to Ireland and New Zealand. These are small advanced economies that are also operating at the income frontier, have an emphasis on productivity-led growth, acute exposure to the external environment, and a similar set of policy options and constraints as Singapore.

There are many things that can be taken from the international small economy experience, but I would point to three related, mutually-supporting classes of action that can make a meaningful contribution to Singapore.

First, strengthening value capture by building deep clusters in Singapore.

Singapore's economic model is distinguished by the contribution from highly productive foreign firms located in Singapore that have an external focus. However, these activities are commonly not deeply integrated into the Singapore economy itself with their limited local supply chains, increasingly capital intensive activity, and so on. This reduces the amount of value that is captured in the domestic economy from growth in these sectors; the profits flow to overseas

shareholders or to a relatively small number of direct employees. This is a challenge also faced by other successful small economies with a heavy reliance on inward foreign direct investment, such as Ireland.

In contrast, other successful small advanced economies have externally-oriented economies that are built on deep, dense clusters of related activity. For example, pharmaceuticals and finance in Switzerland, or maritime and logistics in Denmark. These clusters are based on strong domestic strengths, together with foreign firms and capital, and are surrounded by a supporting ecosystem of research institutes, universities, infrastructure, specialist firms, and such. These clusters support on-going innovation and productivity, and provide the basis for competitive strength and good jobs even in the context of high cost structures.

In many cases, there will be only a handful of these clusters. Small economies can build critical mass in only a limited number of areas. Singapore needs to focus on building and developing existing Singapore strengths, developing deeply-embedded clusters in the Singapore economy that have greater local content. In short, there should be an effort to transition Singapore over time from a hub for foreign firms to a distinctive platform that supports externally-focused Singapore clusters.

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In addition to stronger value capture, this will add to the resilience of Singapore – reducing its exposure to footloose capital. There is a resilience from these embedded clusters because it is hard to replicate these ecosystem characteristics elsewhere. And local firms are likely to be stickier in Singapore than multinational corporations.

Second, deeper international engagement by Singapore firms in the region.

International engagement is the productivity growth engine of small advanced economies; domestic sectors are too small to generate sustained labour productivity growth rates. Singapore's levels of international engagement are very high even when benchmarked against other small advanced economies, but a significant share of this comes from foreign firms.

At a firm-level, international expansion is critical to the productivity and performance of companies. This is very clear from the international small economy experience. A core part of Singapore's productivity agenda should be focused on supporting the international expansion by Singapore firms. This will require government support. International expansion from a small economy will often come early in a firm's life, involving higher costs and risks. Financial and non-financial support is important to accelerate the process of

international expansion.

Singapore's export profile is currently highly diversified across markets - from ASEAN to North Asia, as well as Europe and the US. However, the lesson from other small advanced economies is that regional expansion is very important. For example, over 60 percent of exports from small European economies go to other markets in the European Union (EU).

As global supply chains are unwound – due to both technology and politics – there is likely to be a more regional feel to the global economy. In Asia, this regionalisation of activity will be reinforced by the growing middle class. Even if there are political and economic risks in Asia, Singapore has a privileged position at the centre of Asia. There are some particular opportunities for Singapore in the region. Singapore's export share to ASEAN has been stable at around 20 percent for the past 15 years and there is headroom for growth.

Third, a greater emphasis on inclusive growth.

Relative to large economies, small advanced economies have combined strong economic performance, high levels of engagement with globalisation, top performance on innovation, together with a range of good social outcomes. For example, small economy Gini coefficients are lower, employment rates are higher,

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and index measures of overall welfare (from the UN's Human Development Index to the WEF's Inclusive Growth Index) are higher for small advanced economies than for larger economies. Singapore, as a city-state, faces some particular challenges in this regard — although its Gini coefficient is higher than in many other small, advanced economies, it is lower than other global cities such as London, New York, and indeed Hong Kong, that face particular competitive pressures on labour markets. But, despite these constraints, the small economy experience is instructive in pointing to the ways in which economic and social outcomes can be progressed simultaneously.

These outcomes are largely a matter of deliberate policy choice by small advanced economies. Many small advanced economies explicitly combine a commitment to flexible, open markets, comprehensive social insurance, active labour market policy, and high quality education. This has contributed to a compressed income distribution even in the context of globalisation and technological change.

There is an understanding that sustaining support for an economic model that is based on openness to the global economy requires policies to manage the risks. One (persuasive) intuition for this is that the higher levels of social insurance in (small) open economies

serve to offset the higher level of volatility in household income that is generated by exposure to external markets. The existence of social insurance, active labour market policy, and lifelong learning education opportunities makes it likely that people will be more willing to take risks — and to be able to respond to adverse events. In a context where disruptive economic and political change is increasingly likely, this characteristic of successful small advanced economies is relevant to Singapore.

This is not just about redistribution, and Singapore should not aim to simply replicate Denmark or Finland. But as the risk profile increases due to globalisation and technology, the design of social insurance should be considered to ensure that risks are allocated efficiently across the economy. The international small economy experience suggests that building an economy driven by innovation and creativity will require progress on these measures.

Concluding remarks

The next several years will be a pivotal period for Singapore as key growth drivers markedly slow and new challenges emerge: growth in the country's working age population was essentially zero in 2017; world trade growth has been zero over much of the post-GFCs period until recently; risks of

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a regime change in the global economic system have risen; and a range of disruptive technologies are emerging rapidly.

Singapore is increasingly facing policy issues that are similar to those faced by other small advanced economies. The good news is that other small advanced economies are responding effectively to these challenges and – although local context needs to be taken seriously – Singapore’s fourth generation of leaders can learn much from these small economy experiences.

Technology and Economy

Singapore and ASEAN: Working in Tandem to Leverage Industrial Revolution 4.0

Sanchita Basu Das

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Prior to joining the Institute in 2005, Dr Basu Das was an economist in the private sector involved in infrastructure consulting, manufacturing and banking. She obtained her doctoral degree in International Political Economy (IPE) from the Nanyang Technological University, Singapore. She holds a Master in Business Administration degree from the National University of Singapore and a Master of Arts degree in Economics from the Delhi School of Economics (under University of Delhi), India.

She has authored and edited numerous books and book chapters, policy papers and opinion articles. She has published in several academic journals, including *Singapore Economic Review*, *Asian-Pacific Economic Literature* and *Journal of World Trade*. Her research interests include economic regionalism in ASEAN and the Asia-Pacific Region; international trade; and economic development issues like the digital economy, and infrastructure with its relationship to connectivity.

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In the era of Industrial Revolution 4.0 (IR 4.0), technological advancement is fast changing the way people live and businesses operate. Digital applications, like Uber and Airbnb, are enabling people to travel and book hotels through the Internet. E-platforms, such as Amazon and Lazada, are helping people to shop through web-based technology. E-payment schemes, similar to PayNow, Nets, are allowing people to transfer money through internet networks, thus encouraging them to go cashless. Netflix is bringing online entertainment to people's computers and hand-held devices.

The adoption of digital and smart technology has become an imperative for companies to raise productivity. 3-D printing is enabling automotive firms to produce and deliver parts to car manufacturers. Development of the Internet of Things (IoT) is helping companies to connect the entire value chain of production and distribution across multiple stages and geography. Blockchain technology is providing a digital platform that allows transactions to be made across a secure network. Apart from these, there are several other technologies, such as artificial intelligence, robotics, autonomous vehicles, cloud computing, that have broader application across countries and industries.

Thus, the digital transformation of IR 4.0 is broadly regarded as a technology-

driven revolution that has disrupted the traditional way of conducting business and consuming products. It has also disrupted the way a country is governed. While on one hand, new technologies are bringing the producers and consumers closer in an efficient and timely manner, thereby raising productivity; on the other hand, it is raising challenges in terms of privacy issues, social inequality and labour displacement due to automation. In this context, it becomes important for countries to create an enabling environment surrounding IR 4.0 to harness new opportunities for people and businesses, while safeguarding them from the negative fallout of it.

Singapore, thus, embarked on its journey called the Smart Nation Initiative in 2014 to transform the city-state through adoption of efficient technology and digital innovation. It did not stop with its vision of use of technology only within its national boundary. During the ASEAN Chairmanship of 2018, Singapore worked with other member countries to ensure that there will be cooperation in technology-driven areas, such as e-commerce, customs, innovation and the development of smart cities across Southeast Asia.

Singapore and its Smart Nation Initiative

Singapore has identified the "digital economy" as a future pathway to its economic success. It adopted the Smart Nation Initiative not only to enhance use

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of digital or Information Communication Technology (ICT) in people's daily activities but also to explore new growth opportunities in the emergent digital space. The initiative took an integrated approach and focused on five key areas, which were transport, home and environment, business productivity, health and enabled ageing, and public sector service, and provided enabling factors in the form of facilitating research collaboration, encouraging innovation and upgrading or introducing new education programmes.

The key aspect of Singapore's Smart Nation Initiative is its focus on economic development. As noted in a speech by Prime Minister Lee Hsien Loong in 2014, the Smart Nation Initiative is likely to generate data, information and information technologies (IT) that can be used to raise economic productivity and develop new business opportunities.¹ The initiative deployed public resources in building smart nation capabilities. It made investments in research and development through agencies like the National Research Foundation, through collaboration between government agencies and universities, and the private sector. It introduced new ICT training and

education courses for the people so as to develop more IT professionals and data analysts.

Despite a well thought-out comprehensive initiative, the pace of adoption of new technology across different industries and firms in the city-state remains uneven.² Often, it is found that companies lack understanding of the concept of IR 4.0 and hence lack the capacity to draw up business strategy and roadmap. They are uncertain of the benefits of adopting IR 4.0 in their activities. There are also feelings of uncertainty among manufacturers about the ways to implement IR 4.0 in their production operations. For companies that have embarked on their journey of IR 4.0, the knowledge about IR 4.0 remains limited to the top management and is often not diffused across wider workforce.

In this situation, the Economic Development Board (EDB) of Singapore developed the Singapore Smart Industry Readiness Index to "strike a balance between technical rigour and practical applicability".³ It outlined three core building blocks – technology, process and organisation – that are said to be

¹ Lee, Hsien Loong, "Transcript of Prime Minister Lee Hsien Loong's speech at Smart Nation launch on 24 November", 24 November 2014, *Prime Minister's Office*, <https://www.pmo.gov.sg/newsroom/transcript-prime-minister-lee-hsien-loongs-speech-smart-nation-launch-24-november>

² "The Singapore Smart Industry Readiness Index: Catalysing the Transformation of Manufacturing", 2017, *EDB Singapore*, https://www.gov.sg/~sgpcmedia/media_releases/edb/press_release/P-20171113-1/attachment/The%20Singapore%20Smart%20Industry%20Readiness%20Index%20-%20Whitepaper_final.pdf, p.3.

