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Singapore Challenged: The Uneasy and Unchartered Road Ahead

Can we continue to punch beyond our weight?

Commentary:
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Singapore Challenged: The Uneasy and Unchartered Road Ahead

Editor: **Associate Professor Victor R Savage**

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Singapore Challenged: The Uneasy and Unchartered Road Ahead

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Introduction

"Will Singapore be around in 100 years? I am not so sure….An earlier generation of Singaporeans had to build this place from scratch — and what a fine job we have done….But after that, the trajectory that we take will depend on the choices made by a younger generation of Singaporeans. Whatever those choices are, I am absolutely sure that if Singapore gets a dumb government, we are done for. This country will sink into nothingness" (Lee Kuan Yew, 2013:212).

The above statement by the Founding Father of modern Singapore, Lee Kuan Yew would seem dismal, worrying and yet, could be prophetic. After 50 years of independence (SG50 in 2015), Singaporeans at all levels need to take stock of the City-state's achievements, issues, benchmarks and future challenges. Given its current status as perhaps one of the best run governments in the world, its booming economy, its gleaming global city status, it would be difficult for younger generation Singaporeans today to believe that this modelled, success story of abundance and first-world status could go all wrong in decades. We have seen, in a short spell of three months, how the Irish success story fell apart and how Iceland had a financial meltdown — it underscores an ominous warning that economic success is tenuous, social confidence is brittle and political stability is fragile especially for small countries.

The global status of Singapore reads impressively for 2013 — according to the Standard Chartered Development Index, Singapore ranks fourth globally for sustainable development; it is the third-largest foreign exchange centre in the world after New York and London; it is the top convention centre in the world for 11 years running; and it is ranked the 16th most peaceful country in the world in the Global Peace Index. In his welcome speech to Prime Minister (PM) Lee Hsien Loong in April 2013 in Washington DC, President Obama said that "Singapore is one of the most successful countries in the world". In short, the City-state has become a visible international brand name for a successful city-state that is eco-friendly, economically vibrant, politically stable and with a good quality of living.

Yet, maintaining this 'success' story is no easy proposition for whoever takes over as the government in Singapore. The domestic political pressures are building up and international competition is coming from all quarters as Singapore embeds itself in a globalised market place. Every astute Singaporean is wising up to the question of how Singapore is going to maintain and sustain itself, over the next several decades. The pessimists see Singapore's golden times ebbing soon while the optimists believe Singapore will still survive because countries regionally and globally are unable to develop sustainably. However, Singaporeans cannot bank on the misfortunes of other

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countries and cities to compete internationally. If the City-state is to sustain itself it needs to continually reinvent itself and ensure it remains competitive and relevant in the global exchange of political and economic activities, goods and services.

Given that some Singaporeans are increasingly cognisant of the global imperatives and regional challenges facing the City-state, I thought it was opportune to hear from a spectrum of Singaporeans, covering a variety of economic, political, cultural, environmental, educational and social interests about what they see as Singapore's current challenges and their prescriptions for the management of the City-state. One issue which our cover design highlights is whether Singapore will continue to excel well and be able to punch beyond its weight. Given that the NUSS is celebrating its 60th anniversary this year, it seemed timely to look into Singapore's future prospects from an 'insider's' perspective. All the writers were chosen for their expertise in varied arenas and hopefully, they bring to these commentaries, perceptions, analyses and reflections which are pertinent to Singapore's future national trajectories. *Commentary* remains a relevant platform and arena for debate, dialogue, and discussion. Enjoy this issue — there is a lot to imbibe and much more to reflect on.

To better appreciate the following discussion, one needs to be reminded of three significant developments in Singapore. Firstly, the curtains seem to be closing on the person who developed modern Singapore, Mr Lee Kuan Yew. He marks the end of an illustrious and active career as the Founding Father of modern Singapore. The question is whether Singapore can still develop without his physical presence, political tutelage, and global influence? Only Mr Lee has had the political gravitas to criticise, speak freely and frankly on the world stage and still be respected.

Domestically, however, one wonders whether he has put in place a political system that will transcend his long rein on political power? In Huntington's terms, one would ask whether the first-generation leaders have provided the institutionalisation of political processes and institutions. In his recent book, *The Great Degeneration,* the British historian Niall Ferguson (2012) argues that the "profound crisis of the institutions" undergirds the biggest current problem of Western politics. All around the region (Cambodia, Indonesia, Malaysia, Myanmar, Thailand, Timor Leste, and the Philippines) the evidence of an inability to institutionalise democratic political processes is threatening to undermine governments, political systems and the state's development programmes.

Secondly, the general election in 2011 and the Ponggol by-election in 2012 which set back the ruling party's electoral

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majority in parliament had definitely changed Singapore's political landscape dramatically in more than 40 years. The question on everyone's mind is whether the ruling party's electoral slide will continue in the next general election and cause damage in the party's ability to find competent persons to run the government. Do we accept Lee Kuan Yew's oft-repeated warnings that Singapore does not have enough capable persons to form one cabinet much less two competent ruling parties? So does that mean the Achilles heel of Singapore lies in a crisis of future leadership? Singapore is a global player on a world economic stage and there is no more room for parochial thinking and local perceptions if the City-state is to sustain itself at current global benchmarks.

Thirdly, the silent majority of Singaporeans are waking up with new demands and severe criticisms of everything in Singapore — a crumbling transport system, housing shortages, swelling foreign labour, demographic crowding and expensive health care. The Prime Minster, no less in his 2013 National Day Rally speech, acknowledged that Singapore is in a major transition, a watershed period and much needs to be done to meet these challenging domestic times. Managing the new Singapore political equation is no easy task and it seems like loose talk to compare the first generation of leadership with the current government leaders. Times have changed, society has changed,

and political management challenges today are a lot more complex than 30 years ago.

The 2013 National Day Pledge: New Socialism

Any older generation Singaporean listening to PM Lee Hsien Loong's 2013 National Day rally speech will think it as déjà vu. The government after a dalliance and courtship with the market economy and laissez-faire capitalism has returned to its socialistic roots. It realised that wages are widening, costs are increasing, inflation is rising and many Singaporeans cannot afford basic necessities or a quality life that they have come to expect. This is an ironic situation for a country with the highest per capita of millionaires in the world. Like many countries, the Singapore governance system cannot tame globalisation but it has to adapt to it. The prescription was a return to the 1960's People's Action Party's socialistic policies.

The three tenets of socialism health, housing and education were resurrected and the government poured in new investments and subsidies albeit with one twist — there is no free ride as it still had to accept Milton Friedman's economic dictum of no free lunch. Hence, PM Lee's 2013 speech was all about coming back to socialistic basics — give its citizens more housing, health care and education at affordable and subsidised prices. These public services now include also

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subsidised intra-urban transportation for disadvantaged groups. It has become increasingly clear that the noises and criticisms by older generation and lower income Singaporeans are tied to fears of having no social security, no basic safety net in the tide of rising costs, inflation and widening income gaps. If the government is providing a budget of mass citizen pacification, then failure seems inevitable. The future must be an informed civil society where government and the governed can build a common ground on humanistic concerns for social equity.

Will the People's Action Party (PAP) win back its lost voters and constituencies in the next election? Will its socialistic gamble provide a rejuvenation of the PAP? Time will tell. The challenge however, is that if the PAP loses another two more Group Representation Constituencies (GRCs) in addition to its current losses, the ruling Party might find it hard to put together a competent and experienced cabinet to run the country. That would be a scary domestic scenario — and the future of Singapore's dynamic economy and stable political system will be undermined. While it took 30 to 40 years to develop a First World country, it will take only a couple of years to dismantle it if we do not have a competent government, if our governance system is impervious to the ground swell of discontent, and if Singaporeans do not see the larger global picture in their demands for change,

subsidies and affirmative action for Singaporeans.

However, the more pertinent question is whether the government and society have the political, economic and social resilience to weather the domestic and global storms of the future. Without national resilience, Singapore will have greater difficulty adjusting to challenges in future which are not coming only from climate change. Chinese resilience has been raised on a strong Confucian ethos and a diet of pragmatism. Their most important book, *The Book of Changes* or *I-Ching*, began with human-nature changes followed by human to human changes, and thereby, prepared the Chinese for creating, adapting and managing change. In Singapore, one wonders whether Singaporeans will adjust easily to adverse changes or has society's resilience been eroded with prosperity and politically-stable quality living?

The City-state's Political Dilemma

One of the underlying issues of our national challenge lies in the very nature of the country's political and geographical status. Unlike other cities and states, the Singapore case is quite different. Singapore is both a city and an independent state. In global comparisons, Singapore shares benchmarks and billings with both urban as well as state comparisons. State comparisons put Singapore at a clear

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advantage because of the City-state's small size (in area and population) as compared to larger countries. While Singapore might fare well vis-à-vis other countries, it is less impressive when compared with other cities. Singapore's per capita GDP might be better than the United States, but the City-state is about 40 percent of New York's per capita GDP.

Yet, as sociologists argue, the government's habit of emphasising Singapore's 'uniqueness' could also be a disadvantage. If Singapore is not compared with other cities and states, the City-state may be deluded that it is beyond comparison and hence, it dims the political problems and economic challenges faced. Indeed the World Wildlife Fund for Nature (WWF), in responding to the government's criticisms of global benchmarking the City-state in terms of its ecological footprint, has dropped Singapore from its benchmarking exercise — this makes Singapore only the poorer for its absence. When you read many of the international publications, Singapore is often not featured in many of the global comparisons on many issues. Hong Kong seems to be the preferred city and economic unit of comparison.

This does not mean that Singapore is not being used by international organisations in many comparative studies. Clearly Singapore continues to top the charts in many areas — and it demonstrates that the continuing

institutional political mandate of striving to do well in all sectors has paid good economic dividends. Singapore, in short, is a global brand, and has a good political corporate name in the world of cities and nation-states. Yet, domestically the government's quest to strive for the best has been also a subject of domestic and international debate. Internationally, there are nagging negative impressions of Singapore's brand of democracy which the government has strenuously defended over the years.

Singapore however faces many seemingly endemic domestic challenges that are not easily solved: natural population growth is dwindling; population is rapidly ageing; the urban population base is small; economic productivity per capita is relatively low; and income disparity is on the rise. For example, the Gini coefficient has increased from 0.457 in 2003 to 0.478 in 2012 which demonstrates that income inequality is widening. In fairness, this income disparity however is not a Singapore preserve. In his blockbuster book, *Capital in the Twenty-First Century*, the French economist, Thomas Piketty shows the rich get richer over time in all capitalistic economies. Clearly the policy solutions of income disparity are not easily solved politically. However, taming rising expectations in a developed city-state are equally difficult governance issues.

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The cosmopolitan city versus nationalised state has become the seed of Singaporean discontent with regard to foreign labour, permanent residents and immigration/citizenry issues. Many of these national challenges stem from the demographic situation as well as the economic competition in the global marketplace. There is no easy way out to this issue — do Singaporeans want to be a global, open, cosmopolitan city like New York and London or a national state veering towards 'nation-state' identity like Japan's. While the Finance Minister is working on upgrading indigenous productivity, Singapore's demographic situation remains stubbornly reticent about growth. Curbs on foreign labour are hurting many SMEs and industries — and in the long run Singapore's competitive edge might lose out. On the other hand, can Singapore afford to be insular and xenophobic when the City-state relies on trade that is 300 times her GDP?

Times have changed in the last 40 years and the nature of governance in Singapore needs radical rethinking and cautious implementation. The 'top-down, government knows best' idea of governance has to make way for an inclusive system of governance with all national stakeholders (private sector, civil societies, Non-Governmental Organisations (NGOs), academics) engaged in decision making and implementation of public programmes. Government leaders have to realise

that the deeply-ingrained political *Weltanschauung* (the unquestioning assumption of the order of events or facts) needs adjustment, change, and adaptation. Governance underscores an important axiom in state management where all state and non-state players should be involved and where responsibility is shared. The idea that politics is only for politicians and government leaders is passé and naïve thinking. In democracies, every citizen is a political entity with rights, views and votes; but more important is the need for all stakeholders to realise that the upkeep of the national 'common good' and 'common-pool resources' require at times sectoral and personal 'sacrifices' and the minimisation of 'free-riders' in the state system. In many developing countries, unfortunately, the power elites are the prime free-riders while the poorer masses have to make the major national sacrifices. The nature of such national politics has become the tinderbox of riots, strikes, revolts and rebellions in the Arab World, South Asia and Southeast Asia.

The current Singapore political transition throws up issues of the future of political leadership — can leaders separate foreign policy from domestic politics? In a city-state such as Singapore, political leadership is a lot more taxing, nuanced, challenging and stressful. While city mayors in countries concentrate on local, urban and community issues, state leaders have to deal with national issues

in relation to changing geopolitical situations, regional politics and global competition. Mixing urban and state, local and global issues are not always politically and economically satisfactory. Clearly an ageing population grows conservative, becomes more localised in perceptions and is risk-adverse. However, in a city-state such as Singapore, domestic and local issues often require foreign policy considerations and vice-versa. The whole Japanese political storm of the United States (US) troops in Okinawa shows that if Okinawan domestic politics wins it can undermine Japan's national security and sovereignty. Singapore has no luxury like Japan because city and state, domestic and foreign policy are fused — both political leaders and citizens need to be educated on negotiating politically-sensible decisions and policy outcomes for Singapore's sustainability as a state. In short, if domestic politics wins, the state could be undermined in the global political and economic arena.

Future Options

The global economic change taking place provides some hope for Singapore's future trajectory. There are two areas for growth and optimism: digital information technology and environmental green options. The Cambrian biological revolution seems to be resurrecting itself in a new human revolution in digital information technology — what Alvin Toffler calls the "Third Wave" and *The Economist* refers to as creating a new

Ecosystem (startup colony) of entrepreneurship, creativity and innovation. States and cities, which have the entrepreneurial ecosystem infrastructure, are better able to capitalise on this new synergy for creativity, entrepreneurship and innovation. Singapore has Block 71 in Ayer Rajah Crescent with 200 official and informal startups. The government's investment in incubators and entrepreneurs has produced results — there are 800 internet firms in Singapore. Singapore can ride on this global wave by capitalising on the historical and current intersections of four great civilisational influences: Chinese, Indian, Middle-Eastern and Western — sources of unfolding potential creativity and innovation.

With climate change becoming a pertinent topic even in a business and leaders forum such as Davos in 2014, the stakes are growing high about finding solutions at all levels. Global warming provides a daunting problem for governments, but the silver lining is its attraction in catalysing new energy innovations, green businesses and environmental policy solutions. Singapore's long-term 'clean and green' policies, its water sufficiency initiatives, and 'city in the garden' image makes it an attractive base for green ideas, environmental innovations and creative energy business propositions. It is no wonder that over 1,000 shades of green businesses are operating in the City-state.

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It also has the ability to market its products and policies overseas. Yet, the important message of sustainability lies in the correct balance in human-nature relationships and ensuring a livelihood of moderation, thrift and a culture of non-material satisfaction. Given urbanisation growth around the world (over 52 percent of population), Singapore's urban model is one global laboratory of experimentation, research, study and inquisition. It is a City-state attracting politicians, governments, bureaucrats and academics — trying to uncover the black box of its success.

Both areas of new innovations underscore the city-state's ethos of sustainability which is grounded in developing the national creative quotient of its people. However, is this possible in a tightly-run political environment? Singapore is successful in churning out good students due to our good educational system and universities. Students might produce good grades, but will they become independent thinkers, innovative leaders and creative people? Over the years, expatriate professors often tell me that our students are great at producing facts and figures but they lack 'educational entrepreneurship'. Yet, Singapore's comfortable environment is certainly attracting attention of foreign creative peoples and encouraging young Singaporeans to think beyond the box. While the government might be able to manage a constrained political environment, Singaporeans alternatively express themselves in the Cybersphere.

In Singapore, we have controlled creativity or managed innovation. One example of the managed creativity is the opening of Lucasfilm's Sandcrawler building in January 2014 in Singapore's Fusionopolis, which demonstrates the American organisation's faith in Singapore's creative contributions. PM Lee Hsien Loong hopes that the Lucas investment will help to provide the "creative spark" to inspire people and promote creativity. However, the question is whether Singapore's controlled environment can provide a 'creative ecosystem'. For some, the test of domestic creativity is whether the City-state can produce a Noble laureate.

The other downside of the City-state's entrepreneurship initiatives is the low social status experimental endeavours have. The Singapore government has been too successful in providing a stable job environment — hence, parents want their children to take professions in government, teaching, multi-national corporations (MNCs), and banking in Singapore. Traditionally, Singapore's old rich have made their wealth in conservative long-term economic investments — plantation, land ownership and banking. Without foreign investments, Singapore industrialisation programme in the 1960s onwards would have been a flop if it relied on Singapore investors. The social stigma of entrepreneurial failure is something not

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socially acceptable, which is different from Hong Kong, Taiwan, South Korea, Thailand, India and other nouveau-rich societies. The new Information Technology (IT) ecosystem also favours adaptable younger populations and undermines experienced workers brought up in a different working ecosystem. Unfortunately, Singapore's ageing population is said to provide many 'obsolete' workers in the new ecosystem. Unemployment will continue to increase because experienced ageing workers do not have the IT skills and the fact is that an IT ecosystem reduces labour. These are issues that many developed countries with ageing populations have to confront and manage.

Reflections

The essays in this volume demonstrate both optimism and pessimism. There is optimism in Singapore's success story and its global branding and high status in the international community of nation-states. Singapore can continue to leverage on these positive global perceptions and goodwill. Our Foreign Affairs Ministry (MFA) strives to keep goodwill and cordial ties with all states in many camps and power relationships. However, keeping neutrality in the growing political schisms between China and the US and Japan as well as the internal bickering pressures in ASEAN might be a lot more difficult in the coming years. Singaporeans must be aware that while domestic issues are pertinent to

their domestic housekeeping, external affairs and influences are equally important for Singapore's sustainability. Singapore after all rides on two percent of the global economy for its economic sustenance.

In concluding this editorial on Singapore's future trajectory and challenges, let me end with a quote from the great British philosopher Isaiah Berlin (2013:15) in underscoring that there can be no permanent national solutions to any of societal ills and problems one faces:

"...the study of society shows that every solution creates a new situation which breeds its own needs and problems, new demands. The children have obtained what their parents and grandparents longed for – greater freedom, greater material welfare, a juster (sic) society; but the old ills are forgotten, and the children face new problems, brought about by the very solutions of the old ones, and these, even if they can in turn be solved, generate new situations, and with them new requirements – and so on, for ever – and unpredictably".

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The National Narrative: Singapore Dialogues

A Narrative For Winning

Viswa Sadasivan

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Of the lessons in political commentary that the late S Chandramohan taught me, one stands out. He was then Director of the current affairs programmes division of the Singapore Broadcasting Corporation. In the draft of my script for a special edition of the then popular weekly current affairs programme, *FEEDBACK*, I described the then Prime Minister Mr Lee Kuan Yew as a "politician". Chandra told me that I was wrong; the term politician is pejorative and refers to those who use political power to further interests that are less than noble. He said that Singapore has political leaders who have the "intellectual sophistication and emotional integrity" to deliver on promises. Chandra emphasised that even though some of their policies and actions could appear undemocratic and even draconian, closer examination would show that they were based on a "logic of accountability".

This logic, in turn, is based on a "social contract" between the government and the people — an understanding that in return for prosperity and progress, the people agree to hard work, government control and reduced freedom. The crucial point, Chandra explained, was that this agreement was predicated on a deep and mutual acceptance of a "socio-political narrative" that defines who we are, what we stand for, where we have come from, and where we would like to be.

So what was this narrative?

There were two national narratives created in the 1960s. The first was the narrative for merger with Malaya:

We are a small country with no natural resources and limited human capability – survival is possible only if we compensate for that which we lack by merging with a larger, more established country. We will benefit from a common market, having a hinterland and the security of a more established armed force. It would be a bonus if we merged with a country with which we already have cultural and kinship ties. Malaya fits the bill.

This narrative unified a series of compelling arguments that were presented to the people during the 1963 campaign leading to the People's Action Party (PAP) government's victory in the referendum on Singapore's merger with Malaya. The narrative was used as a leverage to create a collective reflex not only amongst a disparate people, but also between the people and the government. It deepened trust in the ruling party and helped build faith in PM Lee Kuan Yew's leadership and vision.

