The International Institute of Management

The Management Journal

32nd Anniversary
Management for Harmony

October 2017

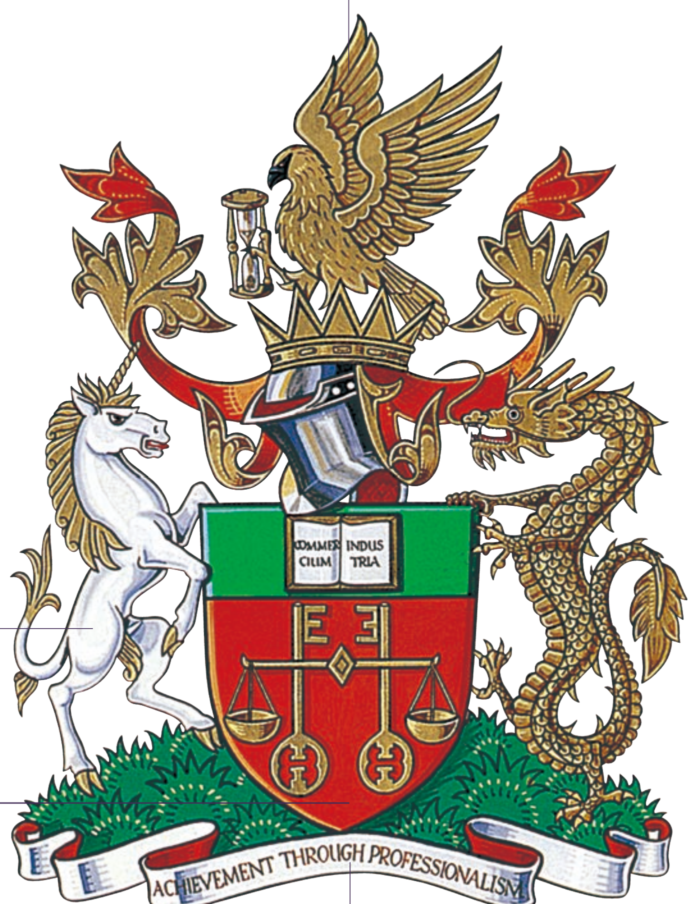
The IIM Coat of Arms

The Crest

The Crest is an Ancient Crown representing the authority of IIM as a professional body. Rising from the Crown is a Philippine Eagle representing The International Institute of Management Limited branching internationally. Holding in the Eagle's Claw is a Timer representing Effective Use of Time.

The Supporters

On the Left of the shield is a white Unicorn with Golden Horn representing Righteousness, and on the right is an Imperial Golden Dragon representing Flexibility.



The Shield

Across the top of the shield is a band with an open book in the center. Written on the book are two Latin words, "Commercium" for Commerce on the left and "Industria" for Industry on the right. On the lower part of the shield are two Keys representing the Keys to Knowledge and a pair of Scales representing Fairness in Dealings.

The Motto

"Achievement Through Professionalism" is self explanatory.

President's Message

Prof. Dr. David H.T. Lan, GBS, ISO, JP
President
The International Institute of Management
藍鴻震 博士教授
國際專業管理學會會長

Glad to present this fourth issue of "The Management Journal (MJ 2017)", the official periodical of The International Institute of Management (IIM). MJ is a platform open to IIM members and all readers for sharing management thoughts, innovative ideas, good practices and leadership wisdom.

We continuously receive positive feedback that the Institute's publication MJ is very well received by readers from various sectors of our society, including libraries from universities & schools , educational & business institutions & no doubt from our members & business associates. As President of IIM, it is my privilege to advise that this year we have some twenty articles contributed by outstanding learned scholars, highly seasoned practicing professionals, prominent social and business leaders, sharing their knowledge & experience. They are the very cream from HK as well as from the world, including overseas opinion leaders, carrying important roles at the national & international levels. This healthy cross-fertilization of knowledge and views from different regions truly reflects the international nature of this platform, substantiating our theme goal – developing future global leaders.

Our continuous contacts over the years with scholars / economists from the University of Chicago meant joint activities & contribution of articles from that source for enriching our readers' quest for knowledge. They include works from Dr Kevin Murphy , George J Stigler Distinguished Service Professor of Economics at University of Chicago (if approval is received before publication deadline), IIM's new Adviser, Professor Richard Wong SBS JP 王于漸教授 , Chair of Economics Philip Wong Kennedy Wong Professor in Political Economy HKU, Dr David YK Wong 黃 友 嘉 PhD GBS BBS JP, Chairman of HK's Provident Fund Schemes Authority. Another important source I must highlight here is the contribution by our new Counselor, Prof CHANG Hsin-kang, 張 信 剛 GBS, JP, FREng, President-Emeritus of City University of Hong on his very interesting stories in both English & Chinese on the "New silk road" 新絲綢之路 .

I look forward to comments from readers and subscribers to help us further improve this initiative, and also your contribution of articles, enabling your management wisdom to be shared with members and the public, as well as stimulating constructive debates and cross-fertilizatio.

Your cultivation will help to make this a fertile land of knowledge and ultimately a temple of management thought leadership.

I sincerely wish you happy and gainful reading.

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Room 2107, 21/F, Pioneer Centre, 750 Nathan Road, Kowloon, Hong Kong
Tel: (852) 2628 1138 Fax: (852) 2628 1698 Email: info@iim.org Website: www.iim.org

Speech by FS at gala dinner for the 20th anniversary of the establishment of the HKSAR

Mr. Paul Chan Mo-Po, GBM, GBS, MH, JP,
Financial Secretary, Hong Kong Special Administrative Region of the People's Republic of China

Following is the speech by the Financial Secretary, Mr Paul Chan, at the gala dinner for the 20th anniversary of the establishment of the Hong Kong Special Administrative Region in Jakarta, Indonesia (July 26, Jakarta time):

Distinguished guests, friends, ladies and gentlemen,

selamat malam (good evening).

It's my great pleasure to be here with you all in Jakarta, a fantastic, great global city pulsing with creative energy. It's a particular pleasure to be here in celebration of both the 20th anniversary of the establishment of the Hong Kong Special Administrative Region (HKSAR) and the official opening of the Hong Kong Economic and Trade Office (ETO).

My thanks to the Economic and Trade Office and the Hong Kong Trade Development Council (TDC), which also runs a busy office here, for organising this festive occasion.

Hong Kong has made considerable progress since reunification with our motherland 20 years ago, under the unique arrangement of "one country, two systems", which enables the indispensable building blocks of Hong Kong's continuous success and prosperity to continue. These include an open and free market, an efficient and clean public sector, a robust institutional framework, freedom of speech and travel, free movement of goods and capital, a simple and low tax regime, a deep pool of multi-cultural and talented businessmen and professionals, and a fine tradition of rule of law, underpinned by an independent judiciary.

Hong Kong's common law system and legal structure provides a robust and transparent framework of protection for all the entities in Hong Kong, effectively guarding the rights of people and businesses. All persons, businesses and organisations, regardless of nationality or size, are treated exactly the same.

And the independence of our judiciary has been enshrined in the constitutional document of Hong Kong, the Basic Law, which stipulates that the HKSAR enjoys independent judicial power, including that of final adjudication. And that the power of final adjudication of the HKSAR shall be vested in the Court of Final Appeal in Hong Kong.

The concept of rule of law and an independent judiciary is widely recognised, and is well respected, treasured and safeguarded in Hong Kong.

As I mentioned earlier, in Hong Kong, capital, goods, talent and information flow freely. There is essentially no restriction on foreign investment, and international companies enjoy the same equitable and business-friendly environment as their local counterparts. And that of course includes our low and simple tax system.

According to the 2016 Paying Taxes study of 189 economies, Hong Kong is one of the most tax-friendly economies in the world. We only impose three direct taxes, namely profits tax, salaries tax, and property tax. More importantly, we do not have sales tax, VAT or GST, no capital gains tax, no tax on dividends as well as no estate duty. Except for a few types of goods such as tobacco, gasoline and motor vehicles, we do not impose import duty.

Our success has not gone unrecognised. Over the past 23 years, the US-based Heritage Foundation has named Hong Kong the world's freest economy.

And for the past two years, the World Competitiveness Yearbook, published by the International Institute for Management Development in Switzerland, has selected Hong Kong as the world's most competitive economy.

Certainly, our economy has shone, despite significant regional and global challenges over the past 20 years. Our per capita GDP last year came in at USD 43,700 – a real increase of about 60 per cent since 1997. And I am confident that there will be a future full of opportunity – for Hong Kong and for those economies that work with us.

As the international financial centre in Asia, Hong Kong's stock market has consistently been placed among the world's top five for funds raised through initial public offerings over the past 15 years. In the recent two years, we had even been ranked number one. In fact, the market capitalisation of our stock market has grown 8 times from USD 410 billion in 1997 to about USD 3,600 billion in 2017. Our robust and versatile financial market, offering a wide range of other financial services from syndication loans and private equity funds to Islamic Sukuk, is an ideal platform for Indonesian enterprises seeking for funds to finance future projects and businesses.

Looking at the "one country" aspect, it's clear that being a part of China has given us advantages available to no other economy. Indeed, Hong Kong is the world's largest offshore Renminbi business hub. As at the end of June 2017, Renminbi deposits in Hong Kong exceeded RMB 600 billion. We offer diversified investment, financing and risk management products in Renminbi and handle more than 70 per cent of the world's offshore Renminbi transactions settlement.