³ *Ibid*, p.4.

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essential to adopting IR 4.0 in business operations successfully. The index is believed to be helping companies to understand IR 4.0 and find ways to benefit from it.

Singapore strongly believes that IR 4.0 offers immense opportunities for its people and businesses. According to a Boston Consulting Group study, IR 4.0 can enhance total manufacturing output by S\$36 billion, improve labour productivity by 30 percent and generate 22,000 additional jobs in Singapore by 2024.⁴ Embracing technological transformation can help the city-state cement its position as a global hub for several manufacturing and services industries.

Forging Regional Cooperation in Digital Economy

During its 2018 ASEAN chairmanship, Singapore seized the opportunity to promote digital innovation as a way not only to uphold its own economic development, but also as a means to boost resilience in the region. For the city-state, the ASEAN economies, with their combined population size of 630 million, a rising middle class and a high percentage of internet users, are ready for IT-enabled products and services.

Lately, ASEAN, as a region, has been

grabbing attention for e-commerce or internet-based economic activities. According to AT Kearney, the e-retail market size of ASEAN-6 countries is US\$7 billion, with Singapore accounting for the maximum at 25 percent, followed by Malaysia and Indonesia.⁵ Although this is low when compared to other markets of the United States (US), Japan and China, the leading indicators prevalent currently in the member economies point to its immense potential in the future.⁶ Indeed, more than 50 percent of ASEAN's total population is below 30 years of age (compared to 39 percent of the population in East Asia and 34 percent of the population in Europe). And of the total population size of 630 million, the region has 480 million internet users and 700 million mobile phone users. In addition, the countries have established an economic community for better integration on trade and investment in 2015, which raises the prospects further. The ASEAN countries have long been paying attention to cross-border trade activities. While the countries have reduced their border tariffs significantly, it is the trade facilitation that continues to be work-in-progress. The countries have made commitments to establish their e-customs facility, also known as National Single Window (NSW) that will be connected at the regional level (ASEAN Single Window or ASW), to enable

⁴ Ibid, p.7.

⁵ "Lifting the Barriers to E-Commerce in ASEAN", 2015, A.T. Kearney, <https://www.atkearney.co.uk/documents/10192/5540871/Lifting+the+Barriers+to+E-Commerce+in+ASEAN.pdf>, p.2.

⁶ Ibid, p.4.

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paperless exchange of trade-related information. This is expected to generate efficiency and predictability for traders and businesses in the region. According to a survey project by USAID, companies are estimated to be able to save US\$60 per consignment or around 8 percent of the current system when they use the ASW for exchange of government and commercial documents.⁷

Despite such benefits and prospects from increased digital connectivity, there is apprehension about regional cooperation, especially when it concerns job creation, cyber-security and the digital divide both within and across the ASEAN nations.

The World Bank in its 2016 World Development Report (WDR) provided an answer to this. It mentioned that although there is a rapid proliferation of digital technologies across the world, the digital dividends, described as broader development benefits from using them, have lagged behind.⁸ Also the aggregate benefits are unevenly distributed.

The report subsequently argued that it is crucial to narrow the digital divide. This not only implies greater internet access but also widespread digital adoption. It

is vital for countries to work on their “analogue complements”, which involves strengthening regulations and standards for businesses to operate in, upgrading skills to match the demand of the new economy and developing supportive institutions.

Digital Divide in ASEAN

If we examine the performance of the ASEAN countries on some of the parameters of digital connectivity, it becomes clear why ASEAN has yet to leverage the digital revolution fully.

At the end of 2015, internet users per 100 of the population varied widely across ASEAN countries. Singapore had the highest at 82.1, followed by Brunei and Malaysia at 71. Cambodia and Laos were at the tail end of 19 and 18 respectively. Even the percentage of firms using electronic mail (email) to interact with clients or suppliers varied. Less than 25 percent of Lao firms used email in their business operation, compared to 80 percent for the Philippines and 91 percent for Vietnam. The mobile internet download speed in Singapore was 16.8 Mbit/s, vis-à-vis 2.5 for Malaysia, 1.04 for Indonesia, 0.9 for Thailand, and 0.4 for Myanmar.

⁷ "USAID ASEAN Single Window Project. ASEAN Single Window- Potential Impact Survey 2012", 19 November 2012, *ASEAN Single Window*, <http://asw.asean.org/multimedia/outreach-material/item/asw-impact-survey-booklet>, p.9.

⁸ "Digital Dividends World Development Report 2016", *World Bank Group*, <http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf>, p.2.

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ASEAN governments are increasingly using digital technologies for public service delivery. These include digital identification of people, tax filing, government procurement, customs and others. But there are wide variations and the benefits are not well-diffused. Singapore, as the most digitally advanced country in the region, leverages data analytics and digital platforms for faster and well-integrated policy decisions. Indonesia has adopted e-procurement for government contracts, but is yet to meet its objectives of improved facility and infrastructure. And, finally, development of one-stop e-customs facility, i.e. NSW, remains a work-in-progress for many of the ASEAN countries.

Also, the role of human skills is of utmost importance in a digital economy. Unfortunately, the biggest challenge facing ASEAN countries lies in the gap in digital capability. According to the WDR, this gap originates from two factors – those of business climate and the quality of human resource. Although the ASEAN countries have improved over time in their overall ease of doing business, there is still a wide variation. Singapore tops the chart among ASEAN countries and even the world, followed by Malaysia and Thailand. Laos, Cambodia and Myanmar fall towards the bottom end

of 190 countries ranked by the World Bank.

It is important for the less developed ASEAN countries to enforce laws and regulations to ensure easy entry and exit of firms and to create an open business regime to encourage competition. The lack of infrastructure, especially highways, rail network, warehouse and storage, hampers growth of e-commerce. Even for the advanced ASEAN countries, stringent regulations in the wake of disruptive technologies make it difficult for digital enterprises to enter new markets and achieve economies of scale. Regarding human resources, Singapore leads the pack of ASEAN countries in the Human Development Index Ranking. But countries like Myanmar, Cambodia and Laos are challenged by their resource quality. In the Human Development Indices and Indicators 2018 statistics, the available data for most recent year in the span of years from 2006-2017 states that for Singapore, 79.4 percent of its population aged 25 and above had at least secondary education, while the proportion for Indonesia is 48.8, Laos is 39.2 and Myanmar is 25.8.⁹

Thus, the challenges that ASEAN countries face in seeking to fully benefit from digital economy remain formidable.

⁹ "Human Development Indices and Indicators 2018 Statistical Update", 2018, *United Nations Development Programme*, http://hdr.undp.org/sites/default/files/2018_human_development_statistical_update.pdf, pp 54-56.

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In the past few years, ASEAN has announced several initiatives, ranging from building infrastructure to trading in information technology products. In 2018 particularly, ASEAN drafted a framework document on e-commerce that covers issues like customs regulations, logistics, online security, data flows and payment solutions. ASEAN launched the ASW with five countries – Indonesia, Malaysia, Singapore, Thailand and Vietnam – and the rest are working their way to joining the live operation in the near future. The 10 countries have also endorsed the ASEAN Smart Cities Network (ASCN) initiative, which will be a collaborative platform for the selected 26 cities to exchange best practices and urban solutions. The overarching objective around all these initiatives is to leverage IR 4.0 to improve lives and employment prospects of the people. It is to help businesses, particularly the small- and medium-sized enterprises (SMEs) tap into the opportunities presented through regional cooperation and digital advancement in ASEAN.

Conclusion

Digital technologies are rapidly spreading across countries and industries around the world. These have immense potential to raise income levels and offer better quality of life for people. These also have capacity to help businesses lower transaction cost and thereby boost efficiency and productivity over time.

However, wider use of technology comes with its own pitfalls. It can raise challenges in terms of privacy issues, socio-economic inequality and labour displacement in the long run. To balance the gains and losses, governments need to take an integrated and comprehensive approach to their policy-making. They need to look beyond the national boundaries and work with other countries to multiply the benefits and curb the drawback from the use of technology and automation.

To this end, Singapore has embarked on its Smart Nation Initiative so as to harness opportunities that might result from the city-state's progressively technology-driven and knowledge-based economy. It has identified focus areas and provided enablers in terms of investments in research and development, and education to attain a set of policy objectives.

Going forward, the fourth generation leaders in Singapore should pay more attention to people. While they should safeguard the citizens' interest from job disruption and lower wages, they should also stay focused on training people with the necessary skills to benefit from the digital revolution. The leaders should re-double their efforts at working with the country's SMEs to impart knowledge and strengthen appropriate digital adoption programmes to enable them to ride and gain from the IR 4.0 wave.

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Simultaneously, Singapore needs to work with other ASEAN members to increase digital connectivity in the region. In 2018, the 10 countries agreed to provide an enabling environment for e-commerce operation in the region and has decided to collaborate on innovation among start-ups and SMEs. The initiative to create an ASEAN network of smart cities is also a way to leverage data and technology to offer efficiency and improve the quality of life going forward.

Indeed, as IR 4.0 is creating major disruption in the way people live or operate business, Singapore and ASEAN are strategically working and navigating challenges to reap benefits from it while we safeguard interests for an innovative and resilient society in the future.



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SMEs in SGP 4.0

Kurt Wee

Kurt WEE has spent his career, spanning the past 18 years in the investment, private equity and business advisory industries. He has invested in various start-ups and private equity projects. He is consulted by a number of businesses professionally and serves on a number of boards. At the Association of Small & Medium Enterprises (ASME), he served as its Vice President from 2002 to 2013. He was elected as the President of the ASME in November 2013. He volunteers at the Singapore Children's Society as an executive committee member and chairs its Appeals (fundraising) Standing Committee. He also serves in a number of government committees and academic institutions. He was appointed as a Justice of the Peace in April 2018 and has received numerous accolades for his public service.

A conversation with Kurt Wee, President, Association of Small & Medium Enterprises, Singapore

Commentary: *How long have you been in this space, promoting the growth of the small and medium-sized enterprises (SMEs) sector in Singapore?*

KW: I was invited to join the Association of Small and Medium Enterprises (ASME) in late 2002, started serving actively in 2003, so it has been about 16 years.

Those were the days when ASME was small with a few hundred members. At the time, Lawrence Leow was the President and we put in a lot of effort to do good projects to build the Association up. We spent time engaging what was then Spring Singapore to achieve alignment with the Government's promotion body for SMEs' so that we could collaborate to achieve mutual interests for the sector.