In fact, this *faith* became so entrenched in the months that followed that it withstood the ultimate test when Singapore was unceremoniously severed from the Federation of Malaysia. Virtually overnight, the merger narrative went up in smoke. Clearly, part of the reason why PM Lee was highly emotional during the

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televised press conference on 9 August, 1965 was the loss of face in having to backtrack from all he had said before to persuade the people that merger was the only way for Singapore to survive.

This must certainly constitute a rare occurrence in political history when a narrative that was imbibed by the people had to be dismantled and promptly replaced by another narrative promulgated by the same leader! This is usually the recipe for the ignominious demise of a political leader. It was clearly not so in the case of Mr Lee and the PAP government.

The new post-independence narrative worked for three reasons: the political leadership had already established a credible level of trust with the people by delivering on promises made since 1959; the leaders saw it as their duty to walk the ground day and night to persuade the people to accept the government's agenda and belief system; and perhaps most importantly, the new narrative capitalised on the prevailing sense of having been abandoned and was, therefore, emotionally relevant and compelling.

The new narrative had to serve two purposes: it had to get the people to stand unquestioning, behind their leaders, and to be a clarion call for charging ahead towards success, almost to prove a point to detractors and to ourselves.

If Mr Lee and his 'lieutenants' were the captain and the crew of the ship that sailed the rough seas, carrying us in it, the new narrative was the wind behind the sail.

This narrative formed the basis of the much talked-about "social contract" that gave the government the licence to rule with minimal resistance from the ground. Also, with the new narrative that was predicated on faith, the government had the latitude to go with its instincts when sailing into the unchartered waters of the 1960s and 70s. Starting from scratch and forced to blaze new trails for a nation in-the-making, the political leaders, often had to lead with messianic zeal! Together with a team of able public servants, they systematically and painstakingly built key institutions such as the Economic Development Board (EDB), the Monetary Authority of Singapore (MAS) and the Housing and Development Board (HDB).

What connected them was their fervent belief in the new Singapore narrative, which was essentially this:

We have become independent and can rely only on ourselves. We have learned that dependence comes with a price. The hard truth is that countries act to protect their own interests. We are small, vulnerable and have no natural resources. Our survival depends on rapidly building 'core muscles' – our economy, security and social compact. Our small size can be our strength – like

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a sampan, tossed about on rough seas, nimble enough to quickly change course, unlike an ocean liner. We must embrace pragmatism. Our mantra - Hard-work and Discipline. We must be prepared to sacrifice for the future, and this includes personal freedoms and liberties. Meritocracy and equal opportunities will be our governing principles. To this end, the government will relentlessly seek new solutions and provide a good home for the people. In return, the people need to follow faithfully. This is our social contract. We cannot be limited by what we have, but must be galvanised by what we can become — a success story that will silence our detractors, and inspire future generations. There is no reason why we can't achieve this. We need to believe.

To illustrate the inimitable mood in the Singapore of the 1960s as well as the unquestioning faith that comes with being fully invested in a narrative, here is an often-recounted conversation that took place in the 1960s between American economist and Nobel Laureate, Milton Friedman and former cabinet minister, S Dhanabalan, who was then a senior economist with the EDB:

"Friedman: What are you going to do now that you have lost the Malaysian Common Market?

Dhanabalan: We don't know what we're going to do but I want to assure you that if you came back in 10 years' time, you will see that we have succeeded.

Friedman: What kind of answer is that for an economist?

Dhanabalan: I'm sorry but the truth is, we have not the slightest clue what we will or should do. We just have the will and the determination. We will not only survive, we will prosper."

This indomitable belief with which the leaders led, was matched by the faith with which the people followed the government. This was the basis for the "social contract" which was at the core of the narrative.

This contributed to the social and economic progress and prosperity of the first three decades since independence in 1965. The people's willingness to suspend civil liberties for economic progress allowed leaders to get away with what would have been deemed seriously politically incorrect in most contexts. Take these remarks made by PM Lee Kuan Yew in his 1983 National Day Rally speech:

"If you don't include your women graduates in your breeding pool and leave them on the shelf, you would end up a more stupid society… So what happens? There will be less bright people to support dumb people in the next generation. That's a problem."

There were no consequences for PM Lee

or the PAP government. They continued to ride on the power of the post-independence narrative. However, time does not stand still. Circumstances change and people change - so must narratives.

The PAP government's reluctance to reshape the narrative was a significant contributor to, what I see as, a gradual erosion of its stature and standing in the eyes of the people from the 1990s till May of 2011.

With affluence, better education and greater exposure, Singaporeans became less willing to accept everything that the government did or said. Having benefited from a better quality of life, the appetite for issues of fairness, right and wrong, and justice grew steadily. Singaporeans not only started having opinions, but also developed a desire for expressing them. The internet provided the platform for this. The gap between the people and the government narrowed. The old "social contract" had reached its run-out-date.

However, the PAP government failed to see the need to develop a fresh, concrete and equally potent national narrative and 'sell it' with the same evangelistic fervour as it did in the 1960s. One could argue that with all the noise generated on the internet and the heterogeneous nature of society today, it is far more difficult to pitch a narrative that will be received without some measure of ambivalence. Yes, it is more difficult, but not impossible. There are three prerequisites: acknowledging that ground sensibilities have shifted; discerning the deeper concerns from the symptoms; and having the interest and will to change the governing approach.

"Tweaking" the system or making incremental changes do not work when people have been waiting a long time for the government to not just listen, but demonstrate that it is listening. What is needed is a bold and distinctly different new narrative that is unequivocal in substance and articulated persuasively in one voice by the leaders — one that not only strikes a chord with the people but is also something the government is capable of and committed to delivering.

Failing to acknowledge the growing discord between the government and the people's sensibilities invariably has consequences. Take Mr Lee Kuan Yew's off-side remark during the hustings of the 2011 General Election on the consequences if the Aljunied Group Representation Constituency (GRC) were to go to the Opposition:

"…If Aljunied decides to go that way, well Aljunied has five years to live and repent…."

This remark in the language of the old

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narrative, spoken with misplaced confidence that the people continued to have unquestioning faith in their political leaders was, many believe, the single most significant factor leading to the PAP losing Aljunied GRC in 2011. The electoral result and the reaction of the populace to the remark amounted to a summary rejection of the post-independence narrative. Never before had the signal been clearer.

Since May 2011, we have seen a discernible shift in the way the government operates. It clearly appears to be listening and responding more. The government is more prepared than ever before to re-examine issues that were considered taboo or at least indulgent in the old narrative: direct assistance for the needy, HDB flats for singles, and more help for special needs schools. There has also been a dramatic, almost uncanny, improvement in the government's ability to address and solve problems, especially with housing and transportation. These have helped the government regain faith. We have also seen a multifold increase in public and stakeholder engagements, further demonstrating the government's willingness to listen to the people. In addition, the PM and virtually all cabinet ministers and PAP MPs have a presence on Facebook. In short, there has been a profusion of 'conversations' since the 2011 General Election.

However, we have yet to 'see' a distinct new narrative emerge. Perhaps PM Lee

Hsien Loong's 2013 National Day Rally speech came closest to articulating it. As long as we do not hear a compelling new narrative, the government will continue to be identified with the post-independence narrative. This is likely to alienate today's populace, especially the young.

The government's reluctance to move away decisively from the old narrative of three decades is understandable, especially since it has produced tangible results. The new narrative does not need to be a total rejection of the old one. For example, meritocracy, equal opportunities, efficiency, and even having a strong, decisive government, are all qualities that most Singaporeans still value. What is important is that the core of the new narrative must resonate strongly with the defining considerations of the people today – our identity, a sense of fairness and justice, balancing progress and prosperity with equitable opportunities and aspirations, and a more partnership-based principle of governance.

In short, a good narrative is one that addresses three factors: it must be in sync with the logic of the audience and stakeholders; there must be a clear sense of empathy for the people's core concerns; and it must be congruous with the ethical considerations of the day.

The sooner a coherent and bold new

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narrative is designed in a way that resonates with ground sensibilities, the better chance of gaining a buy-in from the people. This is the best way to move out of the current level of flux and find a new operating equilibrium. Like societies, organisations which have taken pains to develop a powerful narrative that goes beyond stating what they do well, to defining what they stand for, have found success. After all, mindshare is the basis for sustainable market share. Similarly, in an increasingly competitive marketplace, product or price differentiation has limited scope — people increasingly want to be associated with products, concepts and ideals that make them feel good.

This is what differentiates the men from the boys, so to speak — a certain maturity and sophistication in defining what your organisation stands for. The Body Shop stands firmly against animal testing, Apple for innovation boldness, and AirAsia pushes a revolution in the region where "now everyone can fly". These are not iconic organisations merely flashing clever slogans. The sentiments conveyed by these catchphrases are at the core of the narrative of the organisation — something that unifies the sensibilities of the internal and external stakeholders. This, in turn, engenders loyalty, which is an increasingly elusive concept today.

The National University of Singapore (NUS) has systematically moved up the global rankings over the past decade. In its earlier years, it focused on being a good teaching university. In the last seven years, the differentiator has shifted to research. In a few years, NUS may very well get into the top 20 list. Teaching, research and facilities will be mere hygiene factors then. Universities in this 'club' talk more about what they stand for, such as the fascinating ways their faculty, alumni and students contribute to making this a better, more exciting world. Why the university has decided on its course and its causes and how committed it is to them, form the core of the narrative which is imbued in every member of the university family. This creates pride of association.

Mission and vision statements are static descriptions of what you do and aspire to achieve. In most cases, these fail to capture the imagination of stakeholders because they do not usually present the context — they do not tell us where you started, why you decided on this course, what trials you faced in your journey, what kept you going, what your final destination is, and why this is important for you and your people.

If we examine greatness — The Roman Empire, The Taj Mahal, Nelson Mandela, The Ford Corporation, The Beatles, Mahatma Gandhi, The French Revolution and Singapore — the common factor would be the strength of the narrative. People have always rallied behind ideas

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and ideals, more than products and services. Today, with so much devastation and disillusionment, with all the noise and single-minded aimlessness, the search for what is meaningful that gives hope and is authentic has intensified.

More than ever, the narrative is key — those who have the instinct for it are the true winners.

The National Narrative: Singapore Dialogues

Singapore's Education and Its Multicultural Heritage: Forging a New Dialogue

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Singapore's Education and Its Multicultural Heritage: Forging a New Dialogue

Introduction

In recent years, a number of educationists have called for a re-orientation in teaching and pedagogy that would draw upon the cultural resources of the major Asian traditions that have shaped Singapore history — especially its Chinese, Malay-Islamic, and Indian heritages. Such a fresh alignment is recommended by the educationist, S Gopinathan, who argues that the present stage of globalisation is conducive to knowledge indigenisation in education, particularly because there is ample evidence in recent pedagogical literature that adopting such an approach can not only enhance learning but also make it more meaningful and, therefore, powerful and transformative. He adds:

This is in part a response, both to a better understanding of learning processes bequeathed by cognitive science, and of the recognition that the older subject-centred curriculum and teacher-dominated pedagogy will not provide students with the learning skills and opportunities that are needed to meet the challenges of twenty-first century living. Much greater attention is now being paid to the need for students to critique and question codified knowledge as represented in textbooks, to adopt a problem-solving stance, and for students and teachers to co-construct knowledge.[1]

Gopinathan maintains that such a process of co-construction of knowledge can greatly profit by drawing upon reservoirs of cultural knowledge that have hitherto been marginalised. Apart from the role that indigenisation can play in enhancing learning, it can also be a resource for innovation and creativity in dealing with the many difficult environmental and ecological concerns that we confront today. The geographer, Victor Savage, emphasises this point:

Today the indigenous knowledge embodied in preliterate cultures — especially their environmental knowledge through which they define the relationship between society and nature, culture and ecology — have become central concerns within academic discourse after environmental degradation and climate change have come to be perceived as major global challenges.[2]

Although Savage refers to preliterate indigenous knowledge, there is also a wide body of literature which documents the potential contributions of pre-modern literate traditions to environmental knowledge.[3]

However, there is still a general misconception in such calls to integrate indigenous knowledge — they often assume that the indigenous cultures of

[1] Gopinathan, S (2012), pp 244.
[2] Savage, Victor (2012), pp 253.
[3] See example: Callicott, J. Baird (1997).

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Singapore had played either no role or, at best, a marginal role in shaping modern science and society in the past. However, recent dialogical histories of the birth of modern science and society suggest that the major cultures that came together in Singapore also profoundly influenced the emergence of science and society in early modern Europe. This has significant implications for rethinking Singapore's education that has yet to be systematically explored.

Dialogical History of Modern Natural Science

Let us begin by considering the dialogical history of modern science. Modern science is generally seen as beginning with the Copernican Revolution which made the sun, rather than the earth, the centre of orbit for the planets. This, in turn, is taken to have led to changes in physics which culminated with Newton's formulation of the laws of motion and gravity, which brought under a single unified framework, our understanding of the behaviour of bodies both on Earth and in the heavens. It is traditionally assumed that these changes were rooted in the ancient Greek tradition of science but not in Chinese, Indian or Islamic traditions of astronomy.

However, there is now evidence that the Scientific Revolution also drew on resources from the pre-Copernican traditions of astronomy and cosmology in the Chinese, Islamic and Indian worlds. The most advanced schools of astronomy in these cultures were the *Xuan Ye, Maragha* and *Kerala* traditions. These three schools were developed in the millennium preceding the modern era and were often (mis)taken as the dark ages of European science from about 500 to 1500 CE. Each of these traditions was built upon distinctly different conceptions of the motions of the heavenly bodies.

The Chinese perceived the stars and the planets as circling the Pole Star[4] — the singular fixed point in the heavens around which all other bodies moved.[5] By contrast the Islamic tradition assumed a geo-centric structure for the universe, wherein all heavenly bodies — sun, moon, planets and stars — revolved around the earth.[6] Indian astronomers deployed a slightly more complex model in which the then known planets — Mercury, Venus, Mars, Jupiter and Saturn

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[4] This is also traditionally assigned a moral salience. In the Confucian Analects 2.1, it was written: "Governing with excellence (de) can be compared to being the North Star: the North Star dwells in its place, and the multitude of stars pay it tribute".

[5] As a result, unlike the Indians and Arabs, the Chinese astronomers did not focus on planetary orbits. They were more interested in the predictions of stellar motions which led them to develop a strong tradition of star maps. Moreover, to get precise knowledge of the heavens, they built mechanical models that came to be increasingly refined from the time of Zhang Heng (78 to139 CE).

[6] They also adopted the geometric approach of Ptolemy and the ancient Greeks but combined it with the Indian number system and algebraic techniques.

— orbited the sun, but the sun, the moon and the stars revolved around the earth.[7]

There is now increasing evidence that the Copernican Revolution was only able to consolidate itself by drawing upon a portfolio of ideas and techniques from the Chinese, Indian and Islamic traditions of astronomy. Although the three traditions had different conceptions of how the heavenly bodies moved, all of them assumed that the earth constituted a stationary platform from which these phenomena could be studied and predicted.

Thus, the Copernican theory which assumed the sun to be the centre of orbit for the planets including the earth can be seen as revolutionary for all of these traditions since it gave the earth two different motions by making it rotate on its own axis and also revolve around the sun.

Coincidentally, these two motions also connected the Chinese, Islamic and the Indian astronomical traditions with the new Copernican theory. It is now recognised that the Maragha School model is practically identical to the Copernican model from a mathematical point of view, except for the reversal of the positions of the sun and the earth-moon system. The rotation of the earth also explained why the Chinese saw the heavens as revolving around the Pole Star.

Finally, the heliocentric model extended the planetary heliocentrism of Indian astronomy to include the earth as another planet revolving around the sun. These connections between the Copernican theory and the earlier Chinese, Islamic and Indian traditions of astronomy made it possible for the Scientific Revolution to draw upon thematic ideas, observational data, and mathematical and technical practices from these different Asian traditions. Consequently, even though the Copernican theory displaced these Asian models of astronomy it may also be seen as integrating them together within a higher synthesis.[8]

The Dialogical History of Modern Society

Just as the revolution in the natural sciences that led to modern science drew upon the traditions of Chinese, Islamic and Indian astronomy, so did these cultures furnish many of the ideas technologies and institutions that shaped early modern society. In both cases, these reservoirs of knowledge came to be developed in Chinese, Islamic and Indian civilisations over the millennium 500 to

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[7] From the fifth century onwards, the Indians also adopted Greek epicyclic models on which to do their algebraic computations. The emphasis on algebraic methods rather than geometric methods led the Indians to a very different mathematical orientation in approaching precision knowledge of astronomical processes.
[8] [0] See Arun Bala (2006), pp 145-176.

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1500 CE. This was a time when a system of trading routes were developed connecting these civilisations with each other, and also with Europe and Southeast Asia. According to Abu-Lughod, there were three major trading routes — a land route in the north through the Mongol empire, a middle route linking the Middle East with India and China, and a route in the south passing from Europe through Egypt to East Africa, India, Southeast Asia and China.

John Hobson argues that these linkages made it possible for early-modern Europeans to draw upon a portfolio of ideas, technologies and institutions from various civilisations and forge them together to create modern society. He documents these carefully in his study *The Eastern Origins of Western Civilization.*

Although it is often assumed that global commercial capitalism was instituted by modern Europeans, Hobson maintains that this was built upon the achievements of Muslims who had pioneered it through commercial networks spanning the Afro-Eurasian region. In order to accomplish this task, the Muslims had developed many sophisticated financial instruments including "the creation of a whole series of capitalist institutions (concerning partnerships, contract law, banking, credit and many others), upon which not only Islamic production, investment and commerce rested but also global trade".[9]

Equally important were transmissions from the Islamic world of astronomical and mathematical knowledge, the astrolabe, maps and the lateen sail that made long-distance navigation possible. Also significant were improvements in iron and steel production, advanced textile manufacturing, better dyes, as well as techniques for harnessing wind and water energies through windmills and watermills in industrial production.[10]

The Chinese contributions to modern society were equally important — especially in their discovery and development of technologies which crucially influenced the eighteenth century industrial revolution in Europe. Hobson writes:

 "[T]he British consciously acquired and assimilated the Chinese technologies — either the actual technology or the knowledge of a particular technology. In this sense, Britain was like any 'late developer' or newly-industrialising country in that it enjoyed the 'advantages of backwardness' and was able to assimilate and refine the advanced technologies that had previously been pioneered by early developers."[11]

[9] Hobson (2004), pp 44.
[10] Ibid. pp 43 – 44.
[11] Ibid. pp 192.

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The Chinese contributions were grounded in what has been characterised as the Sung Industrial miracle. In the Sung era, there were many Chinese technological achievements that Hobson describes as revolutionary, including an iron and steel revolution, a transportation and energy revolution, the rise of a commercialised economy with taxation, paper, printing, an agricultural or 'Green' revolution, a navigational revolution, and a military revolution.

The British agricultural and industrial revolutions were built upon these achievements, albeit by taking them to higher levels of articulation. The British agricultural revolution itself drew upon Chinese innovations such as the eighteenth-century iron mould-board plough (Rotherham plough), the rotary winnowing machine, seed-drills and horse-hoeing husbandry. The steam engine, coal and blast furnaces, and iron and steel production, so crucial to the British industrial revolution, were also based on Chinese inventions and discoveries.

Hobson notes that the Indian contribution to the British industrial revolution was particularly crucial in the area of textile production. Prior to the domination of British textiles on the global market, made possible not only by their industrial production in Britain but also by the suppression of textile production in India by British imperialism, India was the world's largest cotton textile producer and exporter. Indian influence on early British textile production is reflected in terms of Indian origin that have now passed into the English language such as, *chintz, calicoe, dungaree, khaki, pyjama, sash* and *shawl.*[12]

Dialogical Histories of Singapore

The dialogical histories of modern science and modern society reveal striking parallels to recent attempts to rewrite the history of Singapore, not from its founding by the British Governor-General of Java, Sir Stamford Raffles, in 1819 but by its founding by a prince of the Sri Vijayan Empire, Parameswara/Iskandar Shah in the early fourteenth century.

These read the birth of Singapore from a deeper historical perspective which contextualises it within the trading networks that linked Afro-Eurasia in the pre-modern era.[13] Three recent studies which have taken this perspective are *Singapore: A 700 Year History* by Kwa Chong Guan, Derek Heng and Tan Tai Yong; *Singapore: A Biography* by Mark Ravinder Frost and Yu-Mei Balasingham Chow; and John N Miksic's *Singapore and the Silk Road of the Sea 1300-1800.* These new histories connect Singapore history

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[12] Ibid. pp 85-86.
[13] See Wolf (1982), Abu-Lughod (1989) and Hobson (2004).