With the establishment of the Shanghai-Hong Kong Stock Connect, the Shenzhen-Hong Kong Stock Connect and, earlier this month, the Bond Connect, as well as the Mainland-Hong Kong Mutual Recognition of Funds arrangement, Hong Kong gives investors – from Indonesia and from around the world – unparalleled access to the Mainland's capital markets and financial products.

We are, as well, a logistics hub built on world-class infrastructure located right in the heart of Asia. In fact, Hong Kong was ranked number one in infrastructure by the World Economic Forum in its Global Competitiveness Report over the past seven years. The Hong Kong International Airport has been the world's busiest cargo airport for the past seven years, too. Within five hours of flying time, you can reach half the world's population from Hong Kong.

And construction is now underway to expand the airport into a three-runway system, which will double our cargo throughput capacity to nine million tonnes a year, and passenger capacity to 100 million per year.

In the nearer future, two other mega infrastructure projects, the Hong Kong-Zhuhai-Macao Bridge and the Guangzhou-Shenzhen-Hong Kong Express Rail Link, will be completed, further enhancing Hong Kong's connectivity with the Mainland and enlarging our hinterland.

With the Hong Kong-Zhuhai-Macao Bridge, the travelling time from Hong Kong to Macao, Zhuhai and Shenzhen will be cut down substantially. By then, most of the major cities in the Pearl River Delta are within three hours' drive. Cities in Indochina, such as Hanoi, can be reached in about one day. And with the Express Rail Link, the journey time between Guangzhou and Hong Kong will be reduced to 48 minutes, and passengers from Hong Kong can easily access to the over 20,000-km national high speed rail network connecting all the major cities in the Mainland. It can create a "One-hour Living Circle" within the Pearl River Delta area. It will take less than 9 hours from Hong Kong to Beijing and 8 hours to Shanghai.

Hong Kong will also play an important role in the Guangdong-Hong Kong-Macao Bay Area development, a plan announced by Premier Li Keqiang in March this year. The fast growing Bay Area covers Hong Kong, Macao and nine cities in Guangdong Province including Shenzhen, Guangzhou and Zhuhai, and has a total population of over 66 million. The gross domestic product of this city cluster is over USD 1.3 trillion, comparable to that of Australia or the Republic of Korea. Besides, the Bay Area is the most affluent region in China. This development plan will further facilitate the flow of people, goods, capital and information in the region, and presents enormous business opportunities for Hong Kong and overseas businesses.

Coming back to our ties with ASEAN and Indonesia. They are strong and fast growing. Indeed, trade between Hong Kong and ASEAN has grown by 72 per cent over the past ten years, reaching USD 107 billion in 2016. That makes ASEAN Hong Kong's second-largest trading partner. As you are, no doubt, aware, Hong Kong and ASEAN have been negotiating a free trade agreement. After three years of intensive work, I am pleased to report that the negotiation has almost concluded. We are hopeful of signing the FTA before the end of this year.

The confidence we have in the future of Hong Kong and ASEAN is, of course, what drove us to establish in June last year a Hong Kong Economic and Trade Office in Indonesia, the largest economy in Southeast Asia. After a year of preparation, I am happy to see that the office has moved into a long-term accommodation and is up and running. And I was pleased to officiate at its opening this afternoon. This office represents the Hong Kong SAR Government in matters between Hong Kong and ASEAN as a whole, and handle in particular bilateral matters between Hong Kong and Indonesia, Malaysia, Brunei and the Philippines. With this new office and the office of the Hong Kong Trade Development Council here in Jakarta, business opportunities between Hong Kong and Indonesia are set to boom.

Both offices will work closely with our long-established ETO and TDC office in Singapore to take our cooperation with ASEAN to another level.

This year also marks the 50th anniversary of ASEAN. And I'd say Hong Kong's anniversary celebration theme – "Together · Progress · Opportunity" – is a remarkably apt description of relations between Hong Kong and ASEAN today. And the heady promise we offer each other tomorrow.

Thank you for being with us tonight. We appreciate your friendship and support, and I sincerely wish everyone of you good health, and the best of business in the coming years.

Terima kasih. (Thank you very much.)

The International Institute of Management

Court of Appeal decision: a factual account

Mr Rimsky Yuen, GBM, SC, JP
Secretary for Justice

On August 17, the Court of Appeal delivered its judgment concerning the application to review the sentences involving Joshua Wong, Alex Chow and Nathan Law.

The Court of Appeal sentenced the defendants to immediate custodial sentence of six to eight months.

The judgment has attracted extensive attention and discussions. Since the defendants have indicated an intention to appeal against the judgment, it is not appropriate to go into matters which may affect the intended appeal.

However, since some of the comments display a lack of understanding of the basic facts of the case or our legal system, it is important that there should be an explanation of the different stages of the legal and judicial process.

The first stage is the prosecution stage. The defendants were prosecuted for offenses involving unlawful assembly, which is defined in section 18 (1) of the Public Order Ordinance as follows: "When three or more persons, assembled together, conduct themselves in a disorderly, intimidating, insulting or provocative manner intended or likely to cause any person reasonably to fear that the persons so assembled will commit a breach of the peace, or will by such conduct provoke other persons to commit a breach of the peace, they are an unlawful assembly."

Unlawful assembly is not concerned with the ideas [whether political or otherwise] that the persons who organized or participated in the assembly sought to advocate. Rather, it focuses on whether the conduct of the people during the assembly was unlawful.

Accordingly, the defendants were not prosecuted for their political ideas.

The second stage is the trial stage. There can be no doubt that the defendants were convicted after a fair and open trial.

The defendants were legally represented, and they had every opportunity to make such submissions as they saw fit. The defendants at one stage lodged appeals against their convictions. However, they subsequently abandoned their appeals. Thus, the defendants no longer take issue with their convictions.

The third stage is the review of sentence. The first review took place before the magistrate who convicted the defendants pursuant to section 104 of the Magistrates Ordinance. The second review took place before the Court of Appeal pursuant to section 81A of the Criminal Procedure Ordinance. Such review can only be lodged if the sentence imposed by the trial judge "is not authorized by law, is wrong in principle or is manifestly excessive or manifestly inadequate."

All these grounds for review only concern legal issues. Political considerations do not come into play, whether at the stage when the prosecution sought the review or when the Court of Appeal dealt with the application for review.

The hearing of the review was also an open and transparent one. All the submissions made by the prosecution were legal [as opposed to political] submissions.

The defendants again were legally represented, and they had every opportunity to advance such submissions as they saw fit.

If one reads the judgment, the reasons leading to the conclusion that imprisonment is appropriate are legal reasons and not political reasons.

Further, as is made crystal clear in paragraph 171 of the judgment, the defendants were convicted and sentenced not because they exercised their right of assembly, demonstration or freedom of speech; they were convicted and sentenced because they had overstepped the line allowed by the law and that they had committed a serious unlawful act.

Hong Kong all along upholds judicial independence. The Hong Kong judiciary is well known for their independence and their top quality. It is regrettable that some of the comments [including some made by overseas media] sought to attack our judiciary.

As I have repeatedly said in the past, the public has a right to discuss judicial decisions, but no discussion should seek to undermine the integrity or impartiality of the judiciary.

Some have queried the timing of the review applications, and alleged that there was ulterior motive behind them.

The timing of the review applications before the magistrate and the Court of Appeal were regulated by the relevant statutes.

In the present case, the prosecution lodged the review applications within the relevant time prescribed by the statutes.

The only reason why it took almost a year for the Court of Appeal to hear the review application is because the Court of Appeal could not deal with the review of sentence until after the defendants' appeals against conviction were disposed of.

The defendants' appeals against conviction were scheduled to be heard on May 22, 2017.

It was only after the defendants abandoned their appeal against conviction on April 19, 2017, that the prosecution could proceed to fix a date for the hearing of the review of sentence, which eventually took place on August 9, 2017.

In other words, the timing of these steps is not within the control of the prosecution, and any suggestion of ulterior motive on the part of the prosecution is simply groundless.

The law in Hong Kong protects people's fundamental rights including the right to assembly, demonstration and freedom of speech.

However, any exercise of such rights should be in a lawful manner [see paragraph 110-112 of the judgment]. From the commencement of the prosecution up to the review of sentence by the Court of Appeal, the defendants were dealt with strictly in accordance with the law.

The defendants were convicted and sentenced for their unlawful conduct, not for their political ideas.

With these explanations, I hope the public and the international community will continue to respect our independent judiciary and refrain from making baseless attacks.

Rimsky Yuen 24 Aug 2017
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Together and Open, or Isolated and Closed?

Prof Tony F. Chan
President
The Hong Kong
University of Science
and Technology
陳繁昌教授
香港科技大學校長

About a year ago, the UK shocked the world by voting YES to leave the European Union, and now its universities are suffering from the aftermath. A recent article which I came across reported that many UK universities are struggling to deal with the looming impact of Brexit, which cast a shadow on the future of current and to-be EU students and staff in the country.