Commentary: *What was your personal vision for the SME sector in those early years?*

KW: I was at the tail-end of my 20s, so I was just a pair of hands executing the key projects of the President, one of which was to chair the Entrepreneur of the Year Award which was co-organised with the Rotary Club. We had to make it big to help SMEs make that leap forward and shine. We brought in the needed finances through sponsorship and partnered

Channel NewsAsia to create a big bang effect. The journey of the participants, the experience of the awards ceremony and the recognition from the awards all worked out well.

I then took on the task of being the Vice-President of projects. Under our past President, Dora Hoan, we launched the Singapore Prestige Brand award which was also successful in meeting the same objectives of giving the sector a boost.

Commentary: *What were the key issues that the SME sector faced at the time?*

KW: The sector did not have the sort of good support structure we have today. If you look back at the engagement that ASME had with Spring Singapore, we pioneered the creation of the Enterprise Development Centre collaboratively. This was later re-branded as the SME Centre. Through this centre, staffed with business advisors who could do on-ground outreach, SMEs could access government assistance schemes that were targeted at them.

Today, the SME Centre@ASME has three satellite centres with the main centre still at ASME itself. Further, there are now other SME centres like the ones run by major trade associations and chambers (TACs).

Concurrently, the internet was just used for information in those days, but the SME-targeted, Enterprise One portal, was

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comprehensive and formed another part of the SME ecosystem.

Now, all over the island, there is a web of business advisors to help SMEs appropriate the government schemes available – the upgrading programmes, the capability development schemes, helping businesses launch their technological upgrades, redesign their work processes and so on.

Commentary: *How would you describe the SME scene today then?*

KW: We are a free market system. It is probably as open as any other open economy in the world. A key characteristic of Singapore though is the prominence of the government-linked companies (GLCs) when compared to other open economies. There are pluses and minuses to that – the GLCs are in strategic industries but the downside is that there is also an encroachment into spaces that they should probably not be in, so you might notice some tension between the GLC and SME sectors today.

Commentary: *Let us take a historical, stage-based overview of the growth process in the SME sector in order to discuss what it needs in SGP 4.0.*

Perhaps I could characterise those stages in the following manner: In SGP V.1, we were in a catch-up mode so there was a pre-existing local entrepreneurship class, but the Government which had visionary

and broad objectives for economic development set up important statutory boards and GLCs – from banks to an airline.

You also had the promotional arm that went out to look for foreign direct investment (FDI) to attract manufacturing activities that were moving out of the key developed economies. These were through the multinational corporations (MNCs). The idea was that the MNCs would feed the growth of the local enterprise sector because the former would also want to outsource some of their activities to the latter.

SGP V.2 was really about enjoying the successes of the first stage, where we see the local entrepreneurship class strengthened. By 1985, at our first economic recession, we were quite surprised that local entrepreneurs were asking if it was possible to push back the GLCs a little bit to create more space for them.

KW: At that time, I recall that current Prime Minister (PM), Lee Hsien Loong who was Trade and Industry Minister came up with the “Yellow Pages rule” which said that as long a type of business could be found in the Yellow Pages, the GLCs should not venture into it.

Commentary: *Indeed. Under the current PM Lee, of SGP V.3, there was clearly a substantial amount of government*

assistance to proactively grow the local enterprise sector even further. The help was not industry-specific. Now, at the tail-end of this stage, the assistance is more targeted; it is organised according to the 23 Industry Transformation Maps. So that is the broad sweep - an existing entrepreneurial class, a bubbling Singapore economy that is FDI- and GLC-driven but has the locals' participation, then the locals being strong enough to say, "Hey, we are prepared to take on more, can you push back a little bit", and the Government saying it will help.

KW: Yes, V.3 is accurate. There are increasingly more budding enterprises, technological start-ups. They start on Day One not merely looking at the Singapore market but with a regional imprint or ambition. They demonstrate enterprising attitudes that we need to support.

Commentary: *Are there any SMEs that are top of mind with those characteristics?*

KW: There are quite a few - how can it be that a Singapore company can be one of the biggest brand of shoes in the world, and Charles and Keith is that. And how can it be that the stores like H&M and Nike are kitted-up by a Singapore company called Futuristic? How can it be that one of the largest multi-level marketing companies is a Singapore company and there you have Best World which is \$1.4 billion in market capitalisation.

So, we have the emergence of a substantial base of enterprises that are leading the charge in terms of Singapore interfacing the world, and there are a lot more up and coming, young companies that have a similar ambition and I can see that there are interesting models which need not be technological. For example, there is a seven-year old company called Mighty Jaxx which makes collectible figurines. It has been profitable from the start and none of the business partners is over 35 years old. In the old days, you would have wondered how such a company could take off.

Commentary: *What about the manufacturing space?*

KW: Singapore still has a good class of manufacturers. It is just that they may not be manufacturing everything within Singapore. The ones that have reaped the benefits of automation are thriving. Those that can merge automation with digitalisation and manage the process well, will certainly continue to thrive.

There is a company that has big automated manufacturing equipment to create tiny silicon parts. They were saying that one machine has replaced the head count by 15 to 20 people, it allowed them to go into high-scale production and sell through global-scale procurement like the big brand handphones. That space is relatively safe, high-tech and not so dependent on labour.

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If you look at the countries that used to be dependent on labour, they were competing countries that thought they were cheap but they now see labour costs are rising and matching what is found at the global scale.

So in terms of our manufacturing space, the ones that are in the high tech space can scale by increasing equipment and machinery, and get on a high level of efficiency – they are safe. It is a space which is dependent on heavy labour input that faces more risk.

Successful companies usually have a set-up within Singapore for fast response production at low quantity. Then they have a set-up overseas for big volume, low cost production.

Commentary: *The journal is focused on SGP 4.0 which is tied to the political transition – from the third Prime Minister to the fourth and a whole change-up of a cohort of younger leaders. Looking ahead, what are some of the key challenges that the SME sector faces which you hope the fourth generation or 4G leaders bear in mind as they make that transition?*

KW: Over the last few generations, we have grown a strong entrepreneurial class and a strong professional class. We also have a strong civil service. We have got a good safety net of national reserves.

One of the worst things that we must

avoid is to become conservative. We need to continue to be bold, imaginative and be prepared to make right calls. There are other countries in the region that are competing with us so we need to push the frontiers. If our political leadership is not bold enough, that may trickle down into an ecosystem that is not bold enough.

Singaporeans have this “roadmap discipline” – we are very disciplined in following the path that has been laid out. We do well in areas that we are supposed to. We are not that exposed to situations where our survival is in peril unlike other economic landscapes where things are a lot rougher, where you have to be very sensitive and ready to fight or tough it out. So we are fortunate but it has also resulted in a less than resilient DNA.

Recognising this, it is important then to have bold plans and roadmaps - bold plans because we need to lead industries; roadmaps because we need to lead our people.

Commentary: *How does ASME interact with the 4G leaders?*

KW: The business ecosystem is trying to support the 4G leadership to ensure that the transition as smooth as possible – hold dialogues, have exchanges, send SME leaders out on overseas missions with the younger ministers. You see, they are replacing a senior class of politicians;

think for instance of Deputy Prime Minister Tharman Shanmugaratnam, who represents very rare, bold leadership.

Commentary: *It matters to SMEs?*

KW: It matters that the political leadership is bold because that signals to the ecosystem – from the young budding entrepreneurs and even the civil servants overseeing this space – that we have got to go out; that the world is our market.

You see, in most of my interviews with the press, I am often asked about the issues that SMEs face that are domestic in nature, so I discuss issues of business costs and the tight labour market but actually if you ask me to name the most important thing to SMEs, it is “markets”; we must have markets.

If we have markets, these issues of costs and the availability of labour would become less significant and the broad base cost level would automatically be more manageable.

The worst thing for Singapore is that we have no internal market because it is very small. So we must spread our wings into regional and global markets.

This was one of the key concerns I had when it was announced that Spring Singapore would be merged with International Enterprise Singapore or IE Singapore. They served different

functions then. Spring served the very domestic capability function, local support function, technological evolution, beefing up SMEs’ internal capabilities. IE had staff in different parts of the region who would go to the ground to search deep in for markets, to build the right networks which would be useful connections for Singapore businesses venturing overseas. IE officers were enterprising, they understood the markets, where opportunities are, what the local culture is. This was extremely valuable.

The merger has been handled well, given that it is in the good hands of CEO, Enterprise Singapore, Png Cheong Boon, who has a solid track record in understanding and moulding the SME landscape, and strong elements of both organisations have been preserved.

Commentary: *How else can SMEs be assisted in moving out to those markets? Does ASME have counterparts in the region?*

KW: Before the merger of Spring Singapore and IE Singapore, we discussed establishing overseas centres or Singapore trade associations where we can “amalgamate” already successful and entrenched Singaporean businessmen out there to form communities.

We have been to Myanmar, Laos, Cambodia, Malaysia and hope to have Enterprise Singapore support these

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groupings through ASME or the Singapore Business Federation.

We could set up a website of overseas points too so that SME business leaders can connect to Singaporean businessmen and consultants overseas who can advise them on how to get out there and what products to go to market with.

Commentary: *Do you need Singapore businessmen who are operating there to form such communities or can you tap the local businessmen in those markets?*

KW: The Singapore businessmen there would be able to offer better guidance.

Singapore's future is really about how we extend ourselves into the region; there are quite a lot of opportunities in some of the formerly frontier but now emerging markets in Southeast Asia.

After all, Myanmar is a market of 60 million people; Cambodia, 28 million. We went to Laos as well and met a very strong Singapore grouping led by a businessman who has been there for about 22 years.

Another important set of markets are the second, third and even the fourth-tier cities in China. For the Singapore SMEs that are successful in China, the market contributes even 50 percent of their top and bottom line.

Third is to try to imagine West and East

Malaysia together with Singapore as one market. Or Indonesia, it is an important market with a huge population although Indonesia's local enterprise culture and landscape is more complex than Malaysia for us.

Commentary: *Thank you, and all the best for the journey ahead.*



Society

Returning to a Social Capital - Driven Vision of Fostering Inclusion in SGP 4.0

Gerard Ee

Gerard EE spearheads Beyond Social Services, which rallies different segments of our society to look at our social challenges, especially those found in Singapore's public rental housing estates. Beyond Social Services facilitates community-building in low-income neighbourhoods to create a nurturing environment for children and youth to grow into confident, caring people who have the opportunity to pursue their aspirations and give back to their community. After 30 years of service as a youth worker, family therapist and community-builder, he is a firm believer that social work is not simply about problem-solving but is a peace-building process that engages people to be a little kinder, fairer and more cooperative.