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within the deeper maritime history of the Straits of Melaka, which served as an important connecting link between China and the rest of the Afro-Eurasian region via Southeast Asia. Singapore in the fourteenth century, at that time known as Temasek, served as an emporium linking its immediate Southeast Asian hinterland with China on one side and India and the Islamic world on the other.

Although Temasek's fortune declined over time, by the time Raffles arrived in 1819, he found it inhabited by only a few villages and selected it as a site for a new British port precisely because he recognised its early historical position as an emporium in the fourteenth century. He was inspired by his experience as a scholar of Malay history and his reading of the Sejarah Melayu which depicted the founding of Melaka by a prince from Singapore. In his study connecting ancient Singapore as a node in the maritime trading networks of the fourteenth century, John Miksic writes:

"Singapore suddenly came back to life in 1819. This awakening was catalysed by a man (Raffles) who was convinced (correctly as it turns out) that it was possible to revive an ancient centre of Malay culture and commerce. This revival could not have taken place unless Singapore possessed the necessary attributes for such developments: strategic location, fair and liberal government, and most importantly a hardworking and cosmopolitan population that was able to live together harmoniously despite a multiplicity of cultures, languages, and religion."[14]

As the British Empire consolidated its hold on India as an imperial power, and China through its unequal treaty ports along with the Middle East after the opening of the Suez Canal in 1867, Singapore came to be a crucial node in the maritime trading network across Afro-Eurasia controlled by the British navy. This also served to bring together diasporic populations from China, Southeast Asia, India and the Middle East that have come to constitute the melange of people in contemporary Singapore.[15]

Rethinking Education: Integrating the History of Singapore with Histories of Modern Science and Modern Society

It is striking to note the remarkable parallels in the dialogical histories of Singapore and the dialogical histories of modern science and modern society. In all of these cases, the leading cultures that came together historically were the same three cultures — the Chinese, the Malay-Islamic and the Indian. Moreover,

[14] Miksic, John N (2013), pp 434.
[15] See Kwa et al (2010), Chapter 7 entitled "Raffles and the Establishment of an East India Company Station on Singapore". There are other historians such as Mark Ravinder Frost, Yu Mei Balasingam Chow, and John Miksic who endorse this view.

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these were also the three cultures that came together in ancient Singapore (Temasek). Do these strange parallels have an explanation? It is reasonable to suppose that it was the maritime Silk Road linking the Middle East, India, Southeast Asia and China, that not only brought populations from these regions together, but also facilitated the intellectual exchanges which led to discoveries which were later incorporated into modern science and modern social institutions.[16]

We have seen the educationist, Gopinathan and the environmental geographer, Savage, argue that learning can be enhanced and be made more meaningful by linking it to processes of knowledge indigenisation, which can also draw upon indigenous knowledge for environmental management. However, the process of drawing on indigenous knowledge of the Asian traditions appears to be seen as a strategy that has no precedence in the past. However, dialogical histories of modern science and society suggest that such a process was crucial to the birth of not only modern science but also of modern society.

Moreover, the cultures that came together to shape modern Singapore, were also the cultures that shaped the notions of modern science and modern society. This suggests that educational strategies for drawing on the indigenous knowledge of major cultures in Singapore can learn from the strategies deployed to build modern Singapore, modern science and modern society in the past.

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[16] A good and influential study of these maritime Silk Road linkages is Abu-Lughod (1989).

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The National Narrative: Singapore Dialogues

It's Not Just the Singapore Literature Prize, But Also Literature in Singapore That's In Crisis

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It's Not Just the Singapore Literature Prize, But Also Literature in Singapore

'People want economic development first and foremost. The leaders may talk something else. You take a poll of any people. What is it they want? … They want homes, medicine, jobs, schools.'
~ Lee Kuan Yew [1]

'Speaking off the cuff in 1968 in reply to a question from the audience at the University of Singapore, the Prime Minister said that "Poetry is a luxury we cannot afford" because technical education was more important.' [2]

'They say people can think for themselves? Do you honestly believe that the chap who can't pass primary six knows the consequence of his choice when he answers a question viscerally, on language, culture and religion?'
~ Lee Kuan Yew [3]

Introduction

Since the 1980s, periodic public expressions of dismay would surface regarding the continuing, even perhaps, terminal decline in the number of students taking English Literature (now Literature in English) at O and N Levels ever since it ceased being a mandatory subject. The latest alarm was set off last year by a Parliamentary question which revealed a further decline to a startling low of 9 percent (or only about 3,000 students).

That English Literature was once even a mandatory subject alongside English Language and Maths and that such a decline is a matter of serious concern among the public, testify to its perceived centrality in education. (In contrast, no fuss was made over an even more drastic decline in the numbers taking History, to only about 1,700 students.)

The decline and its causes are symptomatic of narrow pragmatic mindsets no longer relevant to a post-industrial society and unacknowledged cultural shifts within Singapore society. That schools and students drop the subject can be attributed to a series of internal policy contradictions with consequences which may be inadvertent or calculated, while the cultural shifts proceed from external developments, chiefly Singapore's commitment to globalisation and to English as 'turbine engines' of economic growth.

[1] Han Fook Kwang, Warren Fernandez and Sumiko Tan, Lee Kuan Yew, The Man and His Ideas, Singapore: Times Editions, 1997. Much quoted because it sums up his and his government's 'common sense' and pragmatism as to what makes for (in his words) a 'civilised life'.
[2] Koh Tai Ann, "The Singapore Experience: Cultural Development in the Global Village", Southeast Asian Affairs 1980, Singapore: Institute of Southeast Asian Affairs, 1980, p303. Mr Lee's unscripted and very quotable, characteristic opinion is oft-cited by academics without reference to the fact that it was personally heard by me as a then new English Literature graduate and reported in this article, where it first appeared in print.
[3] Lee Kuan Yew: The Man and his Ideas. As in note [1] above.

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The economic significance of the arts (as 'creative industries', as part of a global city's attractive lifestyle, and so on) seems more appreciated by state and society than its role in educational and thus human cultural development. At issue therefore is the extent to which the literature in English forms part of our cultural heritage and identity. A corollary issue, ignored or unresolved, is the cultural role and function of English, usually viewed in binary opposition to the so-called mother tongues. (I will not, however, go into this latter issue, having previously dealt with it.[4]

In this essay, I reflect upon three seemingly unrelated developments that seem to me to illustrate unresolved conflicts and contradictions which suggest a crisis of cultural identity in Singapore that is largely deemed impolitic to discuss beyond the groves of academe.

These are firstly, a recent call to 'overhaul' the Singapore Literature Prize, which in turn inadvertently drew my attention, secondly, to the growing dominance of Singapore literature (and drama) in English vis-à-vis that in the other official languages, and thirdly, the decline in numbers of upper secondary students taking English Literature as a subject (including the probability that neither do they take Literature in their so-called mother tongues, Malay, Chinese and Tamil).

Is it only and merely "Whither the Singapore Literature Prize?"

"Whither the Singapore Literature Prize?" was one of the panels at the 2013 Singapore Writers Festival. It being a prestigious national award, and Singapore's biggest for a single work in terms of cash prizes ($10,000 for the winner, and proportionately smaller sums for the secondary Merit and Commendation Prize winners), the panel was asked whether it really encouraged new writing, earned the main and secondary winners recognition and most importantly, gained their works and Singapore literature in general, new or more readers. The panel members, two former main Singapore Literature Prize (SLP) winners and the third a Commendation Award winner, representing respectively, writers in the three official languages (except Tamil) agreed that in their experience, the award neither helped them sell more books nor gained them many new readers despite the recognition the SLP gave them as writers.

As for encouraging new writing and new writers, or gaining these recognition, a

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[4] Koh Tai Ann, " 'It's like rice on the table, it's our common dish' ": The English Language and Identity in Singapore. In Management of Success; Singapore Re-visited, Terence Chong, ed., Singapore: Institute of Southeast Asian Studies, 2010, p.536 -560.

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panel member noted that the same already established and recognised writers repeatedly win the Prize, as often as three times in the past five competitions to date. So, as The Straits Times report declared, 'Is it about time to "overhaul" the SLP?'

Chairing that session, I wondered, however, whether the trajectory of the SLP reflects that of Singapore Literature in all the official languages and the school subject, Literature in English as well. Were all in danger of losing their bearings and sense of purpose? Are the parallel questions, "Whither Singapore Literature?" and "Whither Literature in Singapore?"

Whither the Singapore Literature Prize? From the CIMO Model back to the Market Model

The history of the first phase of the SLP (1992 to 2000) is premonitory of the rise of Singapore literature in English which it was originally initiated to promote as the vehicle tacitly believed to be most likely to promote a non-racialised Singaporean identity. Yet, it was trailing in quantity and quality behind the literatures in the other official languages, chiefly that in Chinese and Malay. As writers had difficulty getting published because literary works did not sell, the SLP therefore began as a competition for

unpublished manuscripts. Publication by the publisher-sponsor, on top of the cash award, was to encourage the winner(s) to continue writing. In retrospect, the SLP did succeed in achieving its aims of discovering and encouraging new literary works and writers in English in quantity and quality (more about which, later).[5]

Then from 2004 (after a hiatus), no longer sponsored by a commercial publisher, but supported by the National Arts Council (NAC) and organised by the National Book Development Council of Singapore, both essentially state agencies, the SLP was radically re-constituted as an award that more 'correctly' reflects the national policy of multiculturalism. This entails support for and recognition of the literatures in all four official languages: four equal CIMO categories (i.e., Chinese, Indian, Malay and Others, represented by English) each with its own SLP, were therefore introduced. Another change — opening the competition to published and no longer only to unpublished work — effectively jettisoned its original purpose of discovering while encouraging new writers, new writing and an audience for such writing with publication of the winning works.

State agencies such as the NAC and the National Library Board now have creation and publishing grants (even much higher in cash value) to advance these aims.

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[5] See Koh Tai Ann, Singapore Literature in English: an Annotated Bibliography (2008) . For the updated digital version, go to https://eps.ntu.edu.sg/client/SingaporeLiterature/

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Publishers in effect became pre-selectors of works for submission that they have judged to be publishable, and behind them, is the NAC which may have provided the publishing grant. These are most likely to be works by established names, hence the phenomenon of the same writers repeatedly winning the SLP.

Furthermore, pragmatically acknowledging that only a small pool of writers exists, whether aspiring or established in each language category, and given the known recurrent difficulty of garnering sufficient entries, let alone entries of sufficient quality (some years the SLP has not been awarded), the formerly annual SLP competition has not only become biennial; It is also no longer between writings in the same genre, but between prose fiction and poetry, 'comparing (as one of the panellists noted) apples and oranges'. (Drama was excluded after 1993.) Moreover, at the next round of competition in 2014, non-fiction will be thrown into the mix. Perhaps, more non-fiction, such as memoirs, biographies and histories, is now being published and are more marketable and popular than literary fiction and poetry? Could the SLP eventually become the Singapore Writers Prize awarded to mostly non-literary works?

Whither Singapore Literature? Dominance of the Literature in English

The existence of four official languages in Singapore and the corollary that the literatures in all these languages enjoy equal support means that in an already small nation, resources, writers and readers are thinly spread. At the same time, literatures in all these languages, especially English, from other countries, compete for Singaporean readers. That the SLP was originally established specifically to promote and publish Singapore literature in English (the only official language not tied to race in Singapore) and grow its audience, is a reminder that till the 1960s before separation from Malaysia, Singapore was the centre of Malay literary culture, and up to the 1980s, there was more local writing in Chinese published than that in English, especially of prose fiction. With the support of enthusiastic journals and the local press in those respective languages, some leading writers and literary critics being also journalists, the Malay and Chinese literary scenes without state support, were each livelier, broader-based and had larger readerships than that in English. Unlike the Chinese newspapers, and unlike The Times of London its British counterpart, The Straits Times significantly, did not have a literary supplement. When criticised by a Member of Parliament that 'the English press is not doing enough to promote local writing', it admitted 'we have not done as much as we should to encourage local writing by way of providing regular space' because of — it added condescendingly — 'a dearth of quality writing.' Moreover, the writing in English then, was dominantly poetry, hardly a

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popular form in terms of readership, while fledgling writers of prose fiction either needed to convince publishers about their commercial viability or self-publish.

Not surprisingly then, the inaugural SLP competition in 1992 crucially, was for prose fiction in English. Just as 1965 was a watershed year for the writing in Malay when the literary centre moved to Kuala Lumpur, 1987 was analogously for the writing in Chinese, when English become the sole medium of instruction in the national school system. Already the working language of the nation, English was thus further enhanced in status and importance, and willy-nilly both its potential pool of writers and readers in the language could only become bigger. Entries to SLP competitions in recent years reflect this trend: those in English number more than those in the other language categories and the gap is likely to increase steadily. One indicator, suggesting a wider spread in depth and range of talent among writers in the English language category, is that the awards have been won by different and also generally younger writers, with no writer in English winning the SLP main award more than once, unlike in the Malay and Chinese categories.

The SLP has indeed served its purpose where the writing in English is concerned. The main Prize, Merit and Commendation Awards brought to critical notice or prominence many

writers who have gone on to write and publish other works beside their winning titles: Suchen Christine Lim, Tan Mei Ching, Desmond Sim, Paul Tan, Haresh Sharma, David Leo, Boey Kim Cheng, Colin Cheong, Dave Chua, Alfian Sa'at, Daren Shiau (1992 to 1998) and late-bloomer, Rex Shelley (2000); Hwee Hwee Tan, Cyril Wong, Yong Shu Hoong, Ng Yi-Sheng, Toh Hsien Min, Simon Tay and Eddie Tay (2004 to 2012) and others.

Meanwhile, even as Literature in Malay and Literature in Chinese are now available as electives in Secondary schools, and despite the existence since 1979 of the Special Assistance Plan (SAP) schools set up to promote the learning of Chinese Language and culture and 'nurture bilingual and bicultural students steeped in both', the number of new writers and readers of Singapore Literature in Chinese seems to be declining. In 2011, the Chinese language journalist Leong Weng Kam lamented, "Where have the Chinese readers gone?" When in 1982, a Chinese novel by a Singapore writer could easily sell 3000 copies, a bestseller now means 300 to 500 copies sold. At the same time, published writers, 'still active and alive today', he noted, are mostly in their 50s and 60s. When the panel members Xi Ni Er and Peter Augustine Goh complained that repeatedly, as often as three times in the past five competitions, the SLP went to the same writers, they meant these older writers in Chinese and Malay with established reputations who will

thus have a potentially award-winning work to submit

Whither Literature in Singapore? Policy Inconsistencies and Resultant Contradictions

In various ways, the trajectory of the SLP mirrored by that of literature in Singapore owes much to internal policy contradictions or inconsistencies. For instance, implementation of the policy of linguistic parity among the Singapore literatures reveals the anomaly that while the national language is constitutionally Malay, Singapore (unlike Malaysia) has no national literature in the language, that despite the bilingualism policy neither the majority of students who are Chinese take the subject Literature in Chinese as part of their cultural heritage nor most Malay and Tamil students take their respective Literature subjects. But because English — initially a colonial heritage since become global lingua franca — is the medium of instruction in the national education system, for all Lower Secondary students and those Upper Secondary students who take Literature in English, the Singapore literary texts studied will obviously be in English. Meanwhile, the English language policy having resulted in most Singaporeans below 50 being English-literate if not also English-educated, will the literature in English in the not-too-distant future fill a vacuum and become the de facto national literature, just as English has become the unacknowledged

de facto national language? Yet, ironically, the policy of bilingualism in English and the student's designated 'mother tongue', implemented since 1966 in schools, is predicated on an inextricable link between the 'mother tongue' and one's ethnic culture and heritage, implying that the English language and its literature is not the heritage of the Singaporean child and thus, no such culturally nurturing connection exists. This might explain why the subject Literature in English (formerly English Literature) has been allowed to decline in enrolment in all schools. The change in subject title to Literature in English neatly enables Singapore literature in English to be included under the rubric, testifying to Singapore's lack of a national literature of its own while signalling its embrace of world literature, to encourage ostensibly, 'a global outlook'.

Moreover, despite the bilingualism policy, the numbers taking Literature in the 'mother tongue' are probably low, too. But it is not public knowledge what proportion of students nationally take the non-English Literature electives as the component elective in Combined Humanities or for that matter, how many of the SAP schools' 'bi-cultural elite' destined to fill the future ranks of teachers, journalists and other media-related professions, and those taking Higher Chinese, choose Chinese Literature alongside their 'Chinese Culture' subjects and 'enhancement modules' such as Contemporary Chinese

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history, Chinese Drama and Translation. That the Speak Mandarin Campaign is still being mounted annually some 35 years since its inception in 1979 and some 50 years after the introduction of the bilingualism policy in schools, says something about its effectiveness. Meanwhile another annual campaign for the past 14 years has been simultaneously urging Singaporeans to "Speak Good English" — even as Literature which enables a more inward grasp of the language, languishes in schools for lack of takers.

State Education Policies Responsible for Decline in Numbers taking Literature in School

Paradoxically, while Singapore literature in English (including drama) seems to be trending upwards as a marker of Singaporean identity, benefitting from support for the so-called literary arts by cultural agencies such as the NAC and The Arts House, Literature in English as a school subject is trending downwards. In somewhat contrary yet pragmatic fashion, it was government language, 'meritocratic' and social policies driving curricular changes in the schools since 1966 that were primarily responsible for the decline in the number of students taking English Literature (now Literature in English) as a subject for O and N Level

exams in Upper Secondary. (The Humanities in general have correspondingly suffered, and that is another critical issue.)

The initial and most drastic decline in numbers was precipitated in 1978, by the Ministry of Education (MOE)'s unexplained 'downgrading' of Literature. In an undeclared furtherance of MOE's overarching bilingualism policy and supposed boosting of English proficiency, English Language and Literature were merged into one subject for examination purposes under the Revised Secondary School System. Before this, English Literature, like English Language, was a mandatory subject for all who took the Cambridge O Level exams, the two being seen as mutually reinforcing, with Literature enabling students to acquire a more inward knowledge of the language. Now, inexplicably, English was assigned a recommended weight of 70 percent and Literature only 30 percent. Evidently, the MOE did not see an organic link between the study of literature and language proficiency, but regarded the former as a hindrance to the latter. Literature was and still is perceived to be a 'difficult' subject for students, and thus responsible for lack-lustre exam results, when perhaps it might have been poor text selection and teaching that were at fault.[6]   Astute teachers were quick to complain that while taught as two subjects, "English"

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[6] As highlighted by Lee Tzu Pheng and Koh Tai Ann in "Text Selection, Part I" and Text Selection, Part II", Teaching and Learning: a Publication for Teachers, Vol 8 No 2, Jan. 1988; pp 15-35.

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was examined as one subject. The merger thus violated the principle of equality between subjects since Mandarin and the other 'mother tongues' enjoyed a 100 percent weightage, English only 70 percent and Literature a mere 30 percent. More seriously, for the future of Literature as a school subject, it effectively penalised students who were good in Literature as their effort was worth only 30 percent of the marks at most.

For all students, it meant less exposure to the educational and language enhancement benefits of literary reading and study. This 'down grading' explains the drastic decline within 10 years from 100 percent previously to just 54 percent of students taking the subject for O Levels in 1988, a year after English became the sole medium of instruction in the national education system.

In 1994, when Dean of Arts at the National Institute of Education (NIE), I noticed a large decline in numbers in 1993 to 43.8 percent of secondary school students and traced it to the meritocratic 'annual ranking of schools by examination results' implemented in 1992, which led to schools and students to pragmatically drop Literature as a subject as it was difficult to score in it.[7]

This generated a spate of news articles as well as letters from the public regretting the fact and extolling the well-known merits of studying the subject, culminating in a feature article entitled (perhaps prophetically) "End of English literature?"