With European students growing more reluctant to go to the UK, universities are now racing to find replacement for EU students, probably from Asia, who are willing to pay reputable UK schools hefty international tuition. And some universities who have been reliant on EU research funding are facing a future without the money and increasing competition from schools in the Continent as a result.

On the other side of the ocean, many universities in the US are facing the same challenge of isolationism under President Trump's "America First" policies. His travel ban and tightening up of immigration rules have alienated many—presidents from major universities have joined force to push back many of Trump's isolationist policies, such as the "Muslim ban".

It seems that all the initial excitement and euphoria that for a Trump-led US and a UK heading to Brexit are all but gone. Isolationist policies introduced under Trump and in Brexit UK are putting many tertiary education institutions under siege, for such policies are directly against the principle of openness. In the long run, universities in both countries would lose out in funding and recruitment under an isolated environment, and their reputation and academic standard would suffer inevitably.

These cautionary tales have relevance for HK. Similar to both countries, localism and pacifism are rising in our city and, likewise, many are keen to turn their backs from internationalization. A growing number of people are becoming more outspoken and critical on our universities, and some would even go further to say that international recruitment is squeezing out local students.

These accusations are, of course, short-sighted, and we must keep in mind that for whatever instant gratification populism ideals may bring, we must not overlook the inevitable consequences that come with them.

HK's universities are successful and unique because we are international. Being international brings competition and diversity, which in turn brings out the best in our academics and students. Our schools have done well in international rankings for quite a number of years, and a big reason for the surge is our international appeal and our research excellence.

If we go backward and become "just a local city" that is "built for locals", we will soon be facing the same fate as universities in the UK. Just as we are free to recruit talent from the globe, they are also free to go around the world where they are welcomed and not unwanted. Such openness is what made the US home to the most Nobel Laureates and prestigious institutions, as well as a thriving economy based on innovation —something US educators are fighting hard to retain.

HK's higher education sector is fully engaged with the international community, and we cannot expect to enjoy the benefits of today if we slam our door. We must not give up our hard earned international reputation easily in favor of populism ideals.

Isolationism affects not just universities. In the UK already, banks are moving out from London, and other industries may soon follow suit. Whatever the UK is set to lose out, others will be eager to replace, and assume its position. This is simply the reality in the globalized world today.

Together and open, we bring more opportunities to everyone in this society. Isolated and closed, and we will be alone and left behind.

(Originally printed on The Standard, 1 August 2017)

The International Institute of Management

The New Silk Road: Eurasia's Historical Destiny

Prof. Chang Hsin-kang
President-Emeritus of City University of Hong Kong,
and Honorary Professor of Peking University and Tsinghua University

The geography and climate of Eurasia are favorable to communications, and therefore very early on mankind was able to link, via a series of stopping points, the entire length of the landmass, and engage in "segmented trading," i.e., within a given segment of the route. By the 14^{th} century A.D., under the Mongol-ruled Yuan Dynasty, overland and maritime silk routes connected East Asia, Western Europe and the East African coast. The construction of this vast and complex and transport network can arguably be considered as the "geographic destiny" of that era of human history (see Chinese-language Caijing Magazine, p. 86-89, Issue 30, 2016).

In the most recent five centuries, the economic, cultural and social development of each of the world's continents have been most uneven. Looking forward to the future, a resurgent China expects to play an important role. Each country in Eurasia, as well as some African ones, will participate in constructing a "New Silk Road" to promote mankind's further development, a collaboration that will be implemented based upon the principals of reciprocity and mutual benefit. Such is the historical destiny of 21^{st}-century Eurasia.

Maritime Power and the Rise of Western Europe

Some three thousand five hundred years ago, under the dual influence of the Egyptian and Hebrew civilizations, the inhabitants of Crete in the eastern Mediterranean created Minoan civilization. Five hundred years later it spread north to the Greek peninsula, becoming the source of European civilization, and when Greek civilization spread to the Italian peninsula, it formed Roman civilization.

During the 1^{st} and 2^{nd} centuries CE, the Roman Empire was at its apogee and controlled Europe south of the Rhine and west of the Danube, as well as areas bordering on the Mediterranean as far east as the Caucasus. In the 4^{th} century, the capital of the Roman Empire moved eastward to Constantinople (now Istanbul), presaging the future Eastern Roman Empire. From then on, the western frontiers of the Roman Empire came under continuous attack and occupation by the Huns, who came from Asia, and by Germanic peoples hailing from northern Europe.

When the city of Rome fell to the Germanic "barbarians" in 476 CE, the erstwhile imperial order was laid to waste, and Western Europe lapsed into six or seven hundred years of social chaos and stagnation. During this period, the Eastern Roman Empire formed what later historians would label "Byzantine Civilization," based upon Eastern Orthodox Christianity that employed Greek as its liturgical language.

Islam arose in the Arabian Peninsula during the 7th century and within just a few decades, it had destroyed two great ancient kingdoms, Egypt and Persia, as well as badly damaging the Roman Empire. By the 8th century, the Arab Empire extended across three continents — Africa, Europe and Asia — and west to the Atlantic, and east to the Indus. The 10-11th centuries were the "Golden Age" of Arabo-Islamic civilization: Over a period of two hundred years, Muslim scholars from Spain to Afghanistan studied and synthesized Greek, Persian and Indian civilizations, and created a brilliant medieval civilization of their own. Their knowledge of mathematics, astronomy and medicine was second to none.

In the 11th century, European farmers began utilizing new iron blades that made deeper plowing possible. As a result, agricultural output rose and the human population count soared. Each locality constructed a self-sufficient "manor economy," with a social order whose political framework was based upon a hierarchical relationship between feudal lords, big and small. As agriculture developed, West Europe saw the widespread emergence of "bourg" (lit., medieval village near a castle) dominated by merchants and artisans, and with them the birth of a class of town dwellers — "bourgeois" — who no longer depended on the land for their livelihood.

This was an era of great dynamism and confidence among the inhabitants of Western Europe. In the Iberian Peninsula (modern-day Portugal and Spain), the Christian political authorities began their "Reconquista" (lit., reconquest) to gradually expel the Muslim Moors of North Africa who had governed Iberia since the 8th century. Meanwhile to the east, the emperor of the East Roman Empire based in Constantinople was under imminent threat from the Seljuk Turks, and he requested aid from the Pope in Rome. Pope Urban II initiated a call to Christians for the formation of the First Crusade (1095-99), whose raison d'être was the recapture of the Holy City of Jerusalem, occupied by Muslims for more than four centuries.

Flush with religious fervor and prejudice, as well as greed for the wealth of the Orient, major and minor members of nobility from throughout Western Europe — mainly Franks, including France's canonized Louis IX — organized seven crusades to the east during the 12-13th centuries, with participation by town-dwelling hoi polloi too. They occupied Jerusalem, and even established a number of Crusader kingdoms in Syria and Palestine that ruled for more than a century.

Nearly two hundred years later, the Crusaders gradually lost their zeal for their holy mission, and they were expelled by the Muslim army in mid-13th century. Just at this time, the Mongol army arrived in Syria from the east. It attempted to join forces with the Crusaders and attack the Muslims, but the parties had not reached an agreement. In 1260, the Great Khan Möngke passed away, and his younger brother Hulagu, who had led the Mongol war expedition this far west, opted to return eastward and contest the election for designation as the Great Khan, while leaving a small portion of his troops behind in Syria. As a result, the latter were annihilated by the Egyptian Mamluks (slave soldiers), thus marking the complete loss of the Mongol's massive military momentum accumulated over several decades.

During the 12th and 13th centuries, the Europeans were exposed to the advanced Arabo-Islamic civilization in Iberia as well as on the eastern Mediterranean coast, and translated a great number of scholarly works from the Arabic in domains such as mathematics, astronomy, medicine, navigation, geography, philosophy and religion. They even translated long-lost Greek classics that had been preserved in Arabic. This can be considered the embryonic period of the European Renaissance, one that provided the anemic West with much-needed supplementary cultural "nutrition."

Closely related to the Western European Renaissance was the fall of the Eastern Roman Empire. The Ottomans, a branch of the Seljuk Turks, got a foothold in the European territory of the Eastern Roman Empire in the late 14th century. In 1453, the Ottomans attacked and occupied Constantinople, and the 195th emperor of the Roman Empire died on the city ramparts. In the period of more than one hundred years that followed, many Greeks fled Ottoman rule to various places in Western Europe, often serving as tutors to nobles and affluent city dwellers. Greek artisans migrated there too, raising the level of craftsmanship. Most significantly, the injection of classical Greek humanism via migration stimulated European society's "rebirth," better known by its French term, the "Renaissance."

After the suffering inflicted by the Crusades in the 12th century, Islamic societies — formerly quite tolerant toward Christians — turned conservative, treating the "Franks" (the Arab's collective term for West Europeans) with hostility, and resisting their civilization. In the wake of Western Europe's 16th-century resurgence, this unreceptive mindset proved very disadvantageous to the evolution of Islamic culture. Faced with the long-term obstacle to direct trade with the East posed by the Muslim Arabs and Turkic peoples, during the Renaissance the Europeans began searching for a new path to Asia.

On the Iberian Peninsula the victorious Christians implemented a series of Inquisitions. They initially expelled unrepentant Muslims and Jews, and then persecuted those who had ostensibly converted to Catholicism (conversos) by bringing them before tribunals to judge if they were guilty of heresy, a sin punishable by death.