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In the 1980s when I was a youth worker, young people who did not have the benefit of succeeding in school got on in life by taking up a trade. If they were willing, it would not have been difficult by, word of mouth, to find plumbers, carpenters, electricians or other craftsmen to take them on as apprentices. Most of the youth who came to my programmes started off as painters and along the way picked up other skills that served them well in blue-collar work. Regardless of their personal or family challenges, they were optimistic that they would find a way to make a living and to build a life. These youth were more than aware of their low-income background, their lack of formal education and their challenges with the English language, our lingua franca, but they believed that with the support of family and friends they would make progress. This was a belief rooted in the strength of social capital.

Services Replace Natural Networks

Today, the structure of our economy and the demographics of our country are very different, and these realities exacerbate the disadvantages faced by our fellow citizens who lack formal education, those who are in the lower social economic strata let alone those with ill-health or disabilities. Caring for our fellow citizens on the margins is a perennial challenge, but the challenge I would like to highlight is the way we

have been dealing with it in recent years.

According to the Ministry of Social and Family Development (MSF) website, there are currently more than 10,200 people employed in the social and community service sector and “it is a growing one with ample employment opportunities.” The proliferation of services competes with natural support networks, replaces the notion of a caring community and its self-directed problem-solving, and does nothing to weave the social fabric that binds us as a cohesive society. Neither does it comfort those on the margins that they actually have a relationship or a bond with the mainstream as service consumption is often experienced as being problematised, fenced out and contained in isolation.

The current social service ecosystem is designed on the basis of helping people to cope with their environment. There is a focus on psychology and operates on the belief that problems require treatment or intervention provided by professionals or programmes. There is little focus on the context, circumstances or structural issues that sustain these problems. There is also no acknowledgement that Singapore’s need for immigration to compensate for low birth rates and a shrinking workforce, on the other hand, contribute to a plural society that further stresses those on the margins

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and reinforces their sense of displacement within their own country.

Rally Society around Social Issues

If social services are to serve as an important pillar for nation-building, then social inclusion and integration must be understood as efforts in creating an environment where no one feels displaced instead of simply trying to get the displaced to fit in. We must regard social issues not as problems to be fixed but as opportunities to rally society toward a common good as well as a shared future that is mutually satisfying and meaningful. It is an opportunity to weave and strengthen the social fabric among people from different backgrounds and reduce the threats and ill-effects that a plural society presents.

To achieve this, we must re-imagine the role of the social sector as one that increases the social capital within our country rather than one that simply services those on the margins. It will work at creating context and conditions that enable people from different segments and social strata to develop mutual trust and co-create solutions where they have an active role in their success.

When people come together to own and act on their shared concerns, they will experience a sense of connectedness and contentment which closes the social divide among them. For those on the

margins, these relationships would be important in bridging social capital that avails them of opportunities and resources to raise their sense of well-being.

Why should we do that? We live in an imperfect and unequal world but resentment and resignation set in when people, especially those on the margins, do not believe that their lives can change for the better. Social services, when positioned to help those who have fallen behind, are inherently communicating that its service-users have failed to fit in or to contribute to the larger scheme of things. This is reinforced when the process of accessing resources requires service-users to accentuate their needs. The position makes the people involved feel like they or their situations are problems. They constantly surface “needs”, which are the raw materials for the proliferation of service provision.

Combine Strengths to Build Value

A different paradigm in creating social services is to think of it as holding a space where a diverse group of people come together to make a difference to themselves and the group in a way they cannot when they act merely as individuals. It is inviting people to pool their strengths, gifts and talents in a manner that they find satisfying and meaningful.

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In this vein, problem-solving efforts then become organised around the belief that all people, despite their challenges and often because of their challenges, have the potential to lead positive change. Regardless, all of us have something of value to contribute and together we can build the community and country we want to belong to and live in.

In the public rental neighbourhoods my organisation works within, residents young and old are encouraged to gain an awareness of their shared concerns, deepen their understanding of the issues at hand, assume ownership of the situation and take action. With the support of volunteers and resources from the larger community, parents and youth come together to address issues such as poor school attendance, care and supervision of children, and substance use. As a result, parents coordinate learning and social programmes as well as organise themselves to support neighbours experiencing difficulties. People demonstrate leadership in surprisingly large measure, and neighbourhoods start to have a climate of kindness, generosity, cooperation and forgiveness. People have a sense that together with neighbours and others in the Singapore community, they are making life better for all.

Collective Effort for Change

Let me illustrate this paradigm with a tangible example: The Community

Tabung is a savings programme that encourages low-income families to top-up their children's Child Development Account (CDA). Once a month on Tabung Counting Day, the children will pour their savings into a common pool in the presence of their parents and volunteers. The total amount is then divided equally among all who participated. Each child's amount is tripled by a donor and when deposited into their CDA, the initial shared savings would have multiplied six times at the end of the process as contributions to the individual child's account are then matched by the Government.

This programme has been designed to encourage personal and collective responsibility and while savings are important, there is much value in the conversations people have about it and the relationships formed among all involved. Participants safeguard the practice of sharing the pooled savings equally as they appreciate the ebb and flow of life; its ups and downs. Thus, being a part of a community where there is much give and take is comforting and satisfying. On counting days, parents, donors and volunteers cooperate to get things going and the experience of organising a successful event is mutually rewarding. Also, as parents get to know each other, they begin looking out for each other's children.

Another initiative where success is a collective community effort would be our

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seasonal festive baking projects. To help low-income families earn some income, we secure orders of cookies from corporations as gifts during the festive periods. To handle the large orders, we cooperate with Caritas Singapore, the social and charitable arm of the Catholic Church to offer the use of their baking facility at Agape Village for free. Then, we welcome representatives from the Islamic Religious Council of Singapore to perform Sertu, a cleansing ritual which assures Muslims that the cookies prepared at their studio will be appropriate for their consumption. Also, as suppliers grant substantial discounts and volunteers offer labour and expertise, the low-income families have come to see that while hard work is necessary for success, it is not enough. There is also social capital or friendships where even religious differences and vested interests are put aside to facilitate their success.

In the current mainstream social service ecosystem, the goal is for those facing difficulties to behave differently and the significant relationship for them is the one they have with the professional assigned to assist them. Help is the domain of this expert and even if the difficulties are resolved, the approach does not build social capital that enhances their resilience or an improved perception of their circumstances. However, when the goal is for community and society to behave differently and when relationships between neighbours

and fellow citizens have a significant impact on one's well-being, our social fabric is strengthened.

Network of Community Resources

Does this social capital-driven paradigm work? There is further evidence. In 2016, we embarked on a study to understand the value of our efforts in bridging low-income neighbourhoods with resources and relationships. After a year, there was a positive impact on residents' personal empowerment, their network of support and social connection, and their perception of neighbourhood characteristics. Respondents felt that where they lived, there was a sense of community, and mutual trust among neighbours.

Our work covers some 60 public rental housing blocks and our relationship with the relevant government grassroots leaders is a hygiene factor for our continued presence. Where this relationship was not well established, our efforts made little headway. Otherwise, our work has been facilitated with the access to rooms, event halls and spaces for community engagement that those grassroots leaders help us with.

So, with these points in mind, let me make four recommendations to Singapore's fourth generation, or 4G leaders, to consider as they think about addressing the needs of those on the margins of society.

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Retaining Community Spaces for Community Members

The first recommendation is for the 4G leaders to safeguard community resources and infrastructure for the efforts that bring those on the margins toward the centre of the community.

I find it disturbing to see community centres being leased out to fast food operators and other businesses. Surely, residents can go to the mall in the town centre should they desire such products and surely, the community centre management can utilise their facilities to reach out to residents who may find it difficult or not gratifying to visit the mall as a routine. In any case, community development and resident engagement can certainly be more than making it convenient for people to get fast food.

The optimising of community resources for rental revenue gives the impression that the Government is subsidising business at the expense of meaningful community engagement and development as it is not transparent how the revenue is ploughed back into the community apart from maintaining infrastructure. It also signals the depreciation of community as its space is being encroached upon or even colonised by commercial interest. If this is not the correct impression nor intent, the leaders should reassess some of their positions or decisions in these areas.

Harness Community Competence to Co-Create Solutions

Next, our 4G leaders must safeguard the notion of community as one that has the competence to resolve its challenges; a place where people can give and receive support and build a satisfying and meaningful life as has been described above.

As such, the co-ordination of social services should put the power and decision-making of people at the front and centre of all efforts. Neighbours, families, friends and constituents, in spite of their own problems, can be equipped to act as front-line responders for those experiencing difficulties.

Leadership, in this light, is about convening gatherings where people from different socio-economic backgrounds and ethnicity can understand each other better and co-create solutions. The different gifts and relationships among constituents should be mapped, inventories should be set-up and updated regularly; these gifts and relationships should be celebrated, activated and treasured as assets a community can draw upon to solve its own problems or enrich its life.

Return Problems to the People

To activate a community's assets, the 4G leaders must also safeguard the transparency of concerns. What does this

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mean? Unless, concerns are clearly defined and acknowledged, people cannot or will not see the need to cooperate and resolve them. Usually when concerns are raised, our leaders cite a programme or scheme that is already dealing with it. This says that the status quo is good enough and no improvements are necessary.

I would suggest that the social service sector be an advocate that draws people's attention to the challenges facing citizens living on the margins. Then instead of recommending expert industry solutions, enable people to respond in a way where they can utilise their own competencies and social capital.

As such, this transparency of concerns would mean returning the problems to the people so that they can appreciate the implications and strengthen their sense of agency or ability to act on them. Leadership is about listening to aspirations and factors that people find motivating and then connecting them to relevant resources and relationships as a way of fuelling their work.

Winning Together

Lastly, our 4G leaders must safeguard a narrative of "finishing well together." Our leaders often use football and other sporting analogies to explain their

roles and responsibilities. In sport, we must play to win and while winners are adored, so are the values of fair-play, sportsmanship, mutual respect, friendship and the solidarity among sportsmen, all of which define the context for excellence.

To draw on the philosophy of the Olympic movement, we must "create a way of life based on the joy found in effort, the educational value of good example and respect for universal fundamental ethical principles."¹ Our collective goal must be for everyone to reach the "finish line" of being recognised as a valuable citizen with much to contribute. The social service sector must stand together with those who have crossed the finish line to applaud those still running towards it as they make the effort to do the same.