In 2002, Literature continued to be 'a dying subject in schools'. By then only 21.8 percent (7,322) of the Secondary 4 cohort was taking it. The latest cause for the recent drastic decline was another policy imperative — the new subject, Combined Humanities, its mandatory half being Social Studies, a hybrid of Civics and National (or Values) Education. Evidently a response to globalisation, it is anchored by two core ideas – "Being Rooted" and "Living Global". Through these two ideas, the syllabus aims to develop our students into well-informed, responsible citizens with a sense of national identity and a global perspective (italics mine).' Just as in 1978, English language and Literature were merged into one subject, this new hybrid subject merges two subjects into one, and thereby halves the curriculum time given to Humanities subjects like Literature. Geography, the most 'technical' of the three subjects, proved to be the most popular. Little wonder, the consequences soon emerged. Although students can take Literature in English as a full elective outside Combined Humanities, evidently few do — not even when the curriculum was revised in 2007

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[7] Published as "Literature, the Beloved of Language". In The Language-Culture Connection, Joyce E James, ed., Singapore: SEAMEO Regional Language Centre, 1996; 17-33.

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and the subject re-titled Literature in English. Nor were they persuaded by a syllabus that cultivates 'critical thinking skills,' pragmatically combines a 'global outlook' with other known benefits such as

[building] in students socio-cultural sensitivity and awareness, as well as . .. offering opportunities for them to explore a wide range of literary texts written in different contexts and from various parts of the world, connecting them to other ages and cultures. It develops empathy and stimulates thinking about beliefs and values. These characteristics of the subject are aptly suited to the 21st century, which is a time of rapid development and shifting perspectives in many areas, including the socio-cultural and the ethical-moral. [MOE Literature in English Syllabus (2013)]

Decline in Numbers taking Literature in School: Implications

Inconsistencies trip over contradictions: Literature being a subject that was important enough (in light of the Singapore government's other ambitions for the country, that it be a 'thinking' and 'creative' society with 'a global outlook,' with English the global lingua franca as its working language) Nominated Member of Parliament (NMP) Janice Koh

was moved to ask in Parliament what 'the take up rate for Literature' was. She had been told by 'educators and people in the creative sector … that the quality of thought and argument, and the ability to communicate ideas among young people had gone down' as 'fewer students were doing Literature.' (It was her question that elicited the shocking fact that by 2012, a mere 9 percent (3,000) was taking the subject .) [8]

This implies that on a personal and societal level – among future parents, teachers, policy and decision makers, and so on – there has been and continues to be an educational, cultural and intellectual impoverishment through loss of an opportunity to acquire intangible habits of critical analysis, moral, intellectual and aesthetic values that can become cultural capital and the basis of life-long skills transferable to other areas of life and work.

Taking a subject these days is not only a matter of being faced with more choices from an increasingly large menu of school subjects (MP Indranee Rajah and Senior Minister of State, Ministry of Law and Ministry of Education's explanation for the decline). What is cause for concern is that the choices available mark a shift from the education of the whole child through the Humanities to the narrowly

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[8] See http://www.moe.gov.sg/media/parliamentary-replies/2013/02 /o-level-candidature-for-full-literature.php http://www.todayonline.com/sites/default/files/1403_AP_merged.pdf Accessed 20 Dec, 2014.

and directly vocational and technical for earning a living, such as Media Studies, Principles of Accounts, Design and Technology, Computer Applications, etcetera, which are properly, the province of tertiary vocational and professional institutions. Indeed, so-called 'choice' can be determined and restricted by pressures exerted on children caught in an unseen web of adult ignorance or ambitions, unfounded assumptions and pragmatic policies which influence the goals and outcomes sought in education.

As a National Institute of Education teacher-educator (who should know) has decried, 'The fortunes of English literature as a secondary school subject in Singapore have for some time been bedevilled by adherence to a hegemonic principle of pragmatism which has routinely informed public policy and personal choice.'[9]

Decline in Literary Education / Reading: Implications for 'language, culture and religion'

Just how seriously other nations would take such a decline can be gauged from what happened in the USA when in 2004, a nationwide decline in 'literary reading' over two decades (1982 to 2002) generated great alarm and national debate about its consequences, such as loss of 'cultural literacy' and other 'intellectual' and 'political' effects.

An intense, nationally-mounted effort spearheaded by the National Endowment for the Humanities (NEA), significantly targeted at high schools, was mounted, which successfully reversed the decline, as was reported four years later. (The NEA defines "literary" reading as 'the reading of any novels, short stories, poems, or plays in print or online.') The Chairman of the NEA expressed a national concern in terms that are as applicable to Singapore:

Anyone who loves literature or values the importance of active and engaged literacy in American society will respond to this report with grave concern. … [Literature] affords irreplaceable forms of focused attention and contemplation that make complex communications and insights possible. To lose such intellectual capability — and the many sorts of human continuity it allows — would constitute a vast cultural impoverishment.

Of course, not every student who takes Literature in school will necessarily benefit from it, do more literary reading, become a better reader and acquire critical skills; nor will one who didn't take Literature be necessarily deprived: their home and specific social environment

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[9] Angelia Poon, "The Politics of Pragmatism: Some Issues in the Teaching of Literature in Singapore", Changing English, Vol. 14, No. 1, April 2007, pp. 51–59.

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could have encouraged literary reading. Besides, not every Literature teacher is skilled and motivating. However, the many students who are not exceptions to the rule will fall through the net and join the growing ranks of a citizenry notorious for poor English expression to the point of inarticulacy, who prefer self-help books and are not literary book-lovers and readers, necessitating an annual "Read! Singapore" campaign. Are we growing a society of better-trained but less-educated adults unaccustomed to the kind of complex, nuanced responses literary works inspire, who are likely to have ignorant, narrow-minded 'visceral' responses (to use former PM Lee Kuan Yew's words) to issues of 'language, culture and religion' that could have adverse political and cultural consequences, and more so, in this age of undiscriminating social media?

For children not exposed to wide, attentive reading of a literary kind at home or are otherwise in general not encouraged to read in their intellectually formative teenage years, school might be the only chance for them to encounter literature and gain the immeasurable benefits described so persuasively in MOE's own Literature in English Syllabus (2013) and the NEA statement (both quoted above). Literature is not for nothing known as the "Queen of the Humanities" for it is both an education of the imagination and an art that encompasses life itself in all its myriad variety, unpredictability and complexity

which, through the correspondingly rich medium of language, renders it one of the most complete and broadly educational of human arts.

In a declaredly multilingual and multicultural nation like Singapore where four official languages are recognised and all are theoretically but not effectively equal, where neither the language of the ethnic majority, Chinese, nor the National Language, Malay, is the lingua franca, but English is, the fact that Literature (and Drama, for the most part) is uniquely inextricable from the spoken and written language freights both art form and school subject with a unique cultural, ideological and thus political burden. The state must be seen to support all four equally, and thus their respective literatures. However, the state's own language policies and national priorities have created contradicting, conflicting and negative outcomes in practice and caused willy-nilly, both the dominance of the literature in English nationally and paradoxically, its decline in enrolment as a subject in schools. *And this essay has not even looked into the state of and enrolment figures for the Literatures in Malay, Chinese and Tamil as subjects and the extent to which Singapore literature in particular or literature in general from other countries in these languages are actually much read.*

If 'a global outlook' (if indeed desirable) is not to be an empty signifier, it has been suggested that a way out of our linguistic

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and culturally confused tangle of contradictions, and which could be also a viable response to the contemporary reality of a seismic cultural shift, is to embrace cosmopolitanism in general, and in the curriculum and teaching of Literature in particular. In the fervour of and focus on nation building in our first five decades of nationhood, cosmopolitanism was rejected as inimical to two albeit mutually exclusive goals: the fostering of a cohesive national identity and maintenance of ethnic cultural roots by state-defined communities. The current government embrace of the global that includes the local and the use of English to the point that it almost defines the national identity, may make a step towards cosmopolitanism not too difficult to take – if we could move away from the strait jacket of the categories of CIMO (Chinese, Indian, Malay and Others) even as globalisation makes the population more diverse, and English even more dominant as lingua franca. Who knows, the Singapore Literature Prize might then morph into a global award open to writing not only by Singaporeans but also literary works concerning, set in and about Singapore by any writer in the world. But that discussion and what measures could or should be taken to address our cultural contradictions and priorities, reverse the decline in the study of not only Literature but also the Humanities, will have to wait for another occasion.

Sustainable Singapore

Reflections on Singapore's Demographic Future

Paul Cheung

Professor Paul Cheung is currently Professor of Social Policy and Analytics at the National University of Singapore. He was director of Population Planning Unit of Singapore Government from 1986 to 1995 and Singapore's Chief Statistician from 1991-2004. He just returned from the United Nations where he served as Director of UN Statistics Division from 2004 to 2012.

Reflections on Singapore's Demographic Future

In 1986, Dr Kwa Soon Bee, then Permanent Secretary of the Ministry of Health (MOH), asked to see me in his office. It was a cordial meeting and we discussed a range of population and public health issues. A few days later, I was asked whether I would like to join the MOH and to help establish the Population Planning Unit (PPU). Having just started my teaching career at the University of Singapore after six years of post-graduate training in demography and social planning, I was hesitant. Eventually, I was persuaded and began a joint appointment at the MOH as Director of Population Planning Unit (PPU). My first task was to help formulate the 'New Population Policy' which was announced in 1987 by Mr Goh Chok Tong, then Deputy Prime Minister (DPM), to replace the 'Stop at Two'policy. Since then, I have been a keen observer of Singapore's demographic trends and helped evolve some of its population policies.

Population policy in 2013 has once again become a hot political issue. A wide range of views has been expressed on the desired population size, and the number/ percentage of migrant workers and many critical (and sometimes cynical) comments, have been expressed in social media. Critics have faulted the government for pushing for a larger population and, more importantly, for neglecting the citizen base in favour of the foreigners. This debate on our population policy is necessary and desirable, as we need to articulate a common future. At each debate, we have become clearer in our understanding of the Singaporean society, with the government adjusting its policy stance correspondingly. During the 1987 debate, the need for the government to address issues related to the costs of childbearing and raising a family was brought home. The policy package thus focused specifically on reducing the cost of bringing up a family. Subsequent policy revisions in 2006 further helped reduce these burdens. The current debate has already led to revisions in our manpower policies and we can probably expect more refinements to our immigration policies in the near future.

As I reflect on the current debate on population size and the critical comments that have been expressed, I see the need to once again revisit the demographic challenges facing Singapore and assess our scientific understanding of Singapore's population dynamics as the basis for our projections and population policy recommendations. Why do we now project a population of 6.9 million when not too long ago we said four million would be ideal? Did we make a mistake in our calculations? If we are on track in our technical assessment of our population dynamics, what then is our demographic future? How should we as citizens of this city-state face up to the demographic challenge? This paper shares some of my reflections.

Reflections on Singapore's Demographic Future

A Deteriorating Age Structure

Singapore has a strong registration system for births and deaths and our demographic information system is among the best in the world. A solid information base thus facilitates our understanding of the changing age structure. We have been tracking the changing age structure of residents over time. In the 1980s, when I started work at the PPU, we knew that we were entering into a period of 'high demographic dividend', i.e. the dependency ratio was at its lowest due to the much larger working age population relative to the 'dependent' younger and older populations. In the 1980s, the index of dependency ratio was about 46 to 100, which marked the beginning of this 'dividend' period. Graph 1 shows vividly the trough period and the impending surge in the dependency ratio.

We know for a fact that the future rise of the dependency ratio is entirely due to the increase in older persons, especially those from the baby boom cohorts. We have been tracking the movement of the baby boom cohorts for many years. There is no escape from this 'silver tsunami'. The size of the ageing baby boomers will make their presence felt in many aspects: the demand for health care, the management of their daily lives, the end-of-life issues, and the impact arising from inter-generational transfer of assets. We are also aware that, with the rising life expectancy (from 72 years in 1980 to 82 in 2012), older persons will live and stay healthy for much longer. At age 60, a Singaporean male can expect to live another 23 years and a Singaporean female, 26 years.

While we know a lot about the impending rise in the ageing population and the

Figure 1: Singapore Age Dependency Ratio

Source: United Nations Population Division.
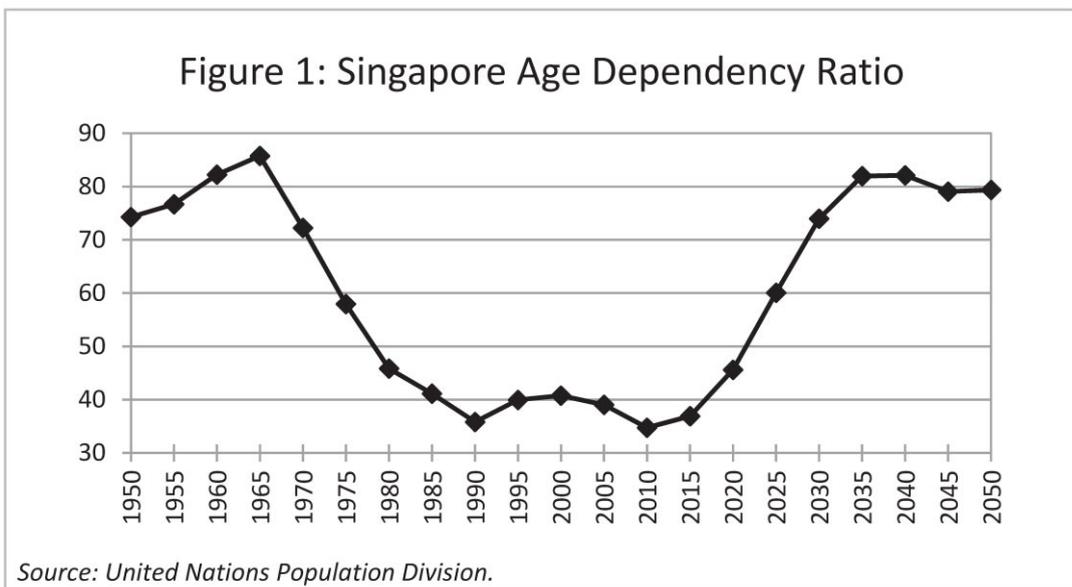
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challenges in the provision of support services, we are still at an early stage of evolving new societal arrangements to accommodate and take advantage of the skills and talents of this group of healthy and educated older persons. The future number and characteristics of the older persons have been projected regularly and were submitted and scrutinised by successive Ministerial Committees on Ageing. Yet, I am surprised how little we have done collectively to add meaning and fulfillment to the last 20 to 30 years of life of many older persons. Perhaps we are at the beginning of a process which will pick up momentum in time. I also believe that end-of-life issues will increasingly be discussed openly as this society confronts the challenges of an ageing population.

The Birth Dearth

The current long-run fertility decline, which started in the 1970s, is well documented. The 'Stop at Two' population policy might have facilitated a faster and more drastic decline. Nonetheless, the decline of Singapore's fertility is in line with the rest of the Asian cities. We have thus far been using the 'Total Fertility Rate' (TFR) as the key indicator to track fertility trends. This indicator comprises of two components: the proportion of married women and the level of marital fertility. Over time, we have seen a delay in marriage timing and an associated decline in the absolute number of married women. The level of

marital fertility has also declined with the number of families with one or no children on the rise. The consequence of the combined effect is a sustained below-replacement TFR. These analyses were based on the data from periodic surveys and population censuses, and I think we have a good grasp of the level and trends, including period and cohort fertility.
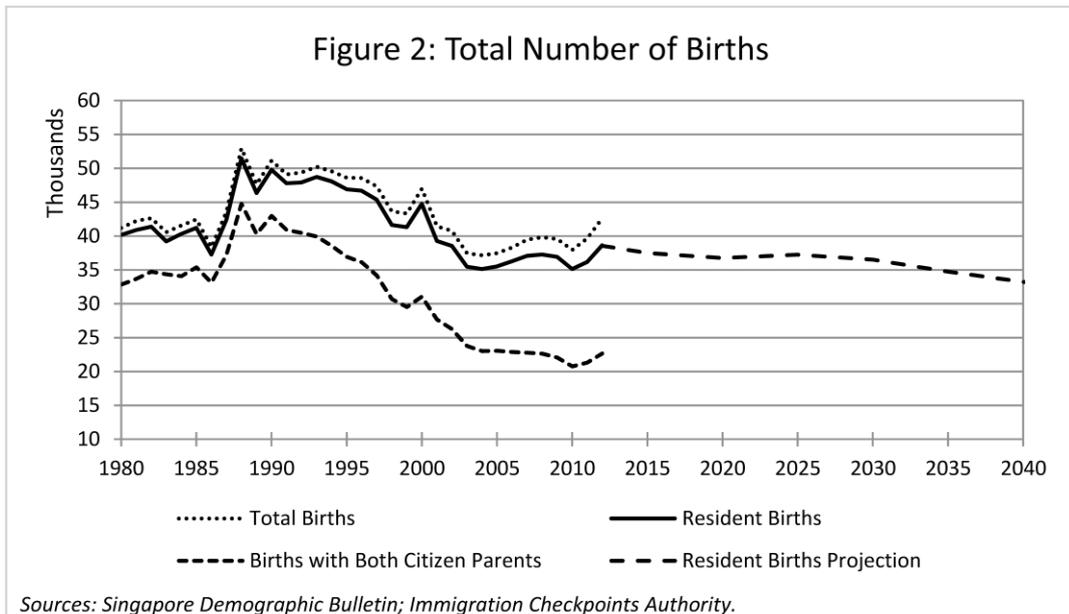
The joint declines in the level of fertility and in the absolute number of mothers directly impact the number of births we can expect in a given year. The declining numbers of the resident births (births born to resident households) and the comparison between 'resident births' and reported 'total births' are shown in Figure 2. In the past 10 years, the number of resident births has been trending between 35,000 to 38,000, and the divergence between the 'total' and 'resident' births has become greater with more foreigners giving births in Singapore. I am not sure why the government continues to use the number of 'total' births in some of the analysis which is quite misleading.

What is of concern is the successive stepwise decline in the size of the resident birth cohorts: an average cohort will be below 35,000 in the years to come. I do not believe anyone would agree that a cohort of 35,000 a year is sufficient to meet Singapore's manpower needs. Moreover, what is of interest is that only 60 percent of the resident births are born to both parents who are citizens (around

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25,000 per year). In other words, four out of 10 births are born to families, with at least one parent being a migrant. I am surprised by this change, as the proportion was much lower in the 1980s. This is in line with the marriage trends discussed below.

order to appreciate the impact of changing values on the sustainability of Singaporean population. With the steady rise of childless or singleton families, I think we can expect Singaporean families to get even smaller in the future.

Figure 2: Total Number of Births

Sources: Singapore Demographic Bulletin; Immigration Checkpoints Authority.

In Singapore, procreation occurs with a marriage and the family is often deemed as the most important social institution. Government policies have focused on supporting the functioning of the family in every aspect. However, the Singapore family is changing as well. The young Singaporean families of today are much better educated and globally mobile. What are the values of children to the modern Singaporean families? Are two or three children still the ideal family size? I think we need a better understanding of this issue in

The nature of Singaporean families will also evolve due to compositional changes. Marriage to non-Singaporeans has been on the rise, reaching almost 40 percent of all Singaporean marriages. Graph 3 shows this rising trend of cross-national marriage. I am surprised by this trend which has important sociological implications. Is this a natural phenomenon as a result of increased contacts with non-citizens locally or overseas? We know that the marriage bureaus play a role in arranging marriages for some of the Singaporean

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with spouses from within the region. Will this trend stabilise at 40 percent or will it climb further? The data strongly suggest Singapore society has become more open or 'globalised' than ever before. It would be very interesting to see how this globalisation trend would affect Singaporean family values, traditions and rituals.