Yet at the very same time, the Christians were eagerly absorbing the Arabs' knowledge of scientific and navigational techniques. For more than a century, the Portuguese monarchy rewarded Portuguese seafarers who were willing to descend Africa's western coastline and pioneer new southbound routes. Meanwhile, the Spanish court subsidized the Italian explorer Christopher Columbus (Cristoforo Colombo) in his search for Asia via the western portion of the Atlantic. Once the Hundred Years' War (1337-1453) between France and Great Britain ended, they too began to seek opportunities for overseas trade and colonization.

In 1492, Columbus arrived in what he believed to be Asia, but was in fact Central America. In 1497, the Genoese explorer John Cabot (Giovanni Caboto) led an English team of explorers across the northern Atlantic and set foot in northeast Canada. In 1498, Vasco da Gama arrived in southwest India by way of the southern tip of Africa, the Cape of Good Hope. In 1502, on his fourth and last voyage there, Columbus sailed into the Caribbean and — once again — mistook the islands he encountered for part of Asia. In 1522, after having completed the first-ever circumnavigation of the world, Ferdinand Magellan's expedition arrived back in Spain (minus Magellan, who died in a battle in the Philippines). In 1534, the French explorer Jacques Cartier sailed north along Canada's St. Lawrence River to Gaspé Bay, where he erected a towering cross and claimed the territory in the name of the French king.

By this time the Mongol empire had long since declined, and the great Timurid Empire built by Timur who believed himself to be the heir to Genghis Khan, had also broken apart. Thus the era when Eurasia's land-based power reigned supreme had come to an end. It was to be gradually replaced by maritime power, a critical foundation for what was to become Europe's future global dominance.

The Industrial Revolution and Colonial Empires

In the first half of the 16th century, three momentous movements arose in Western Europe. Portugal and Spain began their occupation and establishment of many overseas colonies. Meanwhile, the Renaissance that had originated in Italy spread throughout Western Europe. The third was the Protestant Reformation that took place in the area north of the Rhine ruled by Germanic nobility.

Although these three movements occurred in different parts of Europe, they were interrelated. One key factor was that the transport network put in place by the Mongols in the 13-14th centuries became the fastest and safest land-based passageways in the history of Eurasia, making commercial, scientific and intellectual interaction between both ends of the landmass rapid and convenient. During this period, gunpowder, paper-making and printing know-how — all imports from the East — began to disseminate throughout Western Europe, thereby lifting the cultural level of the common man, and markedly increasing military capability as well.

In 1517, Martin Luther, professor of moral theology at the University of Wittenberg, posted his Ninety-Five Theses on church doors to denounce and resist the Vatican's support for issuing indulgentia, thereby igniting the Reformation in Western Europe. He encouraged believers to read the Bible, and advocated that the individual could interact directly with God without the aid of a holy man designated by the church. This proposition was a manifestation of Renaissance-era humanism, and its material basis was the Bible printed on paper; it no longer need be painstakingly hand-copied onto parchment. He even described printing as "God's highest and extremist act of grace, whereby the business of the gospel is driven forward."

It is evident that the widespread resurgence of Western Europe was not a sporadic event, but rather the accumulation of a number of factors. Human civilization has always progressed via mutual study and borrowing. In the case of the 16th century, this revival was stimulated in part by knowledge originating among the Chinese, Arabs and Greeks.

The rejuvenation of Western Europe can be summarized thusly: As a member of the animal world, man recognized that by applying his rational nature he could perceive objective reality. With their emphasis on rationality and their understanding of objective reality as a starting point, Western Europeans were able to make great leaps in science and technology. In terms of the humanities and society, the Reformation signified that the Europeans had transcended the superstitions and ignorance of medieval times.

During the Reformation, many new sects advocated that the individual should not only look forward to Heaven after death, but should also strive through diligence and thrift to attain a happy life here in this world. Therefore, most Europeans not only did not abandon their faith in God, in their humble pursuit of the latter ideal they also exhibited humanism, the basic spirit of the Renaissance.

As they evolved into more affluent societies, at first the Portuguese and the Spaniards, and then the Dutch, French and British all left their homelands to explore and seek personal realization and wealth. The main external manifestation of Western Europe's revival was the seizure of territory and establishment of overseas colonies. Colonization resulted in a large influx of gold and silver into Western Europe, where its circulation stimulated commercial activity and made foreign trade even more crucial. This influx of precious metals marked the origin of what economists have dubbed "mercantilism".

Meanwhile, European monarchs took note of the handsome profits generated by overseas colonies, and actively organized support for their nationals to go abroad and engage in trade, exploration and colonization. The Dutch East India Company is an early example, after which France and the United Kingdom each also established a franchise for managing their colonies and trading. The British East India Company effectively ruled Britain's possessions in India, up until 1858 when Queen Victoria was formally installed as British India's head of state. The practice of granting royal concessions to trading companies to govern colonial possessions was essentially a creative "workaround" devised by Western European countries, where (at least the appearance of) rule of law was considered important: The mother country bequeathed these companies with a special legal status, while acquiescing to their undertaking activities, such as slave trafficking and trading opium, that were in fact illegal back home.

When trade and commercial activities develop to a certain point, demand for production of more and higher quality products inevitably increases, thus prompting makers to improve modes of production. At the end of the 18th century, Britain's Industrial Revolution — symbolized by the usage of steam power — took place. Then France, the Netherlands and neighboring countries underwent their own era of industrialization. Already having led the globe for some two centuries, several of these newly industrialized countries now possessed extensive colonial empires.

By the latter half of the 19th century, several countries in the Western Europe, themselves not large in terms of land or population, had succeeded in ruling most of the earth's territory and the vast majority of its inhabitants. The disparity in power between the colonizer and the colonized was spectacular!

World War I and the American Surge

In the mid-19th century, the American Civil War ended and Canada acquired British Dominion status. Henceforth, North America comprised two newly emerging big powers formed largely by European immigrants. Both built railways from the Atlantic to the Pacific Coast, and mined minerals and developed large-scale, efficient agriculture in areas where Europeans had rarely lived in the past.

While there are obvious differences between the United States and Canada — the former long operated a system of slavery, while one-quarter of the latter's population is Catholic and francophone — the great majority of inhabitants share a common language, religious beliefs and customs, as well as a similar level of economic development. Neither country stations troops along the 6,000km border, and citizens can cross it without a passport; a driver's license suffices. The United States and Canada rank as the world's two most friendly neighbors and big powers.

By the early 20th century, the veteran colonial powers Portugal and Spain were already in decline. At that time, the world's most powerful colonial empires were those of Great Britain, France and Russia, but Germany and Italy, newly unified countries, were in hot pursuit and industrializing at a rapid clip. Germany occupied two colonies of its own, one in East Africa and one in the southwest. Italy also grabbed two colonies for itself in the Horn of Africa.

In terms of industrial capacity, however, the United States and Canada began to exhibit exceptional creativity in the late 19th and early 20th centuries. The phone, motion pictures, phonograph, electricity generator, refrigerator, AC grid and airplane were all invented on North American soil. In addition, the United States and Canada were the world's first countries to implement ten years of compulsory education.

World War I broke out in 1914. Britain, France and Russia joined forces to contend with the Germans. Supported only by the rapidly declining Austro-Hungarian and Ottoman Empires, Germany found itself in a position of strategic weakness. Initially, however, German morale was strong and performance on the battlefield glorious. The fruits of the Industrial Revolution were applied to great effect in this war. Only a decade after the airplane was invented, the warring parties had established their own air forces and extended the domain of warfare, formerly conducted solely on the earth's surface, into a new realm — two-dimensional space.

Since this article revolves around the "New Silk Road," it's appropriate to mention the German pilot, Manfred von Richthofen, better known as the "Red Baron." Born into a prominent Prussian aristocratic family, he entered military school at eleven years of age. Upon the outbreak of World War I, he served in the cavalry on the eastern front, but in 1915 he was transferred to the western front where he learned how to fly. At the time, the main type of fighter aircraft was a small biplane (dual-level wings) that accommodated just the pilot. There were also two-seaters, with a space for a back seat observer-cum-machine-gunner. Richthofen first served as the latter, but soon switched to flying solo.

Both smart and gutsy, he painted his fighter a flamboyant red. The Red Baron was the most renowned hero of World War I, shooting down 80 enemy aircraft in all, according to German statistics. On April 21, 1918, the day after he had brought down his 80th adversary, Richthofen was struck by a machine-gun bullet fired from the ground, crashed and died. He was just twenty-five. In fact, the heroic pilot had a special connection with the Silk Road. Baron von Richthofen, the geographer who proposed the term "Seidenstraße" back in the 19th century — silk road in English — also happened to be the Red Baron's uncle.

When World War I broke out, the American military initially remained uninvolved, "observing the tiger fight from the safety of the mountains," as the Chinese adage goes. Eventually the United States declared war, however, and dispatched its troops to defeat the Germans. During the war, the Bolsheviks overthrew the czar and Lenin announced an armistice with the Central Powers, effectively withdrawing Russia from combat. French casualties were very heavy, but it remained a major global player. Britain too was seriously impacted, but preserved its status as the world's greatest power.