Conclusion

I have presented four areas requiring guardianship and if they are indeed well safeguarded, the social service sector would have woven a social fabric that can be a safety net or trampoline for those on the margins. At the same time, there would be a heightened awareness and understanding of our social challenges across society. Also, people will not shy away from reclaiming these challenges as their own and as a result, start organising themselves to act on those challenges.

¹ "Promote Olympism in Society", *The International Olympic Committee*, <https://www.olympic.org/the-ioc/promote-olympism>.

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One visible indicator that we are succeeding will be the nature of the Annual Social Service Summit. Instead of it being attended only by social service professionals and leaders of social service organisations, it would feature those who have come together as a community to address their shared concerns. Leaders in the social service sector would be able to quantify how these efforts have contributed to nation-building and fortify the bedrock of compassion, social justice and community that social work is built upon.



Society

Identity in Singapore Version 4.0

Lydia Lim

Lydia LIM is Head, Training and Talent Development of the English, Malay and Tamil Media Group at Singapore Press Holdings (SPH).

She is a career journalist who specialised in reporting and writing on Singapore politics and policy before moving to be the head of training in November 2017. She also writes a regular column in *The Sunday Times*. She joined SPH in 1999 and was on *The Straits Times*' Political Desk for 14 years, during which she covered general elections, parliamentary sittings and two historic international court hearings involving sovereignty disputes between Singapore and Malaysia. She is a co-author of two books, *Lee Kuan Yew: Hard Truths to Keep Singapore Going* and *Struck by Lightning: Singapore Voices post-1965*, and editor of *Vintage Lee*, a collection of 33 landmark speeches by Lee Kuan Yew.

Before joining *The Straits Times*, she worked in television as a current affairs producer and broadcast journalist. She has a Bachelor of Arts Degree (Hons) in Philosophy, Politics and Economics from University of Oxford and was a John S. Knight Journalism Fellow at Stanford University.

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Each year, as August approaches, the roar of Republic of Singapore Air Force fighter jets fills the air on Saturdays as rehearsals for the National Day Parade fly-past kick into high gear. The parade has taken place every year, for the last 53 years, on 9 August - the day Singapore became an independent nation.

As a small city-state surrounded by far larger neighbours, Singapore's struggle to remain an independent, sovereign state has been woven into a national narrative upon which rests her citizens' sense of identity - so much so that when I once complained about the noise of those fighter jets to my cousin, an Air Force pilot, he shot back: "That's the sound of freedom."

How can a national narrative based on a struggle for independence be updated for the 21st century? And why does it need to be?

In today's globalised, hyper-connected world, individuals - especially those who are well-educated, skilled and wealthy - are highly mobile and less likely to find value merely in being citizens of an independent sovereign Singapore. Independence at the national level is well and good, but intelligent, informed citizens seek independence of action for themselves, and a sense of individual sovereignty.

This essay argues that a new generation of political leaders - namely the fourth-generation or 4G leaders - thus needs to update the national narrative by focusing on the kinds of independence that matter to citizens today.

In other words, where once founding Prime Minister Lee Kuan Yew inspired Singaporeans collectively by framing separation from Malaysia as an opportunity for them to forge their own way forward as a nation, today's 4G leaders need to create and expand the space for Singaporeans to exercise independence of action as individuals, in areas that matter to them.

Mr Lee Kuan Yew had declared in a speech on 5 December 1965:

With independence, comes independence of action, opportunities to create the conditions for the eventual success of what we want: survival in Southeast Asia — a very turbulent part of the world — as a separate and distinct people, not absorbed or swallowed up by more backward hordes or bigger hordes.¹

He added:

There are lots of people bigger than us who would like to absorb us and I don't think that is good for us. We

¹ Lee, Kuan Yew, speech given at a luncheon by the Pasir Panjang Residents at Perak House on 5 December 1965, <http://www.nas.gov.sg/archivesonline/data/pdfdoc/lky19651205b.pdf>

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want to be ourselves — which means that we’ve first got to show everybody that we can look after ourselves.²

That desire “to be ourselves” is very much alive today, and was well articulated earlier this year by students of the National University of Singapore’s Tembusu College, who penned an open letter to “our fourth Prime Minister” to whom they posed “three pressing questions” on which they sought clarity.

The first question was about how much the Government trusts young people: “It’s a little confusing right now because we’re not always treated consistently,” the students wrote. “Do you see us as equal partners – leaders you want to empower – or as citizens you need to govern? What kind of role do you trust us to play?”

They added:

We are prompted in school to think critically and voice our opinions, but we see some naysayers being treated negatively. We are encouraged to push boundaries in some sectors, yet those of us who write articles online are reminded to respect existing boundaries. We are taught that it is important to learn our history, but are certain narratives preferred over

others? You might answer that it all depends - perhaps in specific areas, you will treat us like leaders, and in other domains, we’re better off being governed. Yet, that’s the crux of the issue, isn’t it? We can tell how much you trust us by looking at what freedoms you entrust us with. And, we want an answer because this will partly determine how far we will go for Singapore.³

The process of “adulthood” as the students rightly pointed out, is one of growing in independence and after more than 50 years of national independence, it is unsurprising that more Singaporeans now demand greater freedoms, including the right to disagree with the government of the day, and to act on their beliefs as equal partners in the nation-building project.

It is telling that the students declared that the extent to which they feel trusted by the political leadership will “partly determine how far we will go for Singapore”. In other words, they have choices they can exercise should they feel less than fully independent in their own country - they can leave to forge their own path in another country, or stay but lead private lives focused on self-fulfillment, choosing not to participate in the nation’s civic and public life.

² Lee, Kuan Yew, *Ibid.*

³ Tembusu College, NUS, “A Letter to our 4th Prime Minister”, 20 March 2018, in Facebook [Tan Yang Long’s page], <https://www.facebook.com/notes/tan-yang-long/a-letter-to-our-4th-prime-minister/2057730451181986/>.

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That too was Dr Cherian George's warning in *Singapore, Incomplete*, a collection of his essays including one titled "Reforming the PAP" in which he argued for more civic and political freedoms as "coercion is not the way to get the best out of any society".⁴

If people are merely acquiescent, they won't be inspired to fight for the common good... Increasingly those who don't feel positively engaged can just opt out. PAP reformers would see that more and more aspects of Singapore life are spinning out of the government's gravitational field, giving Singaporeans the choice to disengage from public affairs and privatise their lives if they don't believe in their leaders' vision.⁵

At this juncture, with Singapore still rich, stable and more cohesive than many other societies, the 4G leaders have a historic opportunity to revitalise the nation's independence narrative for the 21st century.

This time, the struggle for independence is not external but internal and springs from Singaporeans' own desire to be themselves, to be free to speak and act independently and effectively in areas that matter. For the 4G ministers, the leadership challenge is to shift away from

an old command and control model and towards a new mode of engagement, which involves empowering individuals to be active citizens.

In this new model, individual citizens' desire to speak up and challenge the status quo should not be regarded as a threat but as a source of strength. It reflects their willingness to step up and claim the right and responsibility of being independent - rather than dependent - citizens, who take ownership of Singapore's future, in good times and bad.

This is not to argue for a free for all. Citizens must be accountable for their words and deeds, and there is no shortage of laws in place to guard against attempts to undermine racial and religious harmony and national security. But the bar for throwing the law at outspoken and disagreeable individuals should be high since the aim of this new paradigm is to encourage participation, not stifle it.

Just as Singapore's independence from Malaysia had to be negotiated, and was codified in the form of a Separation Agreement, so too will a new proposed state of independence for an engaged and empowered citizenry need to be negotiated.

⁴ George, Cherian, "Singapore, Incomplete. Reflections on a First World Nation's Arrested Political Development", *Woodsville News*, 2017, p.192.

⁵ George, Cherian, *Ibid*.

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All parties involved, and that means both government and citizens, have to learn how to disagree in ways that strengthen their sense of common identity rather than sow division and discord.

That is a tall order but the challenge is perhaps no more daunting than the one Singapore faced on gaining independence as a nation back in 1965. At that time, the task was to forge a nation out of disparate groups of people drawn from different races and religions, and speaking different languages.

Today, the issues that divide most deeply tend to be cultural, with sexuality among the most controversial. These are not issues on which different sides can come to an agreement, but what society can aspire and work towards are norms to guide citizens' engagement with each other, and with the Government. And these norms, when internalised, can themselves help to strengthen a sense of common identity.

The Tembusu College students expressed confidence that unity can be found in the face of difference, stating in their letter to the fourth prime minister that what is needed is trust.

We want you to trust that we do not disagree for dissent's sake, and that

we can find unity even in the face of our differences with you - differences of ideologies, opinions, beliefs or values. Disagreement is not weakness and your appointment is a chance for a new way for our differences to be received. We truly believe that it is only in facing our differences together openly, honestly and fearlessly that our discourse can be strengthened, outcomes can be sharpened, and our relationship can be deepened.⁶

Singaporeans' sense of common identity is rooted in pride in their young nation and what it has achieved in just over 50 years. That is what makes National Day worth celebrating.

What the 4G leaders need to do is to build on this strong sense of identity, by activating many citizens' desire to help Singapore thrive, including those with views that are at odds with the Government's.

Their Singapore project in the 21st century must be to encourage, enable and empower citizens to realise their independence as citizens. It is an opportunity for this small island state to show what it can make of itself by pioneering its own path of forging multicultural unity.

⁶ Tembusu College, NUS, "A Letter to our 4th Prime Minister", 20 March 2018, in Facebook [Tan Yang Long's page], <https://www.facebook.com/notes/tan-yang-long/a-letter-to-our-4th-prime-minister/2057730451181986/>.

Society

Locating the Heart of Civic Action: A Tale from Cassia Crescent

Lim Jingzhou & Rocky Howe

LIM Jingzhou has been an active and dedicated volunteer since 2013, serving and learning with and from local and international communities. He hopes to share moments of sadness, joy and love with the people around him; and in the process grow to become a better person. He is the Co-Founder of the Cassia Resettlement Team, and currently leads the team. His experiences include serving in various capacities at Community Health Assessment Team, Advocate For Refugee - Singapore, Tana River Life Foundation, and more. When he is not serving in the community, he can be found attempting to complete his undergraduate studies at Yale-NUS College. In any remaining time he has, he is addicted to Chinese books and music as they teach him so much about life.