1970s; still, the fact that it will happen soon does bring a sense of foreboding. If we do allow more migrants to settle in Singapore as citizens, this will delay the onset of population decline. Objectively, this sounds like a rational choice. However, as in the case of Japan, there may be other considerations far more important than just balancing the

Figure 3: Proportion of Citizens Marrying Non-Citizens

Source: Department of Statistics.
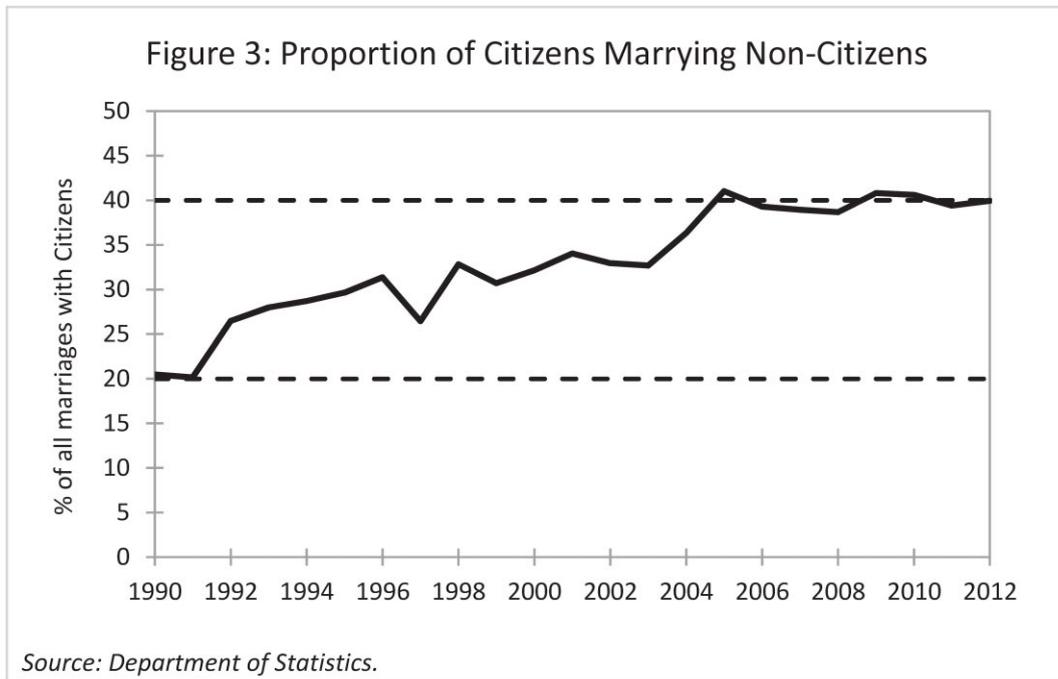
A key consequence of the fertility and ageing trends is that the number of deaths will soon outstrip the number of births, resulting in a decline of our population size. The government has projected that the natural increase for citizens will turn negative from about 2025 onwards and at that point, the citizen population will shrink. We have known this would happen since the

numbers. Japan has stubbornly refused to go for an 'easy' solution of importing labour (and citizens) to ease their population concerns. In contrast, we may have appeared to be too eager. While our choices may be limited as a small city-state, the volume and speed of absorption are policy variables that could have been more broadly discussed.

Reflections on Singapore's Demographic Future

Our Common Future

Our demographic trends are clear and supported by undisputed evidence. We know as a fact that we are heading towards a declining citizen population with an adverse age structure and rising dependency. This is our destiny. We will be dependent on migrant workers in the future in large numbers no matter how much we increase our productivity. During the 1980-2000 period, our development benefited from the 'demographic dividend'. The demand for foreign workers in this period was manageable. With the establishment of the National Productivity Board (NPB) and the push for higher 'total factor productivity', there was reason to hope that foreign inflow will not be too large. The population projections prevailing at that time reflected this sentiment and assumed a much smaller foreign inflow, of about half to one million, to top up the citizen population. We assumed then that a steady state for the medium term could prevail with a four million population size.

In retrospect, I realise that the 4-million population projection in 1990 has grossly under-estimated the growth potential of Singapore and our capacity to accommodate a larger population. It is a no-brainer that population planning in Singapore must take full cognisance of Singapore's unique characteristics and constraints as a city-state. Some of the physical constraints have been minimised (such as new sources of water supply and land reclamation), and we know that with proper planning, Singapore has the capacity of supporting a much larger population with a high quality of life. The manpower needs have also surged due to favourable economic growth.

The current population projection issued by the government in the White Paper has taken a factual assessment of the manpower needs of the future based on current economic scenarios, and has thus made a larger provision for population increase. Critics have argued that our future economic strategy must aim for 'quality' growth with minimal dependency on foreign workers and a stronger push for productivity improvement. This is reasonable, and indeed 'quality growth' rather than 'growth at all costs' should be the guiding principle for future economic development. The government has given some indications that a new economic strategy may indeed be required. There will however be a limit of how much we can substitute manpower by technology, and the fact remains that we critically need a foreign workforce to support and grow our economy.

Our demographic future will be shaped by how we perform on two key tasks. First, we have to continue to encourage the formation of Singaporean families to slow the decline of the population and to preserve our culture and traditions. The nature of Singaporean families will change, and it is unclear how the impact

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of cross-national marriages will erode the traditional values and practices.

Secondly, we have to find an acceptable way to deal with future population inflows which will be sizeable. Our current population inflow is like 'kueh Lapis', with many layers forming a delicate structure. This structure of work permits and employment passes has been in existence for many years and our society has accepted it. Recent reactions to the inflow seem to focus on how foreigners have impacted the lives of Singaporeans. As the foreigners begin to form a critical mass in the labour market, Singaporeans feel that they are being squeezed out. Many Singaporeans feel that they are disadvantaged and even discriminated against in their home country. In addition, the sheer number of foreigners in common places such as markets, public transport, and food outlets gives rise to a feeling of being overwhelmed by outsiders.

I believe there is good understanding among Singaporeans of our population dynamics. The facts are not disputed. We know we need an inflow of foreigners to sustain our population and economy. However, we want this to be a managed inflow, with broader consultation on how the inflow should be managed. If Singaporeans continue to perceive that they have been squeezed out by the foreigners, this will bring forth broader political and sociological consequences. The government must be seen to be advancing the interest of Singaporeans, rather than that of the foreigners. Unfortunately, this perception of a lack of 'home-court' advantage is still widely held. The reactions to the White Paper on Population, the riot in Little India, the strike by bus drivers — all these are signals that managing our future population growth will demand the government to be far more attentive than ever on issues concerning the foreign workforce. The need to forge a public consensus on our manpower policy and the role of foreigners in our society is more apparent than ever before. We need this shared understanding and shared responsibility to meet the future demographic challenges and to sustain the growth and prosperity of our nation.

Sustainable Singapore

Singapore Challenged: The Natural and Living Environment

Euston Quah and Christabelle Soh

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Singapore Challenged: The Natural and Living Environment

Introduction

The study of Economics revolves around the fundamental problem of scarcity. In the face of limited resources and unlimited wants, how can any society be organised to ensure that resources are allocated to the right areas? The trade-offs involved in the choices made and the resultant conflicts in objectives present a challenge to all governments. With respect to Singapore, the most pertinent challenge stems from managing higher economic growth and the need to balance that with conserving and protecting the environment (broadly defined as comprising the living and natural environment). While all countries face this challenge, Singapore's circumstances make the trade-offs especially stark.

On one hand, globalisation and the associated reduction in barriers to trade and capital flows have facilitated the rise of regional economic rivals. Singapore's export and foreign direct investment (FDI) - led growth model is under threat from countries such as China, which have the advantage of cheap and abundant labour to create both export competitiveness while attracting FDI. While this only poses a problem for Singapore to the extent that such countries export similar goods and services and attract similar types of FDI to Singapore, the fact that these regional countries are currently looking to move up the value chain means that the

scenario of Singapore and them being in direct competition may not be that far off in the distant future. The implication is that to achieve the same degree of economic growth, Singapore needs to be more competitive than ever. The increased competition from rival economies has caused the trade-off in terms of pursuing higher economic growth vis-a-vis protection and conserving the natural environment while increasing the non-material aspects of quality of life . With higher incomes and the satisfaction of material needs, people start demanding cleaner air and water, larger green open spaces, more recreation and leisure time, increased spaces for reflection, conservation of heritage, the arts and culture and so on.

The theory is similar to that which underpins the environmental Kuznets curve, an n-shaped curve that describes the relationship between growth/income and the degree of pollution over time. Beyond a certain level of income, the demands for a cleaner environment would lead to less pollution and hence, a reduction in pollution as income increases. Similarly, beyond a certain level of income, people are less willing to trade-off aspects of non-material welfare for more material aspects of growth.

What faces Singapore then is that in light of the increased foreign competition, in order to sustain economic growth, more aspects of non-material welfare may need to be sacrificed. However, at the

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same time, Singaporeans' demands for improvement in the quality of life have increased. Managing both sides and striking an appropriate balance forms the broad, fundamental challenge Singapore faces today.

Trade-offs between Economic Growth and the Environment

The Energy Challenge

Economic growth entails greater production (and consumption) of goods and services. This inevitably involves higher levels of energy consumption. How best to meet this increased energy demand is a specific challenge that Singapore faces.

Singapore currently relies primarily on burning fossil fuels to generate energy. There are two issues with this approach. Firstly, relying on conventional sources of energy from burning fossil fuels results in higher carbon emissions. Although Singapore only contributes to 0.2 percent of global carbon emissions, we have always punched above our weight in global affairs and should also do so with regards to setting an example in reducing carbon emissions. While Singapore has done well in this area, achieving one of the lowest carbon intensity (kilogrammes of carbon dioxide emissions per dollar gross domestic product (GDP)) in the

world, the challenge lies in further decoupling growth and carbon emissions. This requires even further reductions in carbon intensity, which may prove to be costly. The main factor behind our low carbon intensity is the fuel makeup in our energy production. Since 2000, we have increased the use of natural gas, the least carbon-emitting fossil fuel, from 19 percent to 80 percent of the total fuel mix[1]. Increasing the share of natural gas is the low-hanging fruit. Given the high proportion of natural gas in the fuel mix, there is little scope for further reductions in carbon intensity from this source. Further reductions in carbon intensity may require costly technology such as carbon capture and storage. This leads us to the second issue of cost. To maintain competitiveness, Singapore needs to keep energy costs low. If cost were the only consideration, coal would definitely be the fuel of choice, especially when countries such as China have an abundance of it and hence, a cost advantage stemming from lower energy costs. However, coal emits the most carbon dioxide when burnt and is the most pollutive of the fossil fuels. Again, the pressure to remain competitive and environmental considerations pull in two different directions.

The problem is compounded by the fact that Singapore is renewable energy-deficient. Renewable energy could

[1] National Climate Change Secretariat, http://app.nccs.gov.sg/page.aspx?pageid=167&secid=193, Accessed on 26 October 2013

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potentially provide a way out of the conundrum since it does not produce any carbon emission. However, Singapore is not blessed with the ability to rely on these renewable sources. We lack the land mass for wind turbines and fast flowing rivers for hydroelectricity. Solar energy is still too costly and faces the issue of storage to allow the timing of energy production to match that of consumption. Furthermore, we lack sufficient space for the buffer zone which a nuclear energy plant would require.

In view of the above considerations, the challenge is two-fold. In the short run, we need to decide on an optimal energy mix that strikes a balance between cost and environmental concerns. In the longer term, the focus should be minimising the trade-off between the two. On the supply-side, we need to continually explore and develop less carbon intensive energy sources. On the demand side, we will need to manage energy demand from both households and industry. Naturally this is easier said than done. Energy needs to be cheap, clean, and secure. The road forward is continued monitoring and pursuit of energy efficiency, research and development on clean energy including how to make coal usage cleaner, and energy security by continued diversity on sources of supply of energy (which raises another difficulty and often costly trade-off between reliance on a narrow range of traditional supply vis-a-vis searching for

alternative sources). The cheapest and easiest way is to develop a shared smart grid involving supplies from other regional countries which already have an abundance of natural renewable energy resources but this again raises the problem of energy security where the supply source is not in Singapore's determination. On the demand side, it is also very important that both consumers and producers are responsive in the behaviours in the usage of energy. This requires a good understanding and application of behavioural economics. There is only so much developed and legislated economic incentives can affect behaviour. Behavioural nudges are needed to complement the conventional economic incentives.

The Population Challenge

The long run economic growth rate is dependent on the productive capacity of an economy. Singapore's ageing population means that all else being constant, economic growth will slow down and may even turn negative. An ageing population means that entrants into the labour force will be outnumbered by retirees from the labour force. This would cause a shrinkage of the labour force and hence, a reduction in productive capacity and growth. According to the recent Singapore Government's Population White Paper, in the absence of foreign labour inflows, Singapore's population (and hence,

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labour force) will start shrinking in 2025[2]. In the absence of productivity gains, continued economic growth requires a growing labour force. However, Singapore's low fertility rate means that it is not viable for the labour force to increase via domestic means. The labour force requires foreign augmentation. This, unfortunately, has come with a trade-off in terms overcrowding and a resultant reduction in the quality of life due to congestion on public transport networks and a strain on the social fabric. While improvements in productivity have been trumpeted as the cure, there are good reasons to doubt the viability of the productivity targets over the next decade. Firstly, large gains in productivity are usually only enjoyed by developing countries which are playing catch-up. This is because there are still many low-hanging fruits in the form of best practices and existing technology that they can adopt. Singapore does not fall into this category. We have plucked most of the low-hanging fruit and there is no longer a technological gap between us and the rest of the developed world. Secondly, the rough empirics do not add up. The most dynamic economy in the world is arguably the United States, which only saw an increase in productivity of 1.7 percent over the past decade. For

Singapore, greater gains in productivity will require an even higher level of dynamism which is unlikely to be realised within a decade. Thirdly, while there are specific industries which have significant room for improvements in productivity (e.g. construction), the scope for improvement in the overall economy's productivity depends on the future relative sizes of these industries as well. It is quite likely that Singapore will not experience significant improvements in productivity and will miss the ambitious productivity targets of 2 to 3 percent annual growth in productivity over the 2010 to 2020 decade[3].

The implication of the above is that the trade-off between growth and overcrowding is going to remain tight for the foreseeable future. Where there are trade-offs, there must exist an optimum where the marginal benefits of an addition to the population (in the form of a larger labour force and growth) is equivalent to the marginal cost (in the form of the contribution to overcrowding)[4]. The challenge then, for the short term, is to find out the optimal population and to adjust the foreign labour flows to reach it. For the longer term, the focus on productivity is still appropriate and necessary. Long run

[2] National Population and Talent Division, A Sustainable Population for a Dynamic Singapore, http://population.sg/whitepaper/resource-files/population-white-paper.pdf, January 2013
[3] Economic Strategies Committee, Report of the Economic Strategies Committee: High-skilled people, Innovative economy, Distinctive global city, http://app.mof.gov.sg/data/cmsresource/ESC%20Report/ESC%20Full%20Report.pdf, February 2010
[4] Quah & Soh, Optimal population: Why non-material welfare matters, 17 November 2012

solutions should, in general, try to minimise the trade-off costs instead of simply managing the trade-off. Improvements in productivity increases the productive capacity without the need to import foreign labour and avoids the sacrifice of non-material well-being.

The Waste Challenge

Both energy and population present challenges because they are ingredients necessary for economic growth. Waste, on the other hand, presents a challenge because it is a by-product of growth. With growth, there is greater output and consumption — both contribute to waste. Between 2000 and 2012, in line with the increase in national income, waste generated (in tonnes) increased by 56 percent[5].

Singapore's current waste management system primarily involves incineration and the use of landfills. Both involve trade-offs in the form of a worsened living environment. The former causes air pollution and poorer air quality. It also adds on to Singapore's carbon emissions. The latter causes land and possibly, groundwater pollution. Furthermore, with land becoming increasingly scarce, the opportunity cost of landfills in the form of foregone development projects become ever

larger. The problem is compounded by the fact that the Pulau Semakau landfill site is expected to reach its capacity in 2016. Current efforts to expand the site are projected to extend this to 2035[6]. However, despite the National Environment Agency's (NEA) best efforts, there will inevitably be some negative impact on the nearby marine life.

There is a need to reduce the amount of wastes generated. One way to generate less waste is by accepting less growth. The challenge is to find out how much growth and consumption Singaporeans are willing to give up to enjoy a low-waste and cleaner environment and implementing a suitable tax to discourage consumption. The other way to generate less waste is to decouple growth from waste generation — in other words, recycle. Recycling allows increased production and consumption without a corresponding increase in resource usage and thereby waste generation. In this regard, Singapore has thus far produced a mixed bag of results. While 60 percent of total waste is recycled, a breakdown of the recycling rates by materials reveals that the bulk of the recycling is carried out by the industrial sector. Recycling rates of materials more associated with

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[5] ZeroWasteSg, Singapore Waste Statistics 2012, http://www.zerowastesg.com/tag/recycling-rate/, Accessed on 26 October 2013

[6] The Straits Times, NEA plan seeks to limit damage from landfill expansion, 23 August 2013

household use (e.g. plastics) are dismally low[7]. The challenge then is to change households' attitudes and encouraging greater household recycling. However, recycling itself is not a panacea. Recycling waste without increasing demand for the recycled products will not be sustainable. This subsequently often requires huge subsidies which compete with subsidies provided to incineration plants. Furthermore, if waste reduction were successful, there would be less waste produced for recycling which in turn, will threaten recycling firms. What is needed is a holistic evaluation of the entire waste problem from its inception and generation to a cost-benefit analysis of each proposed solution. The cheapest and most efficient way to dispose non-toxic waste is to lease waste landfill sites outside of Singapore. However, this again is politically not suitable despite its economic appeal. Nonetheless, there have been success stories in the various import-export waste states in the United States and this perhaps, bears studying .

Addressing the Challenges

Long run solutions to all three mentioned-above challenges require delinking growth from the problems' sources - carbon emissions, increases in population, and waste generation. These will involve new technology, new means of doing things or fundamental changes

in attitudes. These are the big ideas and involve a certain degree of uncertainty. While important, they provide little in the way of concrete and immediate steps that can be taken.

For a more immediate response, the focus is to manage the challenges. This involves accepting the trade-offs as a given and finding out what the optimal compromise is. Fundamentally, it is an exercise in optimisation. What amount of growth and the corresponding levels of carbon emissions, foreign labour, and waste would maximise social welfare? Would an additional percentage increase in real GDP bring about greater social utility? This requires greater and more consistent use of cost-benefit analysis. While the Ministry of Finance (MOF) has taken steps in the right direction in adopting more consistent use of cost-benefit analyses, what Singapore still lacks is a systematic gathering of data regarding non-market goods such as green spaces and fresh air. More valuation studies need to be carried out to derive society's preferences in order to determine what the optimal trade-offs are. Economics provides many tools to place monetary values on these non-material aspects of welfare. There is little to prevent the application of these tools to the Singapore context to aid enlightened policy-making. Additionally, the act of soliciting society's preferences

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[7] NEA, Waste Statistics and Recycling Rate for 2012, http://app2.nea.gov.sg/energy-waste/waste-management/waste-statistics-and-overall-recycling, Accessed on 26 October 2013

has the benefit of more visible involvement of stakeholders, more transparency in decision choices, and better informed decision-making.

Conclusion

In summary, Singapore's challenges primarily stem from the trade-off between economic growth and other objectives. While globalisation and greater competition have meant that each unit of growth will require greater sacrifice, increased affluence have pulled in the opposite direction with greater demands for a higher quality of life. To address these challenges, long run solutions must involve reducing the trade-offs. Concrete steps however, require short run management. This involves finding an optimal balance, which in turn requires a systematic collection of new and relevant data.

A step that Singapore could take is to set up an agency to conduct and update valuation studies regarding non-market goods and accounting for non-material aspects of growth. This agency would greatly complement what is now increasingly demanded of cost-benefit studies on project proposals and will serve Singapore well into the future by continually inferring and analysing society's preferences.

This article was written from the conventional perspective of growth as the main objective and the resultant trade-offs as necessary evils. However, a paradigm shift might be in order. It might be preferable to redefine the objective of policies to one that pursues higher quality of life of which the focus is on the non-material aspects of life. Here, growth is but a means to an end. Such thinking will need a new mindset which re-estimates the optimal population, energy source, and waste management system — not from how they support growth, but from how they affect a defined quality of life. This may be the real challenge instead.

Singapore's Interest in LNG and Becoming a Regional Gas Hub

Lee Tzu Yang

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Singapore's Interest in LNG and Becoming a Regional Gas Hub

Asia has entered an historic phase of development that will have an impact on the way it uses energy. Citizens in emerging economies are buying their first refrigerators, cars, washing machines and all other consumer goods that are taken for granted in developed economies. These same countries are undergoing rapid industrialisation and urbanisation. These trends suggest a lot more energy will be used, which means more supply will have to be produced fairly quickly.

At Shell, teams of economists, engineers and scientists have been developing, over the last 40 years, a range of plausible futures and their challenging implications for our energy system, including for Asia. We share this thinking with governments, researchers, academe and the public. Our latest edition, called New Lens Scenarios, projects that energy demand could rise by as much as 80 percent by 2050. The scenarios also highlight the shift in economic influence from the West to the East. China and India together will account for the majority of energy demand growth in the next two decades.

Asia is increasingly dependent on energy imports at a time of high and volatile oil prices. According to the Asian Development Bank (ADB), most Asian countries will produce less than half the energy they need by 2035, and many will produce only a tiny fraction. The region will have to rely heavily on energy imports for decades to come.