But the real victor was the United States. Before the war terminated the Americans launched the slogan of "National Determination," and after combat had ceased, they encouraged the European colonies to fight for independence. Despite this anti-imperialist stance, after the war the United States insisted on maintaining possession of colonies wrested from Spain in 1898, Puerto Rico, the Philippines and a part of Cuba.

World War II and American Hegemony

It was the Ottoman Empire and Germany that suffered the most grievously from the disastrous first world war. The Ottoman Empire was entirely dismembered, with control of its territories in North Africa and West Asia formally transferred, some to the British and some to the French. Germany was forced to formulate the Weimar Constitution, pay a huge indemnity, and passively accept manipulation at the hands of the victorious Allied Powers. Nationalism grew popular as a result of these humiliations, and this contributed to the Nazis winning the 1933 elections.

Italy was on the winning side in the war, but deeply regretted having missed the earlier colonialist "bandwagon." Obsessed with catching up with its European rivals, under the leadership of the National Fascist Party, in 1934 Italy invaded the territory of one of East Africa's most ancient civilizations, Ethiopia. This marked the last attempt by a European power to establish a colony on the continent.

On March 15, 1939, when German troops invaded Poland, Britain and France had little choice but to intervene, and this ignited World War II. This time around, Germany's allies were Fascist Italy, and Japan, whose militarist-dominated imperial government had long since invaded China. Despite the implementation of full-scale Chinese resistance against Japan beginning in 1937, and the outbreak of World War II in Europe, the isolationist United States was still reluctant to directly intervene in what was perceived as "someone else's" war. It wasn't until Japan's "unprovoked and dastardly attack" (President Roosevelt's words) on Pearl Harbor that the Americans declared war on Japan on December 8, 1941, and three days later, on Germany as well. With the United States having thrown its towel in the ring, the early battlefield superiority of the key Axis Powers — Germany, Italy and Japan — progressively declined, and the military initiative gradually passed into the hands of the US-led Allies. The atomic bombs dropped on Hiroshima and Nagasaki utterly destroyed Japan's will to resist, and highlighted America's research achievements.

With the war now over, the United States dominated the new international order. The United Nations, International Monetary Fund and the World Bank — all founded in 1945 — as well as the Marshall Plan (1948-52), reflected America's global strategy. At this point in time, one-half of the GDP of the nations of the world was generated by the United States. During the latter half of the 20th century, much of the planet's population engaged in pursuit of "The American Way of Life."

During the Cold War, the Soviet-led socialist camp posed a real threat to the United States and Western Europe. However, due to its overall economic weakness, backward agriculture and emphasis on its defense industry to the detriment of light industry, its eventual decline had long been evident. During the presidency of Ronald Reagan (1981-89), some American scholars predicted the disintegration of the Soviet Union within 10-15 years, mainly due to agitation for independence among the constituent republics in Central Asia and the Baltic Sea region (Estonia, Latvia and Lithuania). The Berlin Wall collapsed in 1989, and just two years later, the Soviet Union officially disbanded, and world hegemony rested entirely in the hands of the United States, the sole surviving superpower.

The acquisition and consolidation of this hegemony, of course, depended upon military force and political measures. But economic and cultural power sustains military and political power, and the source of economic and cultural power is good governance and the full exercise of individual creativity. From World War II through today, the United States has indeed led the world in terms of the economy and cultural creativity.

During the 70-80 years following the outbreak of World War II, scientific and technical progress has proceeded more rapidly than ever before in human history. The atomic bomb, TV, semiconductors, lasers, computers, the Internet, mobile phones, nanotechnology, satellites, the space station, gene technology, therapeutic use of stem cells — have combined to transport mankind into an utterly new era, and all these innovations appeared first in the United States.

Beginning in the mid-20th century, American-style dress and music gained worldwide popularity, and Hollywood's films were welcomed and imitated in countries everywhere. Today, the sartorial and lifestyle preferences of China's emerging middle class are obviously influenced by American culture. Driven by globalization, the international use of English is increasingly common. Looking around the world, we can see that America's high-tech, cultural, economic and military power remains dominant, with no competitor currently in sight.

Geographically speaking, the United States' "homeland security" benefits from the country's location between the Atlantic and the Pacific, but its relative isolation from Eurasia (and Africa) means that it cannot easily project its power worldwide, and must seek alliances and establish military bases across the globe.

The New Silk Road: Reliant upon the East

During the second half of the 20th century, American aviation power was unassailable, and constituted a firm foundation for both long-range projection of US military might and exercising cultural influence. In 1969, the United States landed on the moon, and then went to develop many space-related technologies and hardware, including the Space Shuttle, various satellites and the International Space Station (ISS). In the 70s, the United States invented the Internet, and forty years later, the entire globe has effectively become the "World of the Internet." As a result, human understanding of Nature and society has become broader and deeper, as well as more finely detailed and subtle.

During the final two decades of the 20th century, the most far-reaching development in the world was China's entry into the process of economic globalization, which has transformed it into the most prominent power in the Eurasian landmass today. Over the last forty years, over six-hundred million Chinese — twice the population of the United States — have been lifted out of poverty and received a modern education. The ratio of rural to urban residents has changed dramatically, from 8:2 in the 70s to about 5:5 today.

The state-sponsored development of a people's intellectual capacities on such a large scale has not previously occurred in any society. The basic driver behind this achievement has been the government's deployment of huge amounts of manpower and material resources to construct housing, roads, bridges and tunnels, as well as larger projects including optical fiber networks, canals, dams, power plants, power grids, harbors and airports. The construction of this infrastructure represents the crystallization of thousands of years of civilization, as well as its fastest and most large-scale implementation in history.

As we recall the interaction between peoples and the exchange of ideas and goods throughout Eurasia, it is clear that the ancient overland and maritime silk roads did indeed promote the progress of human civilization. To further develop the present world and ensure that the fruits of civilization can, via modern technology and management, benefit the overwhelming majority of people today, a new, large-scale traffic artery now needs to be built linking the two ends of the Eurasian land mass, as well as connecting it with some African countries.

No matter how well aircraft and the Internet facilitate communications, the transport of large amounts of goods and people still requires overland and sea passageways. China has recently put forward the concept of "One Belt, One Road," with a particular emphasis on developing the infrastructure of developing countries. This is based on China's own experiences during development, as well as the current practical needs of those countries.

When the initiative was announced, it generated international attention, and both praise and criticism. In my opinion, promotion of "One Belt, One Road" by the People's Republic has several advantages. China is the homeland of silk, and the nation's history has been intimately tied to the Silk Road, so these factors make it quite natural for China to make such a proposal. Furthermore, China has a tradition of accommodating distant neighbors, as well as experience in providing aid to Asian and African countries in the modern era. This should enable China both to adopt a long-term frame of reference, and to avoid actions aimed at quick but short-term benefits; it should also help "One Belt, One Road" gain acceptance from potential participants.

China is a major land- and sea-based power that possesses geographical depth and historical experience. "One Belt, One Road" resembles a concerto, with voice and instrument complementing one another, while each continues to play its own distinct role. At the same time, China now has strong economic momentum, abundant financial resources and scientific and technological strength. These advantages are important for the actual physical construction of the New Silk Road, as well as for the extensive international cooperation necessary for the construction process.

Moreover, historically China has not had conflicts — religious or in terms of culture — with any of the "One Belt, One Road" countries. This is in contrast with the history of the Crusades and European colonialism, and contemporary "Eurocentric" and "Americentric" mindsets, as well as anti-Islamic sentiment in the West, all of which might generate psychological resistance among the citizens of a fair number of countries toward any attempt by the Europeans or Americans to initiate projects on their sovereign territory.

In 1935, Mao Zedong wrote his famous poem, Kunlun Mountain, which contains these lines:

Towering Kunlun,
I'd cleave you in three:
One piece for Europe,
One for America,
One to keep in the East.

As we look around the world today, we see that it is precisely these three forces that are capable of transcontinental operations. For the great majority of developing countries, the ideal situation is one in which these three forces coordinate and cooperate. The United States is now the world's dominant power, but it can't possibly do everything and lead in all matters. The European Union is currently the world's largest unified economic body, strong in science and technology; but European cohesion is dissipating, and Europe is fading relative to the United States and China. Among these three players, the most dynamic and capable, and least liable to encounter resistance while engaging in construction of the 21st century's New Silk Road, should be the "East" cited by Mao Zedong. Yet without cooperation of Europe and the United States, the initiative of the East will be difficult to implement smoothly.

It is my hope that both developing and developed countries will, in a spirit of mutual aid, mutual trust, and mutual benefit, engage jointly in commerce, construction and sharing of resources, in order to support the "One Belt, One Road" goal of collective prosperity for all participating countries. The ancient Silk Road will be rejuvenated, and Eurasia will realize its historical destiny of promoting the further development of human civilization.