Rocky HOWE stumbles around endless different interests and activities, including emancipatory politics and social movements, feminist and queer ethics, alternative histories, law and political economy. He leads research and advocacy at the Cassia Resettlement Team. Currently, he is working on an environmental history of mangroves in Singapore, searching for old and new relationships with and in nature. During barely existent free time, he visits museums and can be found striking out drafts of his Chinese poems. He currently reads Politics, Philosophy and Law at King's College London.

Locating the Heart of Civic Action: A Tale from Cassia Crescent

The Cassia Resettlement Team (CRT) serves residents of Blk 52 Cassia Crescent, a majority of whom have been relocated from the rental housing estates of Dakota Crescent and Sims Drive.

Through weekly house visits to our residents, and other initiatives such as potluck parties with the community, we learn about and address the needs and challenges they face. We also seek to work collaboratively with various community partners, including formal social service organisations and government stakeholders, as we do so. Ultimately, CRT's objectives are to walk the journey of life with the residents and facilitate the growth of communities.

We write this account as individual members of CRT reflecting on our collective work, in the hope of speaking with rather than for the team. Our views do not reflect the full diversity of perspectives at CRT, nor the fact that its members have different motivations to serve, participate in, and bring about social change.

We begin with this acknowledgement of difference because it is crucial to what we do. Having engaged more than a 100 volunteers of various backgrounds including students, working professionals from different sectors, and even the residents of Blk 52 themselves, we are

glad that our brand of ground-up civic action is achieving an integrative and transformative role – bringing together the perspectives, experiences and skills of various members who might not ordinarily have had the opportunity to interact with and learn from one another.

Hence this account is but one interpretation of the CRT story. We would like it to provide a picture of the possibilities for better and greater civic action around people, places and communities in the Singapore of the future.

Finding Roots - Resettlement, Change and Identity

Many of our early members found their way to CRT through the efforts of various ground-up initiatives that emerged in the rental housing estate of Dakota Crescent after its redevelopment was announced by the Housing and Development Board (HDB) in 2014. Its residents were asked to relocate to new rental flats nearby in Cassia Crescent, or rental flats in other HDB estates elsewhere.

Those civic initiatives included *IgnorLAND of its Loss*, a community-engaged arts project by theatre company, Drama Box that culminated in a site-specific theatre performance connecting the public with the place and people of Dakota Crescent.¹

¹ Drama Box, "IgnorLAND of its Loss", July 2016, <http://www.dramabox.org/eng/productions-ignorland-loss.html>.

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Similarly, *Dakota Adventures* created tours of Dakota Crescent co-guided by the residents themselves, giving them a platform to share their personal stories with tour participants.² *Between Two Homes* was a documentary effort where residents were invited to share their stories and relocation experiences for an interactive website.³

These efforts resulted in the formation of a wide network of volunteers and participants, some of whom gradually coalesced to form CRT. These shifted the narrative about Dakota Crescent from being just about heritage conservation to a concern with the lives of the members of the Dakota Crescent community and the challenges they faced before, during and after relocation. It is the residents' needs, above all else, that are at the core of CRT's focus.

It is not that heritage conservation advocacy is unimportant. Rather, we think the shift towards a concern for people is a natural turn that reflects the inclinations of a younger generation of Singaporeans who have at most, a passing connection to the physical place. For them, Dakota Crescent links them to contemporary social and political issues like ageing and loneliness, and offers a richer space for civic action to emerge.

Building Communities of Care

It was only after the residents of Dakota Crescent relocated into Blk 52 that CRT was formally organised and when we began to realise the complexity of the challenges they faced. They had difficulty adapting to a radically different environment which was even more acutely felt as the relocation had disrupted their sources of formal and informal social support.

We were clear from the outset that CRT would not replace the role of traditional social service organisations, but instead, that we would act as intermediaries to help these formal agencies bridge the gaps that emerged in supporting the residents. Yet we found ourselves, in many instances, also taking up direct responsibility of care for particularly vulnerable residents of Blk 52 given the various limitations of the current social welfare system. These were instances when our volunteers rallied together to discuss the best course of action to address the needs that emerged.

When we did that, we often found ourselves trying to balance between addressing a particular need that emerged directly and creating unhealthy dependence on volunteers by the residents. We were also keen to avoid

² "*Dakota Adventures*", In Facebook [Dakota Adventures], 2016, https://www.facebook.com/pg/dakotadventures/about/?ref=page_internal.

³ Run & Gun Media & Dakota Adventures, "*Between Two Homes*", 2016, <http://betweentwohomes.sg/>.

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taking over the type of duties and responsibilities that ought to have been provided by social service or public agencies, such as medical escorts to hospitals for the residents. We would make an effort to highlight residents' needs to such agencies so that they could take the appropriate action, unless it was particularly urgent.

Our volunteers have also gotten together out of their own initiative to develop new projects for the community. One such programme is *LIVE@52*, consisting of small-scale activities that target residents from a few floors or of a specific demographic profile, such as children. These activities, largely art-based and held at different spaces within the community, aim to reach out to residents and deepen relationships across the block.

Twinkle Wishes is another example. This project team provides end-of-life support to residents, increasing awareness and access to planning instruments such as Advanced Care Planning and the Lasting Power of Attorney. This arose from the recognition that many residents who had end-of-life wishes did not know how to use these instruments to ensure that their wishes would eventually be honoured.

We are heartened to see that a strong sense of community has emerged among our volunteers as they worked together

in the ways we have mentioned above. The collective action around Blk 52 has been transformative for each one of us, opening up conversations about a range of different challenges people face - from housing to ageing to healthcare. It has led us to build collective knowledge around social issues that question and challenge existing narratives and policy approaches. It has helped us develop a sense of agency that tells us we can believe in our ability to care for others and advocate social change.

At the heart of our work is the time volunteers spend with residents during our visits and through our programmes. Such interactions are not merely instrumental. Our volunteers build genuine relationships with residents at Blk 52 which create a deeper understanding of who they are as individuals, rather than as clients or passive recipients of care. Through our interactions, we also learn from their life stories.

What has emerged in CRT is a community of care that places each resident and the wider community of Blk 52 at the center of it. We think that the future of civic action is tied to building such communities of care. Care becomes a space of action and an opportunity for change. We imagine that such communities, when driven by action and processes of genuine interaction with others, are well-suited to creating social inclusion and solidarity in practice.

Locating the Heart of Civic Action: A Tale from Cassia Crescent

The Conditions for Transformative Civic Action

In the course of our work at Blk 52, we have encountered many members of the public and government agencies who are supportive of our work. We have had individuals share valuable ideas, wisdom and the resources that we needed. For instance, there have been civil servants who have acted as navigators when we negotiated with various departments and agencies about different matters on behalf of the residents.

Such successes have often been contingent on a range of factors - personal relationships with individuals in different organisations; the goodwill of particular civil servants we came into contact with; and sometimes what seemed like sheer luck. This is because ground-up initiatives, lacking legal recognition, tend not to have the same degree of legitimacy in the eyes of public agencies. On first contact, there is often scepticism about our intentions and an aversion to sharing information that we think would facilitate better coordination in meeting the needs of residents.

This, in our view, is not sustainable for civic action in the long run as it creates both a high barrier to entry for civic actors, and a lack of certainty and predictability in engagement with the state. We recognise that it does take time to build trust between existing public

agencies and the social sector when the civic actor is new. We would like to suggest that the network needs a wider definition of legitimacy than a formal organisation does — that definition could take into account the record of the civic actors on the ground as well as the preferences of the community itself.

Making civic action sustainable also involves seeing such actors as equal partners in shaping the social space. Equality can be fostered by allowing for an open and transparent exchange of information between the state and civic actors. It should also come from recognising how the latter can be a valuable source of community knowledge and therefore a legitimate contributor to policy discussions; they are not just hands and legs on the ground.

The next, fourth generation of political leaders can pave the way for the rise of civic actors by lowering the barriers to entry and fostering an open and collaborative approach to addressing social issues. Yet such change also requires a more fundamental shift in the political narrative – leaders must move away from simplistic narratives of progress and success, to allow for better acknowledgement and recognition of the unmet needs of Singaporeans and the difficulty our society faces in resolving them. Only with such honest and transparent engagement will civic actors feel confident enough to engage the state.

Locating the Heart of Civic Action: A Tale from Cassia Crescent

We make these suggestions to encourage the formation of civic groups and improve their effectiveness in bringing about social change. But it is also important to look beyond the policy and social goals such actors might have in order to recognise the *intrinsic value* of civic action in building community and forging a sense of belonging.

In an era where we see rising political and social divisions across the world, civic action points the way to a rebuilding of social solidarity and inclusion through action and change. Civic action that has at its heart, the building of communities of care, as we have highlighted earlier, offers citizens the full richness of being members of a social network and help them uncover the value of individuals' experiences, needs, and diversity. We hope that CRT's work is at least a small contribution to imagining this better future.



Society

SGP 4.0: Re-thinking Approaches to Diversity and Social Inclusion

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In a context where far right political parties and movements are stoking xenophobic sentiments in Europe and the United States, Singapore remains a bastion for liberal mobilities and cultural tolerance.¹ This is one of the most important reasons why Singapore has been able to attract not just the talented and highly skilled, but also those seeking to escape economic hardship and discrimination because of their gender, race, or religious affiliation. Particularly for people of Asian heritage who have grown up and lived in the West, Singapore stands out as a space where their racial, religious or cultural backgrounds are not held against them, and where they have a good chance of enjoying social mobility.

In order to maintain that global reputation as a city-state that is welcoming of foreigners, we must not simply continue to provide economic opportunities for potential migrants and immigrants, but also build a social and cultural landscape that is more inclusive of difference and recognises the inequalities that these differences may engender. With rising levels of economic inequality combined with the changing cultural demographics of the citizen population, there is a need to rethink approaches to diversity and the ways in which social inclusion is configured within our city-state.

Singapore's Diversity Landscape

Post-independence, the Chinese, Malay, Indian, Other (CMIO) categorisations have defined much of Singapore's approach to migration and diversity. This recognition of different ethnic communities and the intention to provide equitable resources through those categorisations proved largely successful. After all, this was a state that sought to create and solidify a national identity that would rally together a population not just of migrants from India, China and Southeast Asia, but also individuals who had previously thought of themselves as Malaysians. It was imperative that this identity would distinguish Singapore from the approach of the past when it was intertwined with the larger Malayan Peninsula.

One consequence of these policies relating to ethnicity is that Singapore's migrant diversity has been diminished through the eradication of the use of Chinese "dialects" and the adoption of a utilitarian, rather than scholarly mode of multilingualism. The effects of these CMIO policies can also be felt in more visceral terms - Singaporeans now see themselves and others in prescribed racial terms. This means that difference rather than commonality as co-citizens is what is foremost in this politics of recognition. Those who fall outside or

¹ Liberal mobilities refers to a belief or policy that market-driven freedom of movement of persons for work has positive economic, political, cultural and social benefits.