This tremendous need for energy will put more stress on our water and food systems, as well as on the climate and environment. All these resources are tightly woven — nearly all forms of energy production require water — energy is needed to move and treat water; while producing food requires both energy and water.

Increased energy needs have also led to rising concerns about greenhouse gas emissions. On existing emissions trends, the world will far exceed the average temperature rise of 2 degrees Celsius regarded as the limit to avoid the worse effects of climate change. Asia's governments are also increasingly facing mounting public pressure to tackle chronic urban pollution and to clean up the air.

Due to the sheer scale of our energy needs, the scenarios project that fossil fuels are expected to continue to supply the majority of energy for decades to come. They expect fossil fuel consumption to rise in energy terms by about one-third over the next two decades. By 2060, fossil fuels are still likely to meet around 60 percent of global energy demand, down from about 80 percent today.

The team also estimates that by 2035 the world's renewable energy sources could grow by at least 60 percent or even double. By 2060, renewable energy could supply up to four times more energy than

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today, which would be a staggering rate of expansion.

Significantly, natural gas will become the most important energy source globally by the 2030s. The International Energy Agency (IEA) estimates there is enough technically available gas to last more than 230 years at today's consumption levels. Gas can be cooled to a liquid state, i.e. liquefied natural gas (LNG) and shipped across oceans. LNG is increasingly being used to help countries meet demand while increasing energy security, because its supply is becoming more abundant and diverse. In the first decade of this century, LNG demand has doubled and it is expected to double again within this decade.

In Asia, gas demand has been rising dramatically, particularly as Asia's urban populations continue to expand. In 2012, Asia represented 46 percent of global inter-regional gas trade, up from 40 percent the year before, according to the IEA. Asia overtook Organisation for Economic Co-operation and Development (OECD) Europe, the then largest importing region accounting for 45 percent of global gas imports. Asia now imports almost four times more LNG than Europe.

Most of the natural gas growth in Asia Pacific will be consumed in the power and industrial sectors, according to the IEA, with the power sector set to be dominant for the next four years. The two most

mature natural gas markets in Asia Pacific are Japan and Taiwan. Both markets are nearly exclusively supplied by LNG. In 2011, they consumed 87 percent of the LNG delivered to Asia, though the IEA says demand growth is likely to shift to China and India.

The region's LNG trade is set to grow as infrastructure is built in more countries. Pakistan, the Philippines, Sri Lanka and Vietnam have announced plans to build regasification terminals for LNG imports. Indonesia, Thailand, Malaysia and Singapore are already importing LNG. Given that there has been limited progress on intra-regional pipeline infrastructure promoting pipeline-supplied natural gas trade, there is still more room for the LNG trade to develop. Given the slow pace of the intra-regional effort, the region might look to more regional co-operation between governments to allow domestic gas prices that reflect international price movements, and in this way, encourage a free and liquid traded-gas market.

Singapore's role

Against this backdrop, Singapore is positioning itself to benefit from this historic inflexion point in energy and Asian growth. It has calculated that the region's potential demand for cleaner energy, gas in particular, will rise exponentially and has taken initial steps to build its position.

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Singapore first announced plans for a world-scale LNG terminal in 2006, started building the facility in 2010 and took its first commercial delivery in 2013. This will help enhance energy security by diversifying energy supply from piped gas from Indonesia and Malaysia, which currently provide the gas for generating electricity.

Singapore's LNG import terminal has initial throughput capacity of 3.5 million tonnes per year, which is expected to expand to 9 million tonnes per year in the future. This is to ensure that supplies are secured for the country and to trade in rapidly expanding gas use within Asia. Beyond its domestic remit, the terminal will be used for storage and LNG re-exports, underscoring Singapore's ambition to become the regional energy hub as Asia's gas demand and trade grows.

Due to its strategic geographic location, Singapore has one of the best prospects in Asia to become a gas hub. Singapore is located between gas-exporting powerhouses in the Middle East, Australasia and gas-hungry Asia, particularly China, Japan, South Korea and Taiwan. With frequent calls on ports in these countries, tankers can refill in gas-producing areas such as Australia, Brunei or Indonesia, enabling trade with Singapore on their way to the Middle East. This has the potential to transform patterns for the Asian gas trade.

The historic free market approach to the energy sector, combined with clear regulation and a solid legal framework in Singapore, is an important winning condition for its gas hub ambitions. In 2001, the government decoupled commercial activities from transportation activities in the gas sector, to enable better competition for gas prices as well as to more accurately reflect market forces. It also introduced wholesale pricing for natural gas so that re-exports from Singapore may be competitively priced. Third-party access to gas infrastructure in Singapore has been guaranteed since 2008.

Singapore also has the financial infrastructure to support gas trading. By 2012, at least 14 companies with LNG trading or marketing desks, including BP, Gazprom, Shell, Vitol Group and GDF Suez were present in Singapore. Critical to shaping Singapore's hub ambitions will be continued support from the government for the free market approach to ensure continued interest from major gas players.

Also key to these ambitions is the continued development of the Singapore gas terminal in both capacity and operational excellence, to ensure world-class efficiency and competitive costs. This will support not only trading ambitions but the reliability of competitive gas supply to the market in Singapore.

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The region

The global trade of LNG is increasingly connecting markets, but there are still significant regional aspects to the gas and LNG industry. Gas in the United States has developed trading around hubs tied into piped gas infrastructure, and is well known for its 'Henry Hub' price point in Louisiana. Europe's gas market is a hybrid of oil-linked contracts and a number of long-established as well as new gas hubs. Connecting these regions are dynamically growing short-term and spot LNG sales, over-the-counter sales and smaller volumes of shorter durations, in addition to the typical long-term contracts.

LNG in Asia has historically been sold on the basis of long-term oil-linked contracts. According to the IEA, 88 percent of natural gas traded in Asia in 2010 was priced by linkage to oil. Asian growth in LNG demand has coincided with a period of rising oil prices, resulting in LNG prices growing in tandem. This has created a debate on whether oil-linked pricing is best for the future, and questions whether Asia should also develop hub prices for gas as in Europe and the United States.

A key point in this debate is the difference in current gas prices between the United States and Asia, which appears significant. At current oil prices, Japanese long-term LNG price averages an estimated $16/MMBtu. The Japanese earthquake of 11 March, 2011, which eventually resulted in a shutdown of nearly 50GW of nuclear power, has further increased Japan's reliance on imported oil and LNG. In parallel, the United States shale gas phenomenon has driven down 'Henry Hub' gas prices. While prices in these regions may seem to differ considerably, the differences are better understood after adjusting for the cost of liquefaction, transportation and regasification to trade from one region to the other. The residual difference would work out to be less dramatic.

Singapore is a highly viable location for a gas hub. While there are elements to hub pricing which are attractive to the region, other contributing factors need to play roles — market liquidity and transparency; depth and breadth of trades; and a significant degree of government regulatory co-operation across Asia on energy that so far, has not been present. While Singapore can play a leading role in creating this, there are many next steps which depend on others.

Conclusion

In order to develop a competitive and secure supply of energy, Singapore has embarked on growing the LNG sector. The development of interest from a diverse range of world class LNG players will be important, as will the demonstration of operational excellence by the Singapore terminal to be best-in-class in flexibility and costs. The debate

on LNG pricing is unfolding and will play a part in how the gas trade develops in the region.

For the development of Singapore as a gas hub, in addition to the domestic factors more within the control of Singapore, the pace of progress is also dependent on world and regional changes. Most critically these include the ability and willingness of regional players to co-operate and create the conditions for an effective integrated gas supply infrastructure with aligned regulatory frameworks. Singapore can prepare to be in a pre-eminent position to play this role when the time is right.

The extent to which Singapore develops its role as a gas hub will, in turn, support its objective to have a secure and competitive energy sector.

The Model City in Question

The New Singapore Dream

Kishore Mahbubani

Professor Kishore Mahbubani, the author of *"The Great Convergence: Asia, the West and the Logic of One World"*, has been listed as one of the top 50 world thinkers this year by Prospect magazine.

The New Singapore Dream

It is always best to begin an article with a strong statement to grab a reader's attention. So here is my strong statement: when Singapore celebrates its 50th anniversary on 9 August 2015, it can confidently claim that no other newly independent nation has developed as rapidly and as comprehensively as Singapore has in its first 50 years. Several people have challenged this claim of mine. However, when asked to name any other newly independent nation that has done better than Singapore, they could not. In short, for the first 50 years of its development, Singapore can lay claim to be number one in the world.

Allow me to make my second strong statement: if Singapore continues on autopilot and repeats the same goals and policies as it had in its first 50 years, it will be heading towards disaster. Bluntly put, the goals and policies that have worked in the first 50 years will not work for the subsequent 50 years. And why not? The simple answer is that the world has changed. Singapore too, must change. In the first 50 years, Singapore had the first-mover advantage. We were ahead of the rest of the world and our region in adopting policies which propelled us forward. Today, the rest of the world and our region have begun copying our best practices. If we play the same game, we will be left behind. Therefore, we have to start playing new games.

To begin playing new games, we may need to have a new set of aspirations.

Clearly, the first generations of Singaporeans (including mine) wanted to get out of poverty and enjoy the fruits of prosperity. This was the reason for going for the five Cs: cars, condominiums, cash, credit cards and country club memberships. However, if all 5 million residents of Singapore keep pushing for the five Cs, we may well have an island that is uninhabitable.

Let me state at the outset that there is no restriction on the amount of cash or credit cards which Singaporeans can acquire. Here, there are no finite limits. However, given the fact that we are one of the smallest countries in the world, and is, after Monaco, the most densely populated UN member state, it is impossible for Singapore to satisfy the demands of each and every citizen and resident in the areas of cars, condominiums and country clubs. Singapore does not and cannot have the physical space to provide these goods to everyone.

To date, Singapore has designed very good public policies which have raised the prices of these finite goods such as cars to ensure that they remain out of the reach of most Singaporeans. However, while demand has been squeezed by higher prices, there has been no discernible effort to address the underlying factors propelling demand. Even today, no middle-class Singaporean believes that he has 'arrived' until he owns a car, even though a car in

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Singapore is outrageously expensive by global standards. In short, a car remains an essential part of the Singaporean dream. Yet, if every Singaporean achieves his or her dream, we will have a national nightmare on-hand.

To prevent this national nightmare, we have created harsher policies to reduce the demand for cars. Paradoxically, the higher prices of cars have made them even more desirable as status symbols. This is the reason for luxury brands trumping cheap brands in Singapore. If the desirability of cars continue to rise, our efforts to curtail car ownership will be as successful as a dog chasing its tail. Moreover, if we keep alive the Singaporean dream of owning a car and restrict access to that dream, we will inevitably create a disgruntled and frustrated middle class. Indeed, this may be one reason for the rising levels of unhappiness in Singapore. Many Singaporeans feel that their incomes are rising, yet they feel that the Singaporean dream of cars, condominiums and country clubs is receding rather than getting closer. The stark contrast between Singapore and the developed world makes this clearer. In 2010, there were 477 cars for every 1,000 individuals in the European Union (EU), the highest ratio in the world. In contrast in Singapore, there are 117 cars for every 1,000 individuals.

So what then is the solution? The solution is obvious: change the Singaporean dream! Yes, almost every Singaporean reading this article will laugh at this suggestion. How can well-off Singaporeans deprive themselves of owning cars? It provides the most reliable form of transportation as well as a powerful status symbol. The minute one owns a car, especially a Mercedes, BMW or Lexus, friends will know that you have 'arrived'.

I have lived 10 years of my life on another 'even more crowded' tiny island where it is not rational to drive or own a car. In fact, it is considered downright foolish to buy and own a car if one lives in Manhattan. All this hit home one evening in Manhattan when I saw the former chairman of Citibank, Walter Wriston and his wife, Kathryn, standing on First Avenue with their arms raised and attempting to hail a cab. Clearly, Walter Wriston was a very wealthy man. He could have easily bought a car (cars are cheap in Manhattan) and parked it anywhere he liked (even though parking charges in Manhattan are among the highest in the world). Yet, it just did not make sense. The ecosystem of public transport in Manhattan developed into a combination of subway trains, public buses and readily-accessible taxis. This meant that, in a crunch, you could get anywhere within Manhattan easily by taking public transport. Meanwhile, the hassle of driving and high costs of parking in downtown Manhattan meant that owning and using a car made even less sense. Significantly, Mayor Michael

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Bloomberg, one of the richest Americans, used to take a subway train to work in Manhattan. Former Bogota Mayor Enrique Peñalosa put it succinctly, "A developed country is not a place where the poor have cars; it's where the rich use public transportation."

Therefore, the new Singaporean solution is to dream a happier dream. We have to give up this 'insane' dream of wanting to rely on a car and replace it with an ecosystem of a public transport which would make it irrational to own a car. Such an ecosystem will include a reliable and resilient Mass Rapid Transit (MRT) system and a frequent bus service, taxis available especially when it thunders and showers and pools of electric cars ready for rental. This failure to provide such a public transport ecosystem is probably one of Singapore's biggest failures in its first 50 years. We have succeeded in creating the world's best port, the world's best airport and the world's best airline, just to name a few. Hence, we understand the game of logistics and transportation well. Since Singapore is one of the world's most densely-populated countries, we should have been able to apply the same degree of knowledge, skills and expertise so that our public transport system would have developed as Singapore developed.

We could have done it right and did come close to doing so. When I served as Singapore's Ambassador to the United Nations (UN) from 1984 to 1989, my American counterpart was the legendary Ambassador Vernon A. Walters. During his globe spanning travels, his hobby was to investigate the MRT system of every city he visited. He proudly told me that he could confidently declare that the Singapore MRT system was the best in the world. I asked him why and his reply was that it was the only MRT system in the world that had been built ahead of schedule, below cost and operated smoothly.

So the million-dollar question is: What went wrong? Did we choose the wrong people or the wrong policies to build our public transport system? There is no doubt that we can have a vigorous debate in response to this question and we could have many different answers. However, there is no simple and correct answer. Each answer in turn reflects an opinion based on a set of values. So, I would not be surprised if my simple answer is taken as controversial as well.

I personally believe that the fundamental mistake which Singapore made in the area of public transport was to allow ideological considerations to trump pragmatic considerations. We made three critical ideological errors. Firstly, we assumed that companies motivated by profits were more efficient at delivering public goods than governmental bodies. Hence, we privatised the public transport system. We trusted the profit motive more than government efficiency in delivering public goods such as public transport. The second error was to

compound the first by insisting that each limb of the public transport system had to be profitable. The MRT and bus companies had to ultimately make money. Indeed, for a while, each new MRT line had to be viable, so too the taxi companies. Yet, we also pay taxes to pay for good public transport and we collect a huge sum annually from vehicle-related car taxes, fees and charges. Why not use some of it to deliver better public services starting with better public transport? The third ideological error was to assume that Singaporeans would never give up their tradition of 'car worship'. As cars became more costly, we too, paradoxically turned the car into an even bigger status symbol. And in spending more money on roads, tunnels and flyovers to ensure freer flow of traffic, we actually created a transport ecosystem which rewarded driving versus using public transport. Indeed, several urban planners have made the case that traffic will expand and fill any available road space. This is why way back in 1957, the respected American urbanist Lewis Mumford advocated construction on the Interstate Highway System be suspended for two years entirely.

The real solution to Singapore's public transport woes is to challenge some of these basic, underlying assumptions. Let us examine them in reverse order. Firstly, we can change the culture of 'car worship'. Ironically, Singapore has been very good at various forms of social engineering. At the point of Singapore's independence, there was a culture of

corruption. There was also a culture of heavy smoking. It would be fair to say that Singapore has reduced both corruption and heavy smoking. In the 1970s, 26 percent of Singaporeans were smokers. From then, it declined to 22 percent in 1983, 18.3 percent in 1992 and 14.3 percent in 2010. The point we have learned from behavioural economics is that it is possible to change human behaviour by shaping social norms in desired directions. Having succeeded in other areas, could we not make a conscious decision to change the culture and cult of 'car worship' in Singapore?

However, to succeed in persuading Singaporeans to reduce their dependence on cars, we must in turn deliver a public transport system that is among the best in the world. Today, with the availability of big data, we can find out where people want to go at different points in time. Instead of mechanically creating bus routes which only ply certain set routes at certain fixed times of the day, we can anticipate demand and deliver public transport that responds acutely to micro-level demand data. Of course, this means that not every 'limb' of the public transport system will be profitable. Instead of looking at the 'profitability' of each 'limb', we should conduct an overall examination of our public transport system and ask ourselves a simple question: Is the system as a whole delivering the public good it is designed to? And can we use a combination of fee collection and car

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taxes to pay for the public transport system? If we are able to, then we will have gotten rid of one of the main local sources of public dissatisfaction locally.

Finally, we have to get rid of a final set of ideological blinkers to solve our public transport problem. This means that we have to stop 'worshipping' the private sector and to stop believing that the private sector can do a better job than the public sector in delivering public goods. In this area, we need to develop a higher degree of intellectual honesty. We should be honest and admit that like the rest of the world we were misled by the Reagan-Thatcher ideological revolution and we believed that the private sector is inherently better than the public sector in delivering all kinds of goods, including public goods. One of the great strengths of the 'Singaporean approach' to problem-solving was that we claimed to be rational and pragmatic. Yet, as a result of becoming prisoners of the Reagan-Thatcher ideology, we made deeply flawed decisions that inevitably damaged our delivery of public services.

Let me offer a striking example that has been mentioned by several retired permanent secretaries. They have said that it was a mistake to privatise the Public Works Department (PWD). This Department contained a lot of valuable knowledge, skills and experience which could have helped Singapore with a lot of its engineering and development challenges. Sadly, when PWD was sold off

first to Temasek Holdings and then to an Australian company Downer Edi, and subsequently to China Architecture Design and Research Group, Singapore lost all the skills and experience we had built up over the years.

To the best of my knowledge, we have never publicly admitted that we made a mistake in selling off the PWD. The time has come to do so now. The goal of such an admission is not to assign blame to any public officers: it would be pointless to do so. Instead, such an admission could liberate our minds from the ideological assumptions of the Reagan-Thatcher revolution and open our minds to the possibility that sometimes the public sector is best at providing public goods.

Once we accept that premise, we would have laid the critical intellectual foundation on which an excellent ecosystem of public transport can be built. We can begin to collect big data on the potential demand for all the 'limbs' and 'arteries' of such an ecosystem. We can then systematically build a total system that at least tries to meet every aspect of this demand. Clearly, some of the 'limbs' will be economically profitable. Other 'limbs' will be less profitable or even unprofitable. It may however still be necessary to have these unprofitable 'limbs'. And the reason? Because we are providing a public service, not a private good.

To understand this critical notion of a

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public service, think of our postal service. We buy 26-cent stamps to post a letter to anywhere within Singapore. It is profitable for the post office to deliver mail to Housing Development Board (HDB) estates because the mailboxes are situated close together making delivery easy. It is unprofitable or less profitable to deliver letters to Good Class Bungalow (GCB) areas because the mailboxes are far apart. It costs the post office much more to deliver mail to private housing areas than to HDB estates. However, it delivers equally everywhere. Why is this so? Because mail service is a public service.

Similarly, like the postal service, public transport should be perceived as a public service. We should endeavour to provide it to all the citizens and residents of the island, even if some parts of the system may experience less cost recovery than others. Here, we should take full advantage of the fact that we are one of the smallest countries in the world with no vast distances to cover. Indeed, if any leading experts on public transport in the world were looking for an ideal public policy laboratory to try out best practices and new ideas with public transport, they could find no better site than Singapore. Here all the critical factors are in place to build the world's best ecosystem of public transport.

Thus, when we do so, the rational and pragmatic Singaporeans will progressively give up their dreams of owning cars. It was perfectly reasonable for my generation of Singaporeans to aspire for the materialistic five Cs. Many of us grew up in poverty and believed that happiness only came with more and more material acquisitions.

Now we know better. As most Singaporeans have satisfied their basic material needs, and more, there is less and less of a need to accumulate material goods. Indeed, according to Maslow's hierarchy of needs, we will get more satisfaction and happiness as we pay more attention to the higher order needs of love or belonging, esteem and self-actualisation.

We are truly blessed that, for the most part, the basic physical and intellectual infrastructure is in place in Singapore to enable most Singaporeans to lead a good life. Indeed, we should all continue working hard but what are we working for? We can work toward a future when the former five Cs become less and less important. We can begin by dropping the dream of the idea that having cars will produce happiness.