“莽昆仑，把汝裁为三截，一截赠欧，一截遗美，一截还东国”。
环顾全球，如今世界上能够有潜力发挥跨洲运作的恰是这三股力量

新丝绸之路——欧亚大陆的历史宿命

□ 张信刚 / 文

欧亚大陆的地理和气候适于交通，因此人类很早就能逐段贯穿整个大陆并进行分段贸易。

公元 14 世纪，在蒙元帝国的统治下形成了连通东亚与西欧（也包括东非海岸）的陆上和海上丝绸之路。这一复杂而庞大的交通网络之建立可以说是人类历史的地理宿命（相关报道见《财经》2016 年第 30 期“古丝绸之路：人类历史的地理宿舍”）。近 500 年来，世界各大洲的经济、文化、社会发展很不均衡；展望未来，重新崛起的中国将发挥重要作用。

欧亚大陆上的各国（以及一些非洲国家）将在互利互惠的原则下建成促进人类进一步发展的新丝绸之路。

这是欧亚大陆的历史宿命，也是“一带一路”的历史渊源。

西欧勃兴，海权领先

大约 3500 年前，地中海东部克里特岛上的居民受到埃及文明和希伯来文明的双重影响，创造了米诺斯文明。3000 年前，米诺斯文明北传到希腊半岛，成为欧洲文明的源头。希腊文明西传到意大利半岛，形成了罗马文明。

公元 1 世纪－2 世纪，罗马帝国最为强盛，控制莱茵河以南和多瑙河以西

古代丝绸之路将被赋予新生命；欧亚大陆将实现促进人类文明进一步发展的历史宿命。

的欧洲，以及地中海周边地区，东达高加索。公元 4 世纪，罗马帝国的首都东迁到君士坦丁堡（今伊斯坦布尔），形成了日后的东罗马帝国。而罗马帝国的西部边疆从这时起连续遭到来自亚洲的匈人（Huns）和欧洲北部的日耳曼人的侵袭与占领。

公元 476 年，罗马城陷于日耳曼“蛮族”之手，帝国秩序被摧毁，西欧因此陷入六七百年的社会混乱与文明停滞。这段时间里，东罗马帝国形成了使用希腊文的基督教东方正教和后世历史学家所称的“拜占庭文明”。

公元 7 世纪，伊斯兰教兴起于阿拉伯半岛，在短短数十年间灭亡了文明古国埃及和波斯，也重创了东罗马帝国。公元 8 世纪，阿拉伯帝国跨亚、欧、非三洲，西达大西洋，东至印度河。公元 10 世纪－ 11 世纪是阿拉伯－伊斯兰文明的黄金时代，从西班牙到阿富汗的穆斯林学者经过 200 年对希腊、波斯与印度文明的学习与综合，创造出辉煌的中世纪文明；数学、天文学、医学举世无双。

11 世纪，欧洲农民用新式的铁犁进行深耕，因此粮食增产，人口激增。各地建立了以自给自足的庄园经济为基础，以大小封建主之间的依附关系为政治架构的社会秩序。随着农业的发展，西欧出现了不少以商贸和手工业为主的村镇（bourg），因此也出现了不依赖土地的市民阶层（bourgeois；一般汉译“布尔乔亚”）。

此时，西欧人充满自信与活力。在西部的伊比利亚半岛（西班牙和葡萄牙），基督教政权开始了它们的“再征服”，逐步驱逐自 8 世纪以来就统治伊比利亚各地的北非穆斯林。在东部，遭到塞尔柱突厥人进逼的东罗马皇帝向罗马教宗求援；罗马教宗乌尔班二世于公元 1095 年倡议欧洲基督教徒组成十字军前往东方，夺回被穆斯林占领了 400 多年的圣城耶路撒冷。怀着宗教狂热和偏见，以及对东方财富的觊觎，西欧各地大小贵族（主要是法兰克人；包括被教会封为殉道圣人的法国国王路易第九）和不少小市民在 12 世纪至 13 世纪组织了七次十字军东征，占领耶路撒冷，又在叙利亚和巴勒斯坦建立了几个拉丁王国，维持了 100 多年的统治。

将近 200 年后，十字军逐渐失去动力，于 13 世纪中叶被穆斯林军队驱逐。恰在此时，蒙古大军从东方来到叙利亚，曾试图与十字军合作打击穆斯林，但没有达成协议。1260 年，蒙古大汗蒙哥去世，蒙古军西征首领旭烈兀（忽必烈之弟）为参与大汗的选举而率军东返，只在叙利亚留下小量部队。结果这部分蒙古军被埃及的马木留克（奴隶）军剿灭，几十年间声势浩大的蒙古军锐势尽失。

在 12 世纪－ 13 世纪两个世纪里，无论是在利比里亚还是在地中海东岸的西欧人接触到了先进的阿拉伯－伊斯兰文明，于是大量翻译阿拉伯文的数学、天文学、哲学、宗教、医学、航海、地理学著作，也从阿拉伯文转译古希腊文的典籍。这可说是欧洲文艺复兴的萌芽期，为停滞了多个世纪的西欧社会补充文化养分。

与西欧文艺复兴密切相连的是东罗马帝国的覆亡。塞尔柱突厥人的一支（奥斯曼人）于 14 世纪进入东罗马帝国的欧洲地区；1453 年，奥斯曼人攻占君士坦丁堡，罗马帝国第 195 位皇帝战死在城墙上。这 100 多年里，大批希腊人逃散到西欧各地，许多人成了西欧贵族和上层市民的家庭教师。也有许多希腊匠人进入西欧，提升了西欧的手工业水平。最重要的是，古典希腊人本主义的传入使西欧社会得到“再生”（“Renaissance”；一般汉译为“文艺复兴”）。

另一方面，素来对基督教徒颇为宽容的伊斯兰社会在 12 世纪受创于十字军后转变为保守，敌视“法兰克人”（阿拉伯人对西欧人的统称）并抗拒他们的文明；这种心态在 16 世纪西欧勃兴之后对伊斯兰文明的发展很是不利。

由于阿拉伯穆斯林和突厥穆斯林长期阻断欧洲人与东方的直接贸易，西欧人在文艺复兴时期也开始寻找通往亚洲的新路径。

在利比里亚半岛，获得胜利的基督教徒一面用宗教法庭迫害穆斯林和犹太人，一面又学习阿拉伯人的科学和航海技术。葡萄牙皇室连续 100 年奖励本国海员沿非洲西岸向南试探新航路；西班牙皇室则资助哥伦布从大西洋的西端找寻亚洲。法国和英国经过彼此的百年战争后，也开始寻求海外贸易和殖民的机会。

1492 年，哥伦布到达他以为是印度的中美洲。1534 年，法国探险家卡尔提叶进入加拿大的圣劳伦斯河，竖立了一个高大的十字架，声称这片土地是法国国王的领土。

此时，蒙古帝国早已衰落，自认是成吉思汗继承者的帖木儿所建的大帝国也已分裂。于是欧亚大陆上陆权至上时代告一段落，海权逐渐取代了陆权，成为欧洲国家日后称霸世界的基本条件。

工业革命，海外帝国

公元 16 世纪上半叶，西欧发生了三件大事。一是葡萄牙和西班牙开始大量占据海外殖民地。二是始于意大利的文艺复兴传遍西欧各地。三是莱茵河以北日耳曼贵族统治地区的宗教改革运动。

这三个事件发生在西欧的不同地区，但彼此有相当的关联。其中一个因素就是蒙古人在 13 世纪至 14 世纪创立的交通系统成为欧亚大陆历史上最为便捷和安全的通道，使欧亚大陆两端的商业、科技、思想交流都变得迅捷而方便。这个时期，东方的造纸术、印刷术和火药在西欧开始普及，一般人的文化程度得以提高，军事力量也大为上升。

1517年，德国教士马丁路德在他的教堂门口贴出95条论述，抗拒和谴责罗马教廷，掀起了西欧的宗教改革运动。他鼓励信众阅读《圣经》，主张个人可以直接和上帝交往，不必借助于教会认可的圣人。这项主张是文艺复兴时期人本主义的体现，而它的物质基础则是《圣经》通过纸张与印刷被许多人所拥有，不必再以人手抄在羊皮上。马丁路德曾说，上帝对我们最大的恩宠就是赐给我们印刷术。由此可见，西欧的全面勃兴不是一个偶发事件，而是若干因素的积聚效果。人类文明素来是通过互相学习与借鉴而发展的。16世纪西欧勃兴包含着中国、阿拉伯和希腊人的智慧。

西欧的勃兴可以这样总结：作为动物界一员的人类意识到，通过自己的理性可以认识客观世界。从对理性的重视，对客观世界的认识开始，西欧人在自然科学和技术方面取得了飞跃；在人文和社会方面，宗教改革运动说明欧洲人已经脱离了中世纪的迷信和愚昧。

宗教改革运动中，不少新的教派主张个人不只要期盼死后的天堂，也要通过勤俭努力求得在现实世界上的美好生活。因此，大多数欧洲人既没有摒弃对上帝的信仰，又体现了文艺复兴的基本精神——人本主义。

在这一个物质逐渐丰裕的社会变革过程中，先是葡萄牙人、西班牙人，继而有荷兰人、法国人、英国人纷纷外出探险，寻求个人的满足和财富。西欧勃兴的主要外在表现是攫取海外殖民地，而海外殖民和由之而起的海外贸易令大量黄金白银流入西欧。黄金和白银在西欧大量流通刺激了更多的商业活动，贸易越加重要。经济学家所称的“重商主义”于焉开始。