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elide such racialised categorisations may also be left out of the system by which the state recognises cultural traditions or even disburses social support. This mode of seeing people within the nation and city by whether they are racial and cultural strangers or affiliates also affects how temporary migrants and immigrants are perceived.

Temporary Migrants

Singapore's exclusion of low wage migrant labour from a route to attaining permanent residency or citizenship does not look set to change. This mode of regulating migration is also resonant with global trends with respect to low wage workers, where they are increasingly being excluded from their host nation's polity.

However, Singapore's reliance on these men and women who perform often dangerous, demeaning and dirty jobs is at far more significant levels than most other nations, with the Gulf States as prominent exceptions. Despite their permanently temporary nature, low wage migrants often stay for long periods in Singapore, taking on circular routes of migration that entail a regular back and forth between home and host countries. Many who have worked in Singapore for decades describe strong feelings of belonging and emotional attachment to a nation that has been a home for much of their adult lives. How can we acknowledge the contributions of

these temporary migrants?

Ground sentiment with regard to low wage migrants is fast changing. Thanks to the work of non-government organisations (NGOs) that cater to the welfare of migrant workers and generate coverage of their lives in the local media, there is now far more sympathy for these men and women than there was even a decade ago. There is greater acknowledgement of the important work that they do in building and maintaining the material fabric of our city and in taking care of our children and senior citizens.

In response to these shifting mindsets, we must explore ways in which we can enhance how these men and women can be made to feel included in the social fabric of Singapore. This should not be left only to NGOs or individual employers. The judicial system and policymakers should take on the task of changing the social structures that pertain to these temporary migrant workers. Penalties for abuse of migrants, whether physical, verbal, or in terms of the late payment of wages for instance, should be far harsher and better enforced. Sending a signal that these crimes and practices are unacceptable assures temporary migrants that they are valued as equal, contributing members of our society.

Further Diversification

In the past 20 years, Singapore has seen

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a very different wave of immigration compared to the movements of the pre-war years. Our total population has grown by almost a fifth, and much of this is due to the expansion of immigration and naturalisation to augment the effects of the ultra-low fertility rates. These immigrants have been overwhelmingly from other Asian countries, although there are rising numbers of Singaporeans who are not of Asian ethnicity, and who do not fit easily into the CMIO categorisations. What is of particular significance is that many (im)migrants have been presumed to fit within the Chinese and Indian labels, being of East Asian or South Asian ancestry, but without the same cultural and national histories of second, third and later generation Singaporeans. What do these changing demographics mean for Singapore's national identity?

Encouraging Integration

Singapore has been highly successful in attracting, in particular, highly educated Asians from Europe and North America, who see Singapore as a happy middle ground between the East and the West. Many express how they appreciate the efficiency, cosmopolitanism and safety of living in a city like Singapore, but which also espouses Asian values and culture. This group with high cultural capital often finds the city of Singapore an easy place to adapt to.

However, in many cases, this has not

entailed meaningful interaction with Singaporeans. They maintain exclusive social networks and self-segregate even in residential areas. This mode of living “parallel lives” – side by side but without meaningful interaction – is a sign of the increasingly divided society that Singapore is becoming. We should not ignore changing demographic realities on the ground. One of the most significant trends that is emerging is the intersection of socio-economic status with immigration status, where highly skilled employment pass holders and low wage domestic, construction and service sector workers lead very separate lives from middle-class Singaporeans.

It is now widely acknowledged that the growth of inequality is a global phenomenon. However, this is an issue that has to be addressed at the level of the nation-state and the city, for it is at that scale that everyday change is experienced. Attempts should be made for greater grassroots reach into condominiums and private developments where there is evidence of immigrant communities self-segregating. More effort should also be made to ensure neighbourhoods are composed of a mix of housing types. The encouragement of organic, bottom-up expressions of identity that are inclusive and bind people across racial and class differences should also be encouraged.

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Directions for the future

The politics of recognition that the post-independence Government adopted, which ensured the representation of the four major ethnic groups in Singapore across many spheres has worked well on many counts. We have a largely bilingual population, there is a high level of residential desegregation and Singaporeans, on most counts, are very tolerant of difference in everyday life. However, the CMIO system of dividing and catering to the welfare of the population seems to have reached the extent of its utility. The divisions between socio-economic class and between local and foreigner now seem to have superseded the divisions once thought to be the most insurmountable – those between the “races”.

Perhaps it is time to move towards a post-recognition politics; one that is inclusive and that resists labelling or categorisation. This is almost an imperative given that one out of every four marriages here is between a Singaporean and a non-Singaporean. The current and future generations will comprise a significant proportion of bi-cultural individuals who will not easily fit into ethnic labels or even national categories.

The difficulties of categorising difference are also coming to the fore with the inclusion of Indians and Chinese born outside Singapore within the same labels

that define Singapore-born individuals of Chinese and Indian ethnicity. Tensions within these two communities have already been noted by scholars and the popular media, and need to be addressed better by integration efforts that do not take affinity within groups as a priori. This means that we should not assume that just because people share similar phenotype characteristics, or even a shared ancestry, that they will share other characteristics, and act as a group.

These shifts in thinking about diversity should come together with a widening of perspective on who needs to be included within the nation and polity. Together with efforts to integrate immigrants, we should also consider how we can acknowledge the labour and contributions of temporary migrants to the nation.

After all, our collective dependence on migrants is not diminishing. In fact, with Singaporeans increasingly shifting to white-collar work, our reliance on a migrant pool doing blue collar jobs is growing.

Given these circumstances, it would be of mutual benefit if we develop better welfare mechanisms and frameworks to deal with issues that low wage migrants regularly face such as overwork and lack of representation against errant employers. Temporary migrants should also be integrated into mainstream Singaporean society

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through their inclusion in neighbourhood level activities, and the extension of labour protections and rights that Singaporeans and middle-class workers enjoy to them. Tangibly, this could mean, for example, extending to foreign domestic workers the benefits and protection prescribed under the Employment Act.

Looking further into the future, migrant labour from the region is unlikely to remain an inexpensive resource. With the growth of regional economies, it may soon become unaffordable for Singaporean companies and individuals to depend on this cheap human resource. Shifting to more automated forms of construction can reduce our reliance on migrant workers in this industry and other related industries.

However, it is the demand for domestic and care workers that looks set to continue unabated, and even become heightened with a rapidly ageing population. Care work and other such feminised labour within this context should not be devalued. More needs to be done to encourage Singaporeans to value this type work, and appreciate the people who do it. An important way to do so is to recognise that this type of work entails a large component of emotional labour, and compensate such work in a commensurate manner. This may also encourage the greater participation of Singaporeans of different genders within the sphere.

If we want multiracial cultural diversity to be one of our greatest strengths, Singapore's leaders should re-think the traditional ways in which diversity has been defined and managed, taking into account the issue arising from migration that has been discussed. It is time for change.



Society

Iron Trees and Cheap Water: Environmental Identities in Singapore

Leong Ching

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Her work lies in making sense of apparently irrational environmental behavior, whether in the refusal to use recycled water, underinvesting in water utilities, or decision-making in building dams and managing rivers. Her field research is focused on water institutions and governance in Asia. She has graduate degrees in philosophy, information technology and journalism. Before joining the university, she had a career in television and newspaper journalism.

Iron Trees and Cheap Water: Environmental Identities in Singapore

Much of Singapore's national identity has been shaped by its size and geography. The fact that it is a city-state forms the exoskeleton of the national narrative – the smallness of our market requiring openness and economic porosity; our vulnerability necessitating nimbleness in foreign affairs.

But, as the biophysical and planetary limitations for growth are reached and, increasingly, breached in many parts of the world, environmental issues have acquired new salience in Singapore.

So, it is fitting that this final essay on SGP 4.0 should be about the environment, since it has all too often been the final item on any national policy agenda but may now become a far more salient one that our country's fourth generation (4G) leaders and indeed all of us will have to grapple with.

Emergence of an Identity Shaped by Environmental Insecurities: Anthropocentricity

To interrogate the idea of “the environment” within Singapore, it helps to understand the concept of “environmental identity”. It defines the relationship between people and their natural environment. Such an identity carries not just emotional significance,

but normative and prescriptive value too.

Like all identities, an environmental identity is constituted by a variety of factors and is closely linked not only to individual perception, but to social and cultural narratives, as well as public and political institutions. Environmental identity is, therefore, a composite of perceptions, shared history and beliefs, all of which inform the choices we make and the way we behave.

One way of thinking about environmental identity is along the ecocentric-anthropocentric scales created by Thompson and Barton that evaluate people's attitudes towards the environment, and their levels of support for environmental issues.¹

Ecocentric individuals find inherent value in nature, believing that nature is worthy of preservation for its own sake. On the other hand, anthropocentric individuals take an instrumental view where nature is treated as the means by which human comfort and quality of life may be extracted and maintained.

Not surprisingly, those living in a bustling city-state like Singapore are more likely to be anthropocentric.

¹ Thomson, Suzanne C. Gagnon & Barton, Michelle A., “Ecocentric and Anthropocentric Attitudes Toward the Environment”, *Journal of Environmental Psychology*, Volume 14, Issue 2, <https://www.sciencedirect.com/science/article/abs/pii/S0272494405801689>, pp. 149-157.

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Since our independence in 1965, the Singaporean national narrative has revolved around the concept of vulnerability. Singapore's split from neighbouring Malaysia left it bereft, with "no hinterland, no natural resources, and almost total dependence on Malaysia for water supplies" as it is often said.

The resulting sense of vulnerability – as much constructed as real – was regularly affirmed by political leaders and foreign observers. Founding prime minister, Lee Kuan Yew once described it as an "inescapable, permanent condition of Singapore as an independent republic".²

This is particularly pronounced when it comes to the issue of food and water insecurity. Water, repeatedly called an "existential issue" for Singaporeans, has also been a perennial source of tension in the country's relations with Malaysia, upon which we depend for water.

In 1961 and 1962, Singapore signed two separate water agreements with Malaysia that would allow it to draw water from Johor and the Johor River. These would expire in 2011 and 2061 respectively. Since then, several talks attempting to revise or establish fresh agreements have stalled, with Malaysian

leaders periodically threatening to cut off Singapore's water supply.