Green Conversations

500 Shades of Green

Geh Min

Dr Geh Min (MBBS, FRCS, FAMS) is currently a board member of BirdLife International (Asia) and a council member of The Nature Conservancy's Asia Pacific Council. She is also a board member of The Climate Change Network (CCN) and a board member of the M.Sc. (Environmental Management) (MEM) Program Advisory Committee, NUS. She was President of the Nature Society (Singapore) from 2000 to August 2008 and was sworn in as a Nominated Member of Parliament serving her term from 2005 to 2006. She has also received the 2006 President's Award for the Environment.

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Singapore's Garden City, conceived by the island-state's first Prime Minister Lee Kuan Yew, may not be original but was certainly remarkable, and even unique, for its time and place. That a tiny nascent developing island City-state, suddenly stripped of its hinterland and whose survival was questionable, could see cleaning and greening as complementary to economic development was visionary. Equally remarkable was the thoroughness of its top-down planning and execution.

There was never any question that a clean and green Singapore was a pragmatic investment strategy "good for morale, for tourists and for investors" (Lee Kuan Yew) and would be a dramatic, visible manifestation of Singapore's inspiring rise from Third World to First.

The National Parks Board (NParks) is the government body entrusted with transforming this green vision into reality. Originally the Parks and Recreation Division,[1] it took on a new but important conservation role with its change of name and the introduction of the National Parks Act (1996). Since then the number of gazetted nature reserves has grown from one to four.[2]

Though its achievements are impressive, NParks is hampered by inadequate legislation, notably the lack of Environmental Impact Assessments (EIAs). Not only has this handicapped NParks in developing a more comprehensive and robust protection of our remaining natural heritage but it has pushed it into rearguard action in defending existing nature areas from incursions by other government agencies. Examples of unsustainable or paradoxical greening resulting from the lack of EIAs include the severing of Bukit Timah Nature Reserve, our remnant of primary forest, from the Central Catchment Area by an expressway, thus, compromising its long-term viability. Many also question the rationale for the disproportionate number of golf courses[3] in land-scarce Singapore many abutting or even within nature area and reserves

NParks' restricted ambit in coastal conservation and the lack of any legal teeth in marine areas has resulted in no Marine Protected Areas (MPAs) despite our rich marine biodiversity while land reclamation at the iconic Tanjong Chek Jawa was reversed due to strong public, non-governmental organisation (NGO) and media action with NParks playing a back seat 'advisory' role.

Realising its limited 'hard' power and the unsustainability of a top-down

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[1] When its main role was providing parks and planting and maintaining roadside trees.
[2] Several reserves were degazetted between Independence and NParks inception.
[3] Twenty-three 18-hole and 15 nine-hole courses.

approach, NParks has since been farsighted and effective in cultivating public support with a diverse array of outreach and education programmes. It also has strong working relationships of collaboration, complementarism and trust with local environmental NGOs such as the Nature Society (Singapore).

This enhancement of soft power has not only resulted in the physical greening of Singapore, but also a significant growth in the 'green community'.

NParks' sister organisation, Public Utilities Board (PUB), has followed suit and successfully launched their ABC Waters programme to develop and promote community ownership of our inland waterways and water bodies, critical for the supply and quality of our drinking water.

Unfortunately, National Environment Agency (NEA), responsible for urban cleaning has been less successful despite numerous valiant efforts. It would appear that nature areas inspire a greater sense of communal ownership than urban ones. Perhaps NEA could achieve more by closing the gap between clean and green and promoting a deeper understanding of ecological principles. Their Singapore Green Plan, despite its name, is noticeably focused on 'brown' issues and narrow efficiency targets rather than broader sustainability goals.

Future Green Challenges

Local

The greatest internal challenge to Singapore's greening and nature is demographic. The 2013 Population White Paper projected a population of 6.8 to 7 million by 2030 — a 25 percent growth in 15 years for what is already one of the densest cities in the world. A former chief planner had even stated publicly that doubling our population to 10 million is 'doable'.

'A Quality Living Environment'[4] covers amenities such as transportation and includes accessibility to parks but there is no mention of nature areas. There is also no evidence of analytical rigour in accessing social or environmental carrying capacity in these ambitious, economically-driven urban planning projections — hence, the demographic impact on Singapore's greenery is likely to be a '3-P' Assault.

Public Sector

Due to intense competition for land between different government agencies the degradation, erosion and destruction of nature areas will certainly intensify with a growing population and agencies under pressure to acheive differing Key Performance Indicators who seem to regard nature areas and even nature

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[4] Chapter 5- Population White Paper: A Sustainable Population for a Dynamic Singapore.

reserves as spare land "to be kept as long as is practical." While there is a growing awareness of our natural heritage by younger policy makers, the importance of ecosystem services will not be fully appreciated without mandatory Environmental Impact Assessments (EIAs).

People Sector

The growing popularity of parks and nature amongst Singaporeans is evident and a recent survey actually showed that a majority (60 percent) wanted more greenery and less development.

However, unless our penchant for nature comes with a deeper understanding of human effects on the health of fragile ecosystems and a sense of responsibility to protect our nature areas, they are likely to be overwhelmed by a populace accustomed to a culture of consumption rather than conservation.

NParks is faced with a dilemma as the number of visitors rather than biodiversity, was the yardstick by which its performance is gauged by policy makers. Universal education on the important differences in value between 'man-made' green and natural ecosystems is essential. However, here too, NParks is faced with a Hobson's choice as the best education involves more exposure to nature areas and these are already overrun by competing public sectors and threatened by degradation from excessive human impact.

Private Sector

Not surprisingly, the scarcity of land, the popularity of nature and the pragmatic approach of policy makers have already resulted in increasing 'commodification' of nature.

Private condominiums hug the boundary of our only primary forest and more are planned — built without EIAs or consultations with NParks. It appears that 'nature at your doorstep' for a privileged few will result in less nature for the public.

Sentosa Island, originally touted as Singapore's playground, is now a playground for the global rich and famous with private condominiums and gated communities, casinos, hotels, marinas and golf clubs.

Spatial injustice whether real or perceived, can ignite smouldering resentments between the haves and have-nots as many recent examples globally have shown.

Regional and Global Environmental Challenges

But, daunting though our internal challenges are, they pale in comparison to external threats to our clean and green environment and future sustainability.

Haze Pollution

The 'Haze' is aptly named for an issue shrouded in smokescreens, layers of obfuscation and general lack of transparency. Initially blamed on 'natural' forest fires[5] the smoke pollution from neighboring countries actually coincided with the massive land clearing and deforestation by multinational corporations (MNCs) involved in logging, pulp and paper production, and palm oil planting. Global output of crude palm oil has been growing rapidly and the two largest producers, Indonesia and Malaysia, doubled the area for oil palm plantations between 1995 to 2005 alone to 10 million hectares. The forest and their biodiversity were victims, not culprits.

When the link was finally made, rounds of bilateral and regional talks and task forces were organised culminating in the milestone *Transboundary Haze Pollution Agreement* by ASEAN which Indonesia, the lynchpin has yet to sign after 10 years. Instead various Indonesian ministers have defended its 'right to develop' and even suggested that Singapore should 'pay Indonesia for keeping her forests,' if she wished to continue enjoying clean air.

The 'Haze' is a man-made problem driven by the profit motive. It is a classic illustration of how market fundamentalism ignores social and environmental 'externalities' resulting in massive costs and serious consequences to the economy,[6] society and the environment.

A recent, notable trend is the outburst of criticism and complaints in social media by a Singapore public accustomed to clean air directed at their government for 'not doing more.' It should be evident that there is very little Singapore can do as a government or even as a nation (despite our being the highest per capita consumer of paper and oil palm products in the region), unless the fundamental cause - market failure - is addressed and social and environmental costs factored into the equation

Climate Change

A truly global problem in cause, distribution and effect and in requiring global solutions and cooperation on an unprecedented scale, climate change is the ultimate complex environmental challenge that not only exacerbates all other environmental challenges but seriously impacts global health, trade, security and the economy and society in ways we are still grappling to comprehend. Its complexity is compounded by unpredictable timelines

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[5] Tropical forests do not naturally combust and spread like bush fires in drier countries.
[6] Estimated loss in 1997 for Singapore with health, tourism & airlines industries alone was S$97.5 to 110.5 million.

where the window of opportunity for effective action is small but the time lag between action and result is long.

How will Singapore face this challenge?

Policy makers, while not unaware of the problem, seemed to put it on the back burner, at least publicly, until it appeared on the world economic stage. After that it was no longer credible for Singapore's reputation to underplay the issue or suppress our vulnerabilities as a small densely populated tropical island to the potential effects of rising temperatures and sea levels.

Our financial centre, petrochemical hub and important key industries, international airport, and many of our reservoirs and other essential amenities are set on coastal and/or on reclaimed land. The uncertain science of predicting rises in sea level may mean anything from expensive adaptation measures such as building sea walls and dikes or a catastrophic environmental disaster.

Singapore as a global city is also highly vulnerable to effects of climate change globally from resource scarcity or pandemics to the opening of arctic trade routes.

Suggested Areas for Improvement

While prescriptive solutions for these challenges are beyond this article's ambit, some suggestions for enhancing

Singapore's resilience & sustainability are proposed.

1) Green Accounting

Singapore places considerable emphasis on numerical assessments such as rankings, performance indicators, et cetera, not merely to indicate our competitiveness but as a guide to track progress and indicate areas for improvement.

However, while we have consistently 'punched above our weight' on global economic competitiveness ratings, our performance in environmental rankings have been generally disappointing despite our clean and green image. Our response to these unfavourable rankings was to dismiss them as 'irrelevant' or 'unrepresentative' until the World Economic Forum (WEF) published an Environmental Sustainability Index (ESI) in which we were near the bottom. This prompted our Minister for Environment and Water Resources to register a formal objection and detailed explanation.

It is perhaps no surprise that although our economic competitiveness performance indicators compare us to other *countries*, our environmental indices are increasingly being compared with other *cities*, tacitly acknowledging our economic competitiveness but not our ecological sustainability.

While this may be a realistic

representation of our strengths and weaknesses as a 'City-state without a hinterland', it is not an honest appraisal of the fact that other cities have a hinterland and that Singapore, despite land constraints and the ingenious use of regional and even global hinterlands, cannot ignore the necessity for planning and locating key amenities such as our international airport and our water catchment areas within our own boundaries.

While environmental sustainability rankings may be 'like comparing apples with oranges', their components provide valuable data and information which would be dangerous for us to marginalise, alter or ignore. We have already seen how the lack of EIAs has compromised our environmental planning in areas such as flood control and climate change adaptation.

Beyond depriving ourselves of critical information, we are also failing to develop the capacity to collect, analyse and interpret this information. Importing this expertise is not a viable alternative as much of it is highly location-specific. For the same reason, sending Singaporeans abroad to learn may only work in a limited context and the real lessons have to be learnt at home instead.

More regional and international disputes will also be about environmental issues and it is important for us to have the wherewithal to represent ourselves and defend our rights in these areas.

In an increasingly complex and chaotic world filled with environmental challenges, all information is important, especially those that highlight our weaknesses. We have achieved economic success through objective appraisal, honest evaluation and analytical rigour in order to formulate the correct policies. Our precarious dependency on water has also been met with the same approach and determination to overcome the odds. We need to extend, broaden and apply this approach to environmental sustainability.

2) Learning from Mother Nature

Biodata may provide the essential stepping-stones or alphabet to meet future environmental challenges but we also need insight and expertise to 'join the dots' or read the text.

The extreme complexity of life sciences and biodiversity has made deciphering, formulating, comprehending and quantifying them far more challenging than the 'hard' or mathematical sciences; However, the inability to read the language is not a reason to destroy the literature. Innumerable scientists, polymaths and thought leaders from Sir Francis Bacon to Richard Feynman and from Leonardo to da Vinci to Nassim Taleb, have emphasised the importance of respecting and 'learning from Mother Nature, the oldest and wisest'.

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Despite or perhaps even because of our Garden City, many Singaporeans including policy makers have an inverted, limited and overly utilitarian concept of our natural environment.

"Nature in its original and authentic form and in its claim to space appears to have little place in the physical development of the City-state. Nature where it can be managed and located to fit into overall land use development schemes seems much preferred…"(Oei). This excessively narrow anthropocentric perspective is also mirrored in our promotion of 'life sciences' till recently.

Understandably, Singapore size, constraints and limited resources require us to carefully select and focus on areas in which to excel but this should not result in a corresponding shrinkage of our knowledge base. This tunnel vision has already restricted our ability to formulate sustainable environment policies and it will be a serious handicap in an even more challenging future.

Many of the advantages of developing an 'Ecological Quotient' such as intellectual curiosity, innovative thinking and emotional resilience are difficult to prove and almost impossible to quantify. But "ecological" thinking translated to biomimicry, green technology, nature-based solutions and the optimization of ecosystem services are rapidly growing fields of endeavor and while putting a monetary figure to them is often easier

after the damage is done (e.g. the haze, floods, oils spills and other man-made environmental disasters), there are inspiring examples of the ecosystem approach to sustainability incorporating the preventive principle. Two iconic ideas that involve water management are: 1) New York City's investment of $1 billion in purchasing and improving watershed forests and soil around its reservoirs. By reducing pollution and conserving water, these forests enhanced both the quantity and quality of New York's water and also avoided a $60 billion purchase of a state-of-the-art filtration plant (excluding running costs). 2) Dutch engineers employing not just expensive pumps but also planting trees (whose roots can take in 80 gallons a day each) to maintain drainage and reduce flooding in reclaimed land in Holland.

Singapore should not neglect the forest-water nexus when trying to solve our flooding issues rather than focusing on massive and expensive engineering works involving a high underground water-holding area that will "take at least 10 years to show results" (NEA).

Green Global Positioning

Singapore's performance abroad has been as stellar as that at home and 'a new state without a hinterland has succeeded in making a hinterland of the global economy with conspicuous success' (Leifer). Notwithstanding this, Singapore's leaders are constantly

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mindful of the City-state's vulnerabilities and vigilant in identifying potential threats to its survival.

They have assiduously constructed a strong web of multilateral diplomatic, economic, trade, security and institutional relationships both as a network for advancement and as a safety net.

Singapore upholds the rule of law and supports good global governance as a credible, responsible and proactive global citizen (while maintaining its sovereign rights). Above all, the nation strives to remain connected, useful and relevant to the global community.

However, in the face of looming global environmental challenges, weak areas and gaps have appeared and while creating a global hinterland for economic growth has paid rich dividends, they now expose the City-state to greater environmental vulnerabilities which may undermine its economic success.

Singapore's green global presence has not been negligible though less spectacular than her economic success. The City-state has actively participated in international environmental conferences such as the Earth Summit where it played a prominent role. It has also donated generously to disaster relief in both funds and manpower. It has also not been slow in in exporting its clean and green image, urban

'Garden City' planning and more recently, its successful water technology.

However, critics of Singapore's green model point to the unsustainability of its consumption patterns, the size of its per capita ecological footprint (5.3 earths) and its carbon-intensive growth. Its predilection for expensive technological solutions rather than conservation and a stronger 3R culture, its preference for 'weak' rather than 'deep' green solutions, its lack of mandatory EIAs despite being a signatory of Convention on International Trade in Endangered Species (CITES) and, perhaps most disturbingly, a growing tendency to defend promote and market the Singapore model rather than learn from others' best practices.

The Sino-Singapore Tianjin Eco-City project, promoted as 'China's national green development zone' and modelled on Singapore's policies and expertise, has reportedly found the Chinese setting more stringent standards and broader targets than Singapore had to offer.

Singapore needs to develop greater ecological rigour and a more sustainable environmental perspective to its greening both at home and abroad in order to remain relevant and credible. Otherwise, in today's world of flux, the kaleidoscope may suddenly shift and our international standing may change from one of economic high-flyer to environmental freeloaders.

Conclusion

Singapore's policy makers have always prided themselves on seeing the big picture and taking a long term view but the lens they have used is primarily economic and even our greening has been narrowly utilitarian & equally short-sighted in focus.

In a future of complex environmental challenges, many of them global, it is critical that we do not view the economy and the environment as a balancing act or even a triple bottomline.

The Big Picture is the natural environment which encompasses and provides the life-support system for people and the economy. Failure to see this was possible in the past when the pressure was smaller but the exponential growth of both is increasingly pushing our environmental envelope.

It is essential we see the world through an ecological lens and make policies accordingly if we wish to ensure our future sustainability.

Green Conversations

Singapore: The New Serengeti?

Bernard Harrison

Mr Bernard Harrison is the Principal Partner of Creativity & Design firm, Bernard Harrison and Friends, and former CEO of Wildlife Reserves Singapore.

Singapore: The New Serengeti

We have a dearth of nature-based attractions in Singapore and many of them are gated.

We are one of the smallest countries in the world (even though there are actually 42 countries smaller than Singapore); we have no unique indigenous species of fauna or flora nor do we have a minuscule hinterland of national parks — yet we tout nature-based attractions as one of our tourist attraction fortes.

Why so brash? And is it sustainable?

What we have in Singapore

We do a fairly good job of covering the fauna and flora of tropical rainforest, rivers, wetlands, mangrove forest, shorelines, seagrass beds and coral reefs in our attractions.

On the fauna side, our jewel in the crown is surely Wildlife Reserves Singapore (WRS) which operates the four great nature parks: Singapore Zoo, Night Safari, Jurong Bird Park and the recently-opened River Safari (developed at a stiff price tag of S$160 million). WRS offers the locals (for a pretty steep admission fee now) a fairly broad cross-section of the Animal Kingdom — at least on land and in freshwater.

The newly-opened Marine Life Park at Resorts World, Sentosa offers us a cross-section of the ocean. (The capital cost of the aquarium has not been revealed publically, but it is speculated that it cost the Genting Group about S$250 million to develop). It is currently the world's largest aquarium (we love having the 'world's largest' prefix in Singapore) containing 45 million litres of water, well ahead of the next largest, Georgia Aquarium in Atlanta, USA, which displays aquatic life in 24 million litres of water. However, Marine Life Park has now been surpassed by Ocean Kingdom, next to Macau which contains 48.75 million litres.

Sentosa also has the still operating but now struggling, Underwater World (owned by Haw Par Corporation), and the privately owned Butterfly Park and Insect Kingdom, a fairly small and unexciting attraction.

The National Parks Board (NParks) manages the flora and indigenous wildlife in Singapore. On the plant side the newly-opened Gardens by the Bay, has a hefty admission price compared to its sister attraction, the Singapore Botanic Gardens which is free of charge (save the entry fee into The National Orchid Garden). The official development cost of Gardens by the Bay is S$1.1 billion, but rumour within the industry has it that the more realistic figure is S$1.6 billion if not S$2 billion — we may never know! The Hort Park, also run by NParks is free of charge for entry, offering a butterfly garden and a really interesting suspension bridge.

Singapore: The New Serengeti

There are four gazetted national parks in Singapore. The Central Catchment Nature Reserve is the largest occupying 2,880 hectares and offers trails and boardwalks in Lower Peirce and at MacRitchie's secondary forest water catchment. It also contains Treetops Walks on a great suspension bridge. The oldest and most established national park is the 164-hectare Bukit Timah Nature Reserve with trails weaving through the primary rainforest. The two other parks are the 130-hectare Sungei Buloh Wetland Reserve which offers trails and boardwalks in wetlands and mangroves for a small entry fee and the 10-hectare shoreline Labrador Nature Reserve. There are also boardwalks in the mangrove forests at Pasir Ris and along the coastal shore at Changi.

In addition, we have the islands, the most accessible being Sentosa which has some areas of coral reefs, the rural Pulau Ubin with its marine park, Chek Jawa, with no charge other than getting there, offering an area for mangrove, sandy and rocky shore and seagrass. There are also the Southern Islands with their coral reefs.

So for a small country, we offer a real cross-section of nature through our well-managed attractions and parks. Although we have only 31.84 square kilometres (3,184 hectares) of national parks in Singapore, compared to the 14,763 square kilometres Serengeti National Park in Tanzania or the 19,485 square kilometres Kruger National Park in South Africa, in relationship to our land area of 710 square kilometres, we have 4.48 percent under National Parks compared to Tanzania's 4.4 percent and South Africa's 3 percent.

History of our Nature Based Attractions

We have had a long and colourful history of nature-based attractions in Singapore.