与此同时，西欧各国皇室眼见海外殖民地带来的丰厚利润，主动组织力量支持并鼓励国民出外贸易、探险、占据殖民地。荷兰的东印度公司是早期的例子，之后法国和英国各自建立了特许的公司进行贸易和经营殖民地。英国的东印度公司一直是英国在印度的统治者，直到1858年维多利亚女王正式成为英属印度的元首。这种由皇家特许公司统治海外殖民地的做法，正是因教育普及而注重法治的西欧国家采取的变通办法：国家赋予这些公司特殊的法律地位，默许它们在海外进行本国不容许的奴隶买卖和鸦片贸易。

一次大战，北美超前

19世纪中叶，美国南北战争结束，加拿大成为英国的自治领，自此北美洲出现了两个主要由欧洲移民组成的新兴强国。两国都从大西洋地区修建通往太平洋海岸的铁路，并且在过去鲜有欧洲人居住的地区开发矿产和发展大规模高效率的农业。

美国和加拿大虽有明显的不同之处，但是大多数人的语言、宗教、社会习俗和经济发展程度相同。在长达6000公里的边界上两国都不驻兵设防，双方公民不需要护照，仅凭驾照即可通过边境。美国和加拿大可以说是世界上最友好的两个相邻的大国和强国。

20世纪初，老牌的殖民国家葡萄牙和西班牙已经式微。当时全世界最有力量的殖民国家是英国、法国和俄罗斯；19世纪末期才统一的德国和意大利正在追赶，工业化的速度极快。德国在东非和西南非各拿到一块殖民地；意大利也在非洲之角夺得两块殖民地。

就工业能力而言，美国和加拿大在19世纪末和20世纪初开始显出非凡的创造力。电话、电影、留声机、发电机、电冰箱、交流电网和飞机的发明者都在北美洲。另外，美国和加拿大是全世界最早实现十年义务教育的国家。

第一次世界大战于1914年爆发。英、法、俄三国合力对付德国，德国仅得到日薄西山的奥匈帝国和奥斯曼帝国的支持，居于战略弱势；但是德国初期士气旺盛，战绩辉煌。在这次大战中，工业革命的成果被充分利用在战争中。飞机发明仅仅十年之后，交战双方就各自成立了空军，把战争由往日不脱离地球表面的二维空间延展到空中。

本文意在论述“新丝绸之路”；因此德国飞行员“红男爵”李希特霍芬（M. von Richthofen）值得一提。他出身贵族家庭，11岁入军校。一次大战开始时，他任骑兵，在东线作战；1915年被调到西线，开始学习飞行。当时的空军战机主要是双层机翼的单人小飞机，驾驶员用身上的佩枪射击敌机人员；也有部分双座的飞机，有一名驾驶员和一名使用机关枪的观察员。李希特霍芬先任双座飞机的观察员，不久转任单人飞机的驾驶员。他智勇双全，飞机漆成红色；据德方统计，“红男爵”总共击落敌机80架，是一次大战中最著名的英雄。1918年4月21日，他击落第80架敌机的次日，李希特霍芬被地面的机关枪击中，坠机身亡，年仅25岁。“红男爵”与丝绸之路有特殊的渊源——1877年首先提出“丝绸之路”这个名词的德国地理学家李希特霍芬（F. von Richthofen）是他的伯父。

“一战”中美国始则按兵不动，坐山观虎斗，继而宣布参战，出兵打败德国。战争中间，俄罗斯发生革命，退出了大战。法国在战争中人员伤亡十分严重，但国力没有倒退。英国也受到严重冲击，但是仍维持世界第一强国的地位。美国才是真正的胜利者：在战争没有结束前提出了“民族自决”的口号，鼓励殖民地在战后争取独立；但战后却保留了1898年从西班牙手中夺取的殖民地——古巴的一部分、波多黎各和菲律宾。

二次大战，美国霸权

第一次世界大战后的德国和奥斯曼帝国损失最为惨重。德国被迫制定魏玛宪法，付出巨大的赔款，备受战胜国的摆布；奥斯曼帝国完全解体，在北非和西亚的领土被英、法分别接管。德国因为受到战胜者的羞辱而民族主义盛行，促成1933年纳粹党获选执政。意大利虽然是一次大战的战胜国，但痛感自己没

有赶上殖民主义的早班车；法西斯党人执政时，于1934年入侵东非古国埃塞俄比亚，成为最后一个试图在非洲建立殖民地的国家。

1939年，德国入侵捷克，英法无奈地出面干预，引爆了第二次世界大战。这一次与德国结盟的是法西斯党人执政的意大利和早已入侵中国的军国主义统治下的日本。中国在1937年全面抗战以后以及二次大战在欧洲爆发后，美国仍然不愿直接卷入“他人”的战争，一直到1941年日本偷袭珍珠港后美国才对日宣战，同时参加了欧洲的战争。战争结束，美国主导新的国际秩序。

冷战期间，苏联领导的社会主义阵营曾经给美国以及西欧各国造成了威胁。但是由于苏联总体经济力量薄弱，农业落后，重国防工业而轻民生工业，它的颓势很早就已经显现。在里根任美国总统时，就有美国学者预言苏联会在10年－15年内解体，主要原因将是波罗的海和中亚的加盟共和国闹独立。1989年，柏林围墙倒塌。1991年苏联正式解体，世界霸权完全落在美国手里。

这个霸权的取得与巩固，当然有赖于军事力量和政治运作。但是支撑军事和政治力量的是经济和文化力量，而经济和文化力量的来源是社会的良好管治和个人创造力的充分发挥。从二次大战前到今天，美国在经济和文化创造力方面确实在全世界领先。

二次世界大战爆发后的七八十年是人类历史上科技进步最为迅速的时期。原子弹、电视、半导体、激光、电脑、互联网、手机、纳米技术、卫星、空间站、基因技术、干细胞等等把人类的生活方式带入全新的时代，而这些创新都是在美国出现的。文化上，从20世纪中叶开始，美国式的衣着、音乐受到全世界的喜好；好莱坞的电影受到各国的欢迎和模仿。

然而在地缘上，美国的国土安全既受到太平洋和大西洋的保护，又因为相对隔绝而不能在欧亚大陆（以及非洲）随处任意发挥力量，必须在各地寻求同盟与基地。

丝绸新路，须靠东国

20世纪下半叶，美国的航空力量傲视全球，构成远途投射美国军事力量和发挥文化影响的基础。1969年美国登陆月球，此后继续发展了许多空间技术，包括空间穿梭机、各类卫星和长期空间站等。70年代，美国首创互联网；40年之后，全世界都成为互联网的天下。人类对自然界和社会的理解越来越广阔和深刻，也越来越精微细致。

20世纪最后20年，世界上影响最深远的发展就是中国加入经济全球化的过程，成为今日欧亚大陆上最为突出的力量。40年来，中国已有超过6亿人口（美国人口的两倍）脱离了贫穷并接受了现代教育；全国农村人口与城市人口的比例从70年代的8比2 改变为今天的大约5比5。这么多人口的智能开发是任何人类社会所未曾有过的。而这些成就的基本原因是大量的人力和物力在政府的调配下所修建的屋宇、公路、铁路、桥梁、隧道、电网、光纤，也包括水渠、水坝、电站、海港、机场的建设。这些基础设施的兴建是几千年人类文明的结晶，也是人类文明建设最大规模、最快速的总演练。

回顾欧亚大陆人员、思想、货物的交流情况，是古代陆上和海上丝绸之路推动了人类文明的发展。要进一步发展当前的世界，让人类文明结晶以现代科技和管理手段惠及当代的大多数人类，就需要建立欧亚大陆上（以及一些非洲国家）新式的交通大动脉。

不论飞机和互联网多么便于交通，大量物资的运输和众多人员的来往仍然需要陆上和海上的通道。中国提出来“一带一路”的概念，特别注重发展中国家的基础设施。这是基于中国自身发展的经验，又是多数发展中国家的实际需要。

“一带一路”倡议提出后，引起国际社会广泛关注，论者褒贬不一。

中国历史与丝绸之路关系密切，因此中国的倡议有天然的吸引力。其次，中国有怀柔远人的历史传统及援助亚非国家的现代经验；这些既可以使中国得到“长时段”的参照系，避免急功近利的行为，也会使“一带一路”的概念更容易被有关国家所接受。再者，中国既是海洋大国，又是陆地大国，具有陆海两方面的地理纵深与历史经验；因此“一带一路”有如一首协奏曲，两者既必须相互配合，又可以各自发挥。同时，中国目前具有强劲的经济动力，丰沛的金融资源和雄厚的科技实力。以上这些优势对新丝绸之路的建设以及建设过程中所必须的广泛国际合作都十分重要。更何况，中国与任何“一带一路”沿线国家都没有过文明或是宗教冲突；而欧洲十字军、欧洲殖民主义和当前欧美国家以我为准的心态和反穆斯林的情绪会使相当多国家的人民对欧美再度直接进入自己的家园有心理抗拒。

1935年，毛泽东写道：“莽昆仑，把汝裁为三截，一截赠欧，一截遗美，一截还东国”。环顾全球，今天世界上能够有潜力发挥跨洲运作的恰是这三股力量；而对众多发展中国家来说，最好的情况莫如这三股力量协调与合作。美国现在是世界霸主，但霸主也不可能什么都必须牵头。欧洲是当今世界最大的经济体，科技力量雄厚；但欧洲的内聚力正在涣散。这三股力量中，最有动力，又最没有阻力地从事建设21世纪新丝绸之路的应该就是毛泽东笔下的“东国”。然而，没有欧美的合作，“东国”的倡议也很难顺利推行。

盼望发展中和发达国家都能支持“一带一路”，以互助、互信、互惠和共商、共建、共享的方式，达到各国集体繁荣的目标。古代丝绸之路将被赋予新生命；欧亚大陆将实现促进人类文明进一步发展的历史宿命。

作者为香港城市大学荣休校长、北京大学及清华大学名誉教授，编辑：王延春

The International Institute of Management

ASEAN – What the Future Holds

Second International Research Conference

Addessing The Challenges of Globalization with Asean Perspectives.
Puerto Princessa, Palawan, Philippines. May 19, 2017

Prof. Dr. Maurice G.T. Teo, PHD, DSC, FIIM
Chairman
The International Institute of Management

Before **ASEAN** was formed there was **MAPHILINDO** *(**MA**LAYA, **PHIL**IPPINES & **INDO**NESIA)* – the Greater Malayan Confederation albeit for one month.