Kog et al. termed this the practice of *hydropolitik*, or the political exploitation of a "life-and-death gambit" of a resource which is frequently described as a matter of national security.³

To minimise this, Singapore's Public Utilities Board (PUB) introduced the "Four National Taps" water management strategy to expand the sources of water – from imported water and water from local catchments to include desalination and recycled wastewater (also known as NEWater). The goal is to move towards achieving complete self-sufficiency in water by 2060.

While Singapore's initial intention was to address those "life and death" challenges in securing water supplies, it is now building a global hydrohub identity based on its strength in water policies and is sharing its experiences with an international community that is increasingly burdened by environmental and climate challenges.

What was once an inescapable fact has now been eroded by technology and policy. In the late 1990s, when Malaysia

² Heng, Yee-Kuang, "A Global City in an Age of Global Risks: Singapore's Evolving Discourse on Vulnerability", *Contemporary Southeast Asia*, Volume 35, No. 3, <https://www.jstor.org/stable/43281266>, pp.423-446.

³ Kog, Y.C., Lim, I.F.J. and Long, J.S.R., "Beyond Vulnerability?: Water in Singapore-Malaysia Relations (No. 3)", *Institute of Defence and Strategic Studies*, 2002.

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mooted the idea of revising the water prices, the key element was that there was only one seller; Singapore was a price-taker. Today, with desalination and recycling, the equation has shifted. True, there is only one seller, but there really is only one buyer. This leads to a new environmental identity around water – one that includes confidence that Singapore no longer has to bend its knee in future water talks with Malaysia.

The same narrative applies to food. While Singapore produces about 10 percent of its total consumption of food, it is the third most food secure country in the world.⁴ This is because food security is measured not by the actual amount of food produced, but by the exposure a country has to any single food source – Singapore imports from diverse sources. This sense of security perversely means that, on average, each Singaporean household throws out 2.5kg of food waste, which is the equivalent of a bag of rice each week.⁵

Overall, while the current situation of relative food and water security may seem to portend a safe and stable situation for the country, it also means our view of natural resources

such as water and food is highly anthropocentric. This in turn will impact our behaviour and hence our resilience to environmental changes and climatic events.

An Artifice of Nature: Resilience and Behaviour

A more fundamental question therefore is this: What is the Singaporean conception of “nature”? When so much of “nature” is in fact man-made – from manicured parks to reclaimed land – how do Singaporeans understand “nature” and how do we derive our environmental identity?

The artificial and the natural are frequently thought of as polarities, but in the case of Singapore, the relationship is more complex. The best way to illustrate this is to take the example of Singapore’s Urban Beautification Programme, launched in 1967 which is overseen by a “Garden City Action Committee” comprising senior civil servants.

The Government announced its plan to build a “Garden City”, planted trees along major roads, and creepers and climbers to camouflage concrete structures such

⁴ Ong, Keng Yong, “Singapore and Food Security”, *RSIS Commentary*, 30 June 2017, <http://hdl.handle.net/11540/7233>.

⁵ “2.5kg of food a week wasted by each household, equal to half of all household waste: NEA study”, 3 December 2017, *The Straits Times*, <https://www.straitstimes.com/singapore/25kg-of-food-a-week-wasted-by-each-household-equal-to-half-of-all-household-waste-nea>

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as flyovers and over-head bridges. Angsana trees – “instant trees” – were imported and planted along public roads and streets, sometimes even before construction is completed.

More recently, the “ABC Waters” (Active, Beautiful, Clean) programme which won the international Waterfront Awards in its year of completion (2012), saw an investment of S\$76.7 million to turn concrete canals into meandering rivers, transforming Singapore into a “City of Gardens and Water”.

Which is more natural? A city with concrete buildings and highways, or one with instant trees and creeper covers? A plain, utilitarian canal, or one that has been turned into a “river” quite unlike the original? The “natural” in Singapore contrasts with the more obviously artificial, but is no less man-made.

“Nature” in Singapore is not feral but constructed, as Barnard argues.⁶ The Singapore Government took its technocratic, managerial approach to economic development and transferred it to the “Garden City” project to cultivate a form of greenery which is tamed to fit with its idea of urban development.

Lee Kuan Yew said at the opening of the National Orchid Garden in 1995:

Singapore today is a verdant city, where abundant greenery softens the landscape. This was no accident of nature. It is the result of a deliberate 30-year policy, which required political will and sustained effort to carry out.⁷

Hence, the artificial-natural dichotomy is by no means unproblematic. Groups such as the Nature Society, for example, argue that nature has become a “human construct” in Singapore, and greening for aesthetic purposes has come at the expense of encouraging robust natural vegetative growth and biodiversity. The most visible symbol of this is at Gardens by the Bay, where the defining features are iron trees.

It may be unsurprising for a dense city-state to have an artificial sense of what comprises the natural environment. But environmental identities have implications on our behaviour today as well as the ability to adapt in the future.

Resilience

A consistent thread in the agenda of the 4G political leaders is building national resilience which is the psychological ability to withstand shocks and challenges. Within environmental sciences, resilience is commonly defined as a system’s ability to resist change and

⁶ Barnard, T.P., “Nature Contained: Environmental Histories of Singapore”, *NUS Press*, 2014.

⁷ National Parks Board, “A Special Tribute to Mr Lee Kuan Yew, The Man Behind the Greening of Singapore”, 2016, <https://www.nparks.gov.sg/about-us/special-tribute-to-mr-lee>.

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withstand external disturbances.⁸

Resilience takes on two broad forms in addressing the different types of risk that surface. The first is defined by a “status quo bias” of maintaining the same relationships and resisting external change.

The second conception of resilience is defined not by the system’s ability to build up a bulwark against change but instead to the ability to adapt and adjust to fluctuations. This emphasises elasticity and flexibility in the face of change. These two forms of resilience impact the way that environmental identity may be expressed.

In the first view, pro-environmental behaviour is primarily expressed in the provision and strengthening of large-scale human-built infrastructure to guard against further environmental degradation and climate change. This is evidenced in the building of dams, dykes, and seawalls.

In the second view, pro-environmental behavior is expressed through adaptive human behavioural change, and the cultivation and maintenance of ecosystems, of which humans are a part. This entails the building of

institutional capacity and communities, as well as the introduction of incentives to change the way resources are allocated.

Emerging Climate Change Elements Within the National Environmental Identity

In 2012, Singapore recorded the highest carbon footprint among Asia-Pacific countries; in 2014, we recorded the seventh-largest ecological footprint out of 150 countries. How do Singaporeans feel about our environmental record?

In a survey conducted by Singapore’s National Climate Change Secretariat in 2013, it was found that 70.2 percent of Singaporeans were concerned about climate change, and 78.5 percent believed that they would be adversely affected it.

However, when it came to personal responsibility, only 39.2 percent felt that individuals were mainly responsible for taking action, while a larger proportion felt that it was up to the Government, businesses, or non-government organisations to do so.⁹ This shows that while Singaporeans are certainly aware of the threat of climate change, a majority do not feel personally

⁸ Holling, C.S., “Resilience and Stability of Ecological Systems”, 1973, http://www.zoology.ubc.ca/bdg/pdfs_bdg/2013/Holling%201973.pdf.

⁹ “Climate Change Public Perception Survey”, 2013, *National Climate Change Secretariat*, <https://www.nccs.gov.sg/docs/default-source/default-document-library/appendix-i.pdf>.

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culpable or moved to take action.

A good example is when Singapore experienced a two-month drought in 2014 with February that year being the driest month since 1869. There was near-zero rainfall. Facing similar circumstances, neighbouring Malaysia implemented water rationing in Johor, Selangor, Negeri Sembilan as well as the Federal Territories of Kuala Lumpur and Putrajaya. In Thailand, 20 provinces were declared drought-disaster areas. In Singapore on the other hand, it was business as usual. Water consumption advisories were sent only to commercial and industrial users.¹⁰ There was no water rationing.¹¹

The implication is that even in the face of severe climatic changes, it is likely that Singaporeans will find it hard to change their behaviour. At the same time, extreme weather events including heavy rainfall and exceptionally dry periods are projected to occur more frequently in the region as a whole.

The crucial issue behind this attitude lies in our environmental identity. What do people think about the possibility of

drought? What do they think they should do about it? What do they think the Government should do about it?

Recently, the PUB also announced it would raise water tariffs by 30 percent (to be spread over two years) for the first time in 20 years in an effort to curb the excessive consumption of water. Even as laws, regulations, and economic incentives may result in temporary behavioural changes, they may not be able to change attitudes in any lasting or permanent way. As such, the ultimate aim of demand-side management ought to be to educate and engage the public to help it relate to climate change on a more personal level.

Much of Singapore's national policy-making has been guided by economic pragmatism and anxiety about the future, but such a mode of decision-making is often at odds with the public good of fostering environmentally-sustainable behaviour. When it comes to the environment, as with many other common pool resources, beneficiaries do not want to incur the costs required

¹⁰ "Singapore experiencing record dry spell - and it could get worse: NEA", 25 February 2014, *The Straits Times*, <https://www.straitstimes.com/singapore/singapore-experiencing-record-dry-spell-and-it-could-get-worse-nea>. Also: "Singapore endures driest month since 1869", 4 March 2014, *TODAY Online*, <https://www.todayonline.com/singapore/singapore-endures-driest-month-1869>. Also, Zulkifli, Masagos, speech at Budget Debate, 1 March 2017, <https://www.mewr.gov.sg/news/speech-by-mr-masagos-zulkifli—minister-for-the-environment-and-water-resources-during-budget-debates—1-mar-2017>.

¹¹ Leong, Chin, "Resilience to Climate Change Events: The Paradox of Water (In)-security. Sustainable Cities and Society", 2016, pp. 439-447.

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to sustain the environment, or are powerless to enforce the levying of costs on those who extract these environmental assets.

In short, all three emerging elements of the Singaporean environmental identity present challenges to the 4G leaders if they wish to shift policy towards greater environmental sustainability. These are first, an anthropocentric attitude that does not see the intrinsic value of the natural environment but believes that nature is malleable to human will; second, excessive carbon emissions that will invariably impede Singapore's quality of life in years to come; third, and concurrently, Singapore's reliance on infrastructure and government policies when it comes to tackling critical climate change issues, instead of adopting strategies of social adaptation and behavioural change.

An anthropocentric attitude towards its environmental assets is a part of the environmental identity of the Singaporean and cannot be easily moved. And yet within the arc of development in Singapore, the economic pragmatism that has bred this very identity can be used to serve an environmental goal – perhaps one way of reversing the overuse of our environmental resources is to see the importance of the environment in sustaining economic life itself.



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