The first Botanic Garden, initiated by Sir Stamford Raffles, was 26 hectares of land and located on the slopes of the Government Hill (Fort Canning Hill). Its purpose then was the experimental cultivation of plants, such as nutmeg and clove, to evaluate their economic value and suitability as cash crops. However, it proved to be too expensive to upkeep and was abandoned in 1829.

The present Botanic Gardens, located in Tanglin, was setup by the Agri-Horticultural Society in 1859 on 23 hectares of land acquired from Hoo Ah Kay (Whampoa), an influential businessman. The Gardens expanded with the acquisition of the additional surrounding land.

The role of the Gardens then was mostly recreational. Growing financial difficulties finally forced the management of the Botanic Gardens to be handed over to the Colonial Government In 1874.

Menageries were being established through the influence of Europe on its

Singapore: The New Serengeti

colonies in Jakarta (1864), Bombay (1866) and subsequently, in the Singapore Botanic Gardens (1876). However, due to increasing maintenance costs the menagerie (which actually displayed a Sumatran rhinoceros for a while) eventually closed in the early 1900s.

There were some small animal collections opened to the public by private individuals and animals dealers in Singapore in the early and mid-twentieth century, the most well-known being the Punggol Zoo owned by a wealthy Indian trader, William Lawrence Soma Basapa, between the 1920s and 1940s. There have also been several crocodile farms open to the public since.

The establishment of the Van Kleef Aquarium is historically interesting. In 1928, Karl Willem Benjamin Van Kleef, a rich Dutch trader based in Singapore, in his will appointed the Municipality of Singapore (Straits Settlements) *"to use its net proceeds for the embellishment of the town and other ends whatsoever, but on no account on behalf of churches and other institutions connected with worship in general!"**

It took the Municipality until 1935 to agree on using the funds to develop an aquarium, which was eventually opened in 1955. Talk about a long incubation period! It was eventually demolished in 1998 due to structural issues.

The 20-hectare Jurong Bird Park, opened in 1971 at a cost of S$3.5 million, was conceived by the late Dr Goh Keng Swee, the then Minister for Finance. In 1968, during a World Bank meeting in Rio de Janeiro, Dr Goh visited its zoological garden and was impressed with its free-flight aviary and decided to establish a bird park in the industrial estate of Jurong in Singapore, to give some biophilia relief to the dwellers there. The Bird Park was designed on paper by London Zoo's then architect, John Toovey, with little reference to the site itself and suffered the consequences for many decades, due to the uniform and boring jelly-mould aviaries that were developed. Through the efforts of the second Chairman, Dr Kwa Soon Bee, the Jurong Bird Park was revitalised and upgraded into what it is today – the best bird park in the world.

The 28 hectare Singapore Zoological Gardens was conceived by the Chairman of Public Utilities Board (PUB), Dr Ong Swee Law in 1969, who after visiting many zoos around the world with a particular Boy Scout Jamboree in Sydney where he visited the Taronga Zoo left lasting impressions), set aside 100 hectares of land around the Upper Seletar Reservoir for the development of the zoo.

*Source: Van Kleef's Will, cited by Prof Tommy Koh in his article The Man Who Loved Singapore: Singapore-More Than Meets the Eye, SIF Publication, January, 2014, http://singaporemagazine.sif.org.sg/the-man-who-loved-singapore/

Singapore: The New Serengeti

Dr Ong felt that more of our beautiful and tranquil catchment area should be opened for the recreation of the public. In 1970, consultants and staff were hired, and in 1971, the construction of the basic 50 enclosures started at a cost of S$9 million, of which S$5 million was equity and the balance, a repayable Government loan. The Zoo started off life in debt much to Dr Ong's great concern and subsequent worry.

The Director of the Colombo Zoo in Sri Lanka, Lyn de Alwis, was hired as a special consultant, because of his experience in the development of tropical zoos. Lyn did a far better job than Toovey's effort at design and the Singapore Zoological Gardens opened in 1973. Together with local architect Edwin Chan (whose daughter May Chan worked on the design of the Night Safari), they laid the groundwork for what is acclaimed today as one of the most beautiful zoos in the world.

Dr Goh and Dr Ong were visionaries, setting up these nature-based attractions for the recreation of the Singapore public, giving some relief to the heavy concrete living of the City- state that was being created around us.

The Night Safari was conceived in 1988 by Lyn de Alwis, after an exhaustive review of possible ways to utilise the balance of about 40 hectares of land that we had at the Upper Seletar site. The review was triggered by a phone call I received as the Executive Director of the Singapore Zoological Gardens, from our landlords, the Public Utilities Board (PUB), who wanted to know what we were going to do with this unutilised land. Dr Ong and I were concerned that the PUB wanted to take back the land. Hence, we met various Captains of Industry for a series of lunches and generated an array of potential ideas. However, it was Lyn, who suggested a large wildlife attraction, based on an experience he had previously with the Tiger Tops in Chitwan National Park, Nepal. Seeing tropical mammals (especially a tiger on a kill) at night when they are active is something worth replicating, he put forth.

'Had it been done before?' was Dr Ong's first retort?

'No', said Lyn.

'Then lets do it!' said Dr Ong.

One may not realise it but Dr Ong's spontaneous reaction goes totally against the grain of a Singaporean public servant. It was instead the reaction of a true entrepreneur.

So from that moment, my life (and the lives of many wonderful staff that I have had the great fortune to work with) commenced to revolve around the conceptualisation, master planning, development and funding of the Night Safari. Nothing like it had ever been done before in the world. It was totally unique

and that too was the challenge. I was also to learn through bitter experience over the next few years that 'unique and never been done before' are not terms in the vocabulary of Singaporean bureaucrats and concepts which they are certainly not comfortable with.

In the USA, if you go to a venture capitalist and tell him that you have a unique project which has never been done before, he will prick up his ears. Richard Branson certainly would! However, in Singapore, if it is not tried and tested like Changi Airport which is based on Amsterdam's Schiphol Airport and the Mass Rapid Transit (MRT) is based on Hong Kong's Mass Transit Railway (MTR), then it is too risky. Where is the benchmarking and where are the best practices? We are not a nation of risk takers and that is obvious.

It took the Cabinet three years to make a decision to fund the $56 million for the development of the Night Safari and when they finally approved the project, the capital cost had escalated through inflation to S$72 million. Ministry of Finance eventually gave us S$65 million through a variety of equity grants from quasi Government bodies. However, all said and done, we got the money and went ahead with the project. It was opened to the public by the then Prime Minister Goh Chok Tong in 1994. It has proven its worth and is still one of Singapore's premier tourist attractions.

Is it all financially sustainable?

When I looked at the official price tag of S$1.1 billion for Gardens by the Bay, I started to wonder. I am no botanist nor designer of botanical gardens but the international competition that the designers won for the design falls far short of what may be considered a serious botanical gardens. Yes, it's an iconic architectural piece, which is most probably what Grant Associates and Gustafson Porter, the designers, won the competition for and probably was exactly what the Singapore planners had wanted. Super trees — are they serious? Really expensively-designed conservatories (or biodomes) can be designed for much lower cost. However, they are iconic for Singapore and the Marina Bay skyline — no doubt, the Cabinet bought it hook, line and sinker!

The inspiration for Gardens by the Bay came from the Eden Project, developed as a private millennium project in the United Kingdom (UK) by Sir Tim Smit, an archaeologist cum anthropologist turned musician. Eden cost £132 million (S$265 million). Yet, the Eden Project had a depth and breath of design and content which Gardens by the Bay can only begin to mimic, both as a botanical gardens and as an exposition of a sustainable lifestyle. Although the Eden Project is located in the middle of nowhere, in Cornwall accessible only by car, it receives 1.6 million visitors annually. That's pretty good going for a botanical gardens.

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I say this not so much because I am particularly sore that it took Cabinet three years to ruminate on the Night Safari project's paltry (in comparison to Gardens by the Bay) S$56 million price tag; Apparently they debated intently whether Singaporeans would leave the comfort of their homes and television sets to visit a zoo in the night in the far reaches of Mandai. Rather, I say it because I wonder if we have lost our sense of proportion of capital investment and subsequent operational cost of Gardens by the Bay.

Wildlife Reserves Singapore (WRS) is a financially self-sustaining institution with an annual net profit (after tax) of between S$15 million to S$20 million. The River Safari is the pet project of former Chairman Robert Kwan who left WRS in 2007. Coming from the commercial sector as former Chairman of MacDonald's Singapore, he had no qualm about borrowing a fair chunk of money. (I heard that an estimated S$50 million was actually a bank loan while the balance of S$110 million was in the form of grants and soft loans). I am pretty sure the previous Chairmen, both Dr Ong Swee Law and Dr Kwa Soon Bee, would have been scared stiff to placed WRS in such a debt-servicing situation. Time will tell whether the newly-added River Safari will increase the profitability of the Group or whether it will actually cannibalise on some of the present 3.8 million visitors to the three older parks — certainly a

challenge inherited by the current chairperson, Miss Claire Chiang.

Like Universal Studios, Marine Life Park is a supporting attraction for the Casino at Resorts World Sentosa and obviously cross-subsidised, when or if necessary.

However aquariums do go into receivership which was precisely what happened recently with the US$93 million Colorado's Ocean Journey in Denver, USA which opened in 1999 and filed for bankruptcy in 2002 with a US$62.5 million debt. It was eventually purchased by Landry's Restaurants for US$13.6 million and was renamed Downtown Aquarium, refitted with restaurants and other food and beverage (F&B) outlets. It was re-opened in 2005.

It will thus be interesting to see how Gardens by the Bay manages financially. It is operated by NParks, hardly a business-savvy organization, even with businesswoman Mrs Christina Ong as the chairperson. Even though I am sure that the initial capital investment is in the form of a grant, the depreciation costs on the S$1.1 billion structures will be a sizable sum for them to generate each and every year. The published anticipated, annual operating cost is $58 million, of which $28 million is for the operation of the conservatory buildings.

Will Gardens by the Bay be totally supported by the Government or will market forces be allowed to take effect?

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One cannot help but think of the predicament of the privately owned and operated Singapore Flyer, the largest single investment within the Singapore entertainment industry, which cost S$240 million to develop, opened in 2008 and went into receivership in May 2013.

Of course, many attractions are targeted primarily at the 16 million strong tourist population, of which probably 50 percent do not see the light of day, going straight from the airport to the casino, a quick sleep in the hotel room, and returning to the airport.

Out of the financial reach of Singaporeans

Can the average Singaporean enjoy and gain from all these attractions, whether recreationally, educationally or environmentally?

Is it not time that we consider making some of these gated nature-based attractions more financially accessible to the average Singaporean? Many developing countries have a duel pricing system for locals and tourists. WRS offers a 20 percent discounts for visitors (targeted at Singaporeans and PRs) to the Zoo and Bird Park who pay with DBS/POSB, UOB or OCBC credit cards. Night Safari has a 10 percent discount and River Safari a 5 percent discount.

The entry fee to the Singapore Zoological Gardens is S$28 for an adult, S$18 for a child and S$11 for a senior citizen. Entry to the Night Safari is S$39 for an adult, S$25 for a child. A Friend of the Zoo pass for a family of four is S$199.50.

Gardens by the Bay has cheaper pricing for locals at S$20 for adults, S$15 for children and $12 for senior citizens (tourists charges are a staggering S$28, S$15 and S$28 respectively) to visit both conservatories. The OCBC Skyway within Gardens by the Bay is an additional S$5 for adults and S$3 for children.

It is all still very expensive.

I am thus heartened to know that the Singapore Botanic Gardens is still free entry as with many other national parks and wild places. However, realistically-speaking, how many middle-income Singaporean families can afford the admission charges to most of these gated attractions on a regular basis? A trip to the Singapore Zoo for a family of two adults and two children, including the 20 percent discount, amounts to S$73.60 before you have a drink or something to eat, which is also expensive. One has the option of a family pass to the Zoo at $199.50, which is value for money for regular middle-class visitors, but people from the lower income group will not want to put out that kind of money on visiting an attraction.

The environmental conservation

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education that Singaporeans should be receiving through many of our attractions is lost because they are financially out of their reach. I sincerely believe that it is time we ensure that our local families have the realistic possibility of spending quality time to benefit socially, educationally and environmentally, from our gated nature-based attractions. This means simply making them more affordable for the lower income groups through various dual pricing schemes and specially discounts targeted at specific segments of the market.

Foreign Relations

Unwise for Singapore and Malaysia to have Bad Ties in the Future

Ooi Kee Beng

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Unwise for Singapore and Malaysia to have Bad Ties in the Future

If one does not go back too far, one could divide relations between Singapore and Malaysia into the Mahathir period and the Post-Mahathir period. Malaysia's long-term Prime Minister Tun Dr Mahathir Mohamed retired on 30 October 2003, after 22 years at the helm. Those years did witness quite a bit of tension between the two countries.

To be fair, bad bilateral relations were already there before him. Even before Tun Dr Mahathir took over the country's top post, things had been troublesome between the two countries. Even Singapore's founding father, Mr Lee Kuan Yew mentioned in his book From Third World to First: The Singapore Story (p.289) that more was achieved in bilateral relations during the Mahathir era than under the three prime ministers before that. That says a lot about how difficult ties between the two have been.

Be that as it may, in the decade following Tun Dr Mahathir's retirement, Malaysia has had two new prime ministers — Tun Abdullah Badawi (2003 to 2009) and Datuk Seri Najib Tun Razak (2009 to present)—during whose tenures bilateral ties have been encouragingly warm. This apparent shift in foreign relations is all the more interesting as compared to how Tun Dr Mahathir had resolutely managed after his retirement to exert exceedingly strong influence over domestic politics in Malaysia.

However, it would be too much to hope that the bad times between Malaysia and Singapore are over for good or to imagine that the material, notional and cultural reasons souring relations for 40 years prior to 2003 are no longer relevant. In fact, just recently in November 2013, news that Singapore had been part of the conglomerate of nations spying on countries in the region reignited international tensions — calls were quickly made for Singapore to apologise to Malaysia. Such incidents can be expected to arise even in the future to sour relations temporarily. The fact that memories tend to be long on both sides in relation to troubles with each other has not helped matters.

To be sure, many concrete issues have been solved over the years. These include the Malayan Railway land cutting through Singapore (solved recently under Datuk Seri Najib Abdul Razak's tenure); disagreements over water supply to Singapore (unravelled by technological advancements in Singapore); conflicting claims over the small island of Pedra Branca (resolved by the International Court of Justice); and CPF payments to Malaysians who had been working in Singapore (dissolved through agreement and by the ageing of claimants). Although tension continues over issues such as the use of airspace by the Singapore Air Force and so on, the stronger signal being heard, if one manages to ignore the ubiquitous political din, is an encouraging one.

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Collaboration between the two countries on matters of security has practically always shown impressive results. This has included cases such as piracy control; the capture of Mas Selamat; and the arrest of the Singapore "Messiah" hacker in November 2013.

Where economics is concerned, ties have always been stronger than politicians have been publicly willing to admit as well. Labour flows from Malaysia to Singapore have always been heavy and continue to grow daily. We also saw how, immediately after Tun Dr Mahathir Mohamed's retirement in late 2003, Malaysia initiated the Iskandar project in Johor. Taking advantage of an effluent neighbour's overflow of capital, an overflow of consumer demand and the overflowing need for land simply makes good economic sense. The question that begs to be asked instead is: why did it take so long for the Iskandar project to be conceived and implemented?

What is it that makes bilateral relations so inherently difficult between Singapore and Malaysia? Certainly, there is a complex culture of political sniping between the two developed over time perhaps with a conscious intention to keep them apart for the purpose of building national identity. Or is there something more inherently problematic in the two countries' relationship to each other which is based on something fundamental such as competition over resources and trade?

As with all relationships, ties between Singapore and Malaysia also go through different periods. Singapore in 1832, was used as an administrative centre for British influence in the region after inheriting the role from Penang. During the Japanese occupation of the region, the little island at the southern tip of the Malay peninsula continued to be the administrative centre. With the return of the British in 1945 and the implementation of the Malayan Union the following year, we saw how the British sought to retain Singapore even as they prepared to withdraw from the region. It was a jewel they preferred to keep.

However, to locals, be they Malayans or Singaporeans, that division was unnatural. The political—and cultural— imperative to unite the two, was therefore felt to be very strong. Although finally accomplished in 1963 to suit all the powers that be, the going proved to be tough from the very beginning. The importance of Singapore as the regional centre for commerce, politics and education, as well as the metropolitan centre for Chinese immigrants in Southeast Asia, did not allow it to fit comfortably into the federation. In fact, it fitted so badly that a separation within two years seemed the only way to avoid serious inter-ethnic clashes from breaking out.

Looking back, it would seem that the parts were brought together into a whole

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too tightly and quickly for the project to be viable. How optimistic the merger now seems, or was there not also a large dose of desperation involved with the British rushing to leave and the leftist threat still strong in the region? The years following Singapore's separation from the Federation have therefore to be seen in that light.

On the one hand, Malaysia's connection to the global economy and to important modernising dynamics was downsized. Singapore on the other hand, was detached from its natural hinterland and had to construct an independent polity that could not only grow fast but also defend itself with sufficient credibility. Making use of every advantage it had, without letting nationalistic or anti-colonial sentiments dictate economic policy over time, became Singapore's greatest challenge.

Against the nature of its own people, the new country had to create an identity and a pattern of behaviour that differentiated it from its neighbours, in fact, from its own history. Through its foreign policy, export-orientation economic strategy and its strong links to external players, it sought global connections in order to remedy its abruptly shrunken regional context.

Malaysia's issue with Singapore, on the other hand, stemmed more from being historically and ethnically offended by the separation than from any desperate need

to manage on its own. Malaysia was big enough and rich enough to grow by itself. While more pragmatic Malaysian leaders such as then Deputy Prime Minister Tun Dr Ismail Abdul Rahman (in office from 1970 to 1973) realised the advantage of learning from the hyperactive Singapore's fervent search for solutions, others preferred to distance themselves from all things Singaporean, at least polemically. Tun Dr Ismail visited Singapore to study institutions such as the Housing Development Board and the Economic Development Board, something that his colleagues avoided doing for decades to come.

In fact, under Tun Dr Mahathir, the basic stance was one of competition instead of complementarity. This was certainly worsened—and prolonged—by the mutual dislike that he and Mr Lee Kuan Yew had for each other. However, those days are now over, for all practical purposes. As can be seen in how important the success of the Iskandar project is to both the Johor government and the Federal leadership, the two countries have realised the gains that can come from two of the most developed countries in Southeast Asia working together and from both of them building on the complementary aspects of each their economies. Spiteful competition between the two only advantaged third parties, both near and far.

From now on, ASEAN Regionalism is an important context within which the

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future of bilateral relations between Singapore and Malaysia should be analysed. There is no doubt that the changing political, strategic and economic structure in the East and South Asia region will introduce considerations that we are only just beginning to become conscious of. Regional integration at a deeper level may not be possible for a long time yet, but the development of contacts and connections at the people-to-people level, not to mention between businesses, is bound to alter profoundly the national discourses within the region. For one thing, ethnocentric agendas will lose traction once the benefits of intra-regional trade, travel and cultural ties have become obvious to governments and peoples. National ethnic minorities, placed in a regional context, are not easily defined and manipulated. Dealing with them will require more diplomacy and tolerance than has been the case when done within national frameworks.

The uncomfortable nation-state structure that the various ethnic groups in Southeast Asia has had to live with since independence, once broadened by regional realities may help improve relations between them. In the case of Malaysia and Singapore, the inter-ethnic dimension has always loomed large. Tensions had been convoluted by inter-state relations which after all, follow a logic quite different from how groups relate to each other. The regional context holds great promise for dissolving mistrust and misunderstandings, not only

where ties between Malaysia and Singapore are concerned, but in Southeast Asia as a whole as well.

Infrastructural connectivity is bound to enhance a culture of political, economic and cultural openness towards regional neighbours. These neighbours are indeed quite different from each other in many cases. Some are only discovering each other for the first time. Policies such as the Open Skies for commercial flights have allowed Southeast Asians to visit each other's cities and eat each other's foods. Continued tension between Malaysia and Singapore would not only be unwise, it would also nullify the advantages that the two can have at a time when balances of power are shifting in the region.

In conclusion, it should be said that from the very start, the assumption of Singapore and Malaysia being twins, or at least cousins, raised expectations of good relations to an unrealistic level. Complementarity requires more a focus on differences between the participants than on similarities. As states, the two are bound to disagree with each other on specific issues. That has to be accepted. However, beyond that, much improvement is possible, especially if we keep an optimistic eye on economic integration in the region.