During Philippines' Commonwealth era a Malay Federation was envisioned by Wenceslao VINZONS. In 1959, Major Eduardo Abdul Latif MARLELINO, in his book, ***Someday, Malaysia***, cited the vision of the then President of the Philippines Manuel L. **QEUZON** for an integrated pan-Malayan nationhood in the region. MAPHILINDO, was to realize the dream of Dr. Jose **RIZAL**, a Filipino hero, to unite the Malay peoples, in the region, seen as divided by colonial powers.

In July 1963, QUEZON's successor, President Diosdado **MACAPAGAL**, convened a summit where the 3 countries signed agreements to resolve controversies over the former British colonies of Sarawak and North Borneo (Sabah).

On 31 August 1963, Sarawak, North Borneo (Sabah), and Singapore were granted Independence by the British, in anticipation of them joining The Federation of Malaya States **(MALAYA)** to form a greater alliance **– MALAYSIA.**

On 16 September, MALAYSIA was founded.

PHILIPPINES had claims over eastern part of Sabah while **INDONESIA** saw the formation as a British imperialist plot.

President SUKARNO of INDONESIA launched ***"KONFRONTASI"***, as he perceived MALAYSIA to be a threat to the stability of Indonesia, by sending special forces to disrupt SINGAPORE and MALAYA. It was short lived. At that time, there was fear that states such as Thailand, Malaya, Indonesia and Singapore may fall one by one to the communist (domino theory). Diplomacy and reconciliation prevailed resulting in better understanding and collaboration.

Subsequently in 1967, with the establishment of **ASEAN, (INDONESIA, PHILIPPINES, THAILAND, MALAYSIA and SINGAPORE)** the dynamics changed from one rallied against the "domino theory" of communist advancement to that of regionalism. After the Vietnam War, ASEAN has maintained a neutral and conciliatory stance towards the **PEOPLES REPUBLIC OF CHINA (PRC).**

Today, ASEAN enjoys peace and stability, despite its diversity of culture and religion. Since its founding, ASEAN has enlarged to include **BRUNEI** (1984), **CAMBODIA**, **VIETNAM**, **LAOS** and lastly **MYANMAR** expanding it to 10 member states. ASEAN, has gradually over 50 years, shifted its focus from political to economic.

PRC improved economically and politically; campaign for more influence. And with USA's appetite as global police, there is now a split within ASEAN among countries with territorial disputes with PRC and also those without.

Julie **BISHOP**, Foreign Minister of Australia said "ASEAN is not only a geographic center of Indo-Pacific but also its diplomatic center and has influence throughout Asia that is not always well-understood".

Although within ASEAN there are differing economies from first-world **SINGAPORE** to least developed **LAOS**, the **ASEAN Economic Community (AEC)** helped make ASEAN a major manufacturing, servicing and investment destination.

Investments to ASEAN outpaced those to PRC since 2013. A United Nations Population study projected ASEAN's population of 663 million in 2015 will increase to 717 million in 2030 and 741 million in 2035.

Though diverse, this added young and vibrant population will dilute the effects of aging population and be well suited to ensure continuance of urbanization, and building on the growth since 1990. It will translate to more demands for local consumption further enhancing the **GDP** (gross domestic product) of respective countries contributing to globalization.

ASEAN - GLOBAL TRADE AND SOCIAL RANKING

OUTSOURCING:	**First** in number of cities in top 100 business outsourcing.
TELECOMMUNICATION:	**Second** in monthly Facebook users and **third** in mobile phone subscription.
POPULATION:	**Third** in overall size (over 660 million)
RELIGION:	**First** in MUSLIM population; **second** in BUDDHIST population and **third** in CHRISTIAN population.
MONETARY:	**First** in issuance of SUKUK (Islamic bonds); **second** in direct foreign investment and **third** in foreign reserves.
RESOURCES:	**First** in crude palm oil and natural rubber products production; **second** in rice production and **third** in coal and natural gas production.
TRANSPORT:	**Third** for number of domestic and international flights; sea-borne cargo volume; number of ports in world's 100 biggest.
OIL & GAS:	**Third** in oil consumption.
SHORELINE:	**Second** in length.

This indicates, ASEAN is well entrenched in globalization. After all, ASEAN, as the world's 7th largest economy; having natural resources; abundant educated, skilled, talented and dynamic youths, has good growth potential.

With a GDP of US$2.5 trillion last year, ASEAN by itself is a significant diversified market with over 660 million consumers playing an important role in globalization and world trade. Philippine Finance Secretary Carlos **DOMINGUEZ** believes ASEAN is ripe for an investment boom.

The **Regional Comprehensive Economic Partnership (RCEP)** comprising of ASEAN countries, **PRC**, **INDIA**, **SOUTH KOREA**, **JAPAN**, **NEW ZEALAND** and **AUSTRALIA**, will further strengthen ASEAN's position in globalization.

Despite the positive outlook, a dark cloud is hanging over ASEAN with the territorial disputes in South China Sea with PRC's flexing its economic and political power and the unstable situation in the Korean peninsula.

It is made more complex with the erratic and unpredictable behavior of both Presidents **TRUMP** of USA and **KIM** of North Korea.

On a positive note, President **XI** of PRC calls for cooler heads while President **DUTERTE** of Philippines calls for stability, peace and prosperity. Both pointed to economic growth rather than political strength as contribution to world peace. Only in a calm and peaceful world, will all mankind will enjoy fruitful lives that they deserve.

ASEAN - THE CHALLENGE

With ASEAN's cultural and religious diversity; there is the threat of radicalization and extremism. If not kept in check, valuable resources will be wasted on containing rather than on producing goods and services.

Some countries within ASEAN, are forging individual trade alliances outside this region. Though practical, with differing ideologies and ambition, they may inadvertently become proxies of those alliances. This may lead to tensions between ASEAN countries.

Despite being 50 years old, freer movement of citizens within ASEAN is still not practiced as each country tries to safeguard its domestic interest.

Will RCEP also bring closer shared visa policy akin to Schengen countries of Europe?

ASEAN has a tremendous large pool of talented, dynamic and educated youths but for now most found work outside their country of birth. This brain drain may inhibit ASEAN's growth in the future.

ASEAN countries cannot afford to continue this practice depriving itself of this resource. Surely, ASEAN as a US$2.5 trillion economy, should be able to find ways to ensure profitable and gainful employment for its citizens, ensuring those in lesser developed areas move up the economic ladder faster.

The PRC is promoting "**one belt one road**", aiming at integrating the economies of Africa, Europe and Asia through a powerful network of transport and communications infrastructure.

Recently, Straits Times reported 110 countries, from Europe and Africa and Russia, are sending their national leaders to PRC for the "one belt, one road" conference; along with Philippines, Malaysia, Vietnam and Indonesia from Asia.

USA, Japan, India, Australia, Singapore and most West European countries will be represented but at a junior level at this forum.

Since, most countries in ASEAN lack good infra-structures especially roads, (with the exception of developed ones) the founding of **AIIB (Asian Infrastructure Investment Bank)** will provide these ASEAN countries with cheaper alternate project finances.

Hence, these ASEAN countries should not wait, but seize the opportunity. With better infrastructures, improving connectivity, time to market will be greatly reduced enhancing efficiency while complementing productivity. This could only mean faster and larger GDP growth.

ASEAN- RESOURCES WORTH NOTING

1. accounts for quarter of the global fish production;
2. has unique biodiversity;
3. is an exceptionally culturally diverse market;
4. is home to 227 world's largest companies;
5. has over 300 million young, dynamic and talented work force;
6. expected double by 2025, the number of households;
7. is fourth largest exporting region in the world after EU, North America and PRC/Hong Kong;
8. is the world's seventh largest economy; and
9. is the world's second longest coastline.

Experts opined ASEAN would see robust growth throughout the next decade and perhaps overtake EU economy within a generation. Whether this happens or not, the consensus is that ASEAN will grow rapidly in terms of economic and influence in the world.

In a way, Dr. Jose RIZAL's dream of uniting Malay peoples in the region was fulfilled. The original thought of a pan-Malayan federation had evolved along the years and became the ASEAN we know today that as an inclusive economic, multi-racial, and cultural grouping in the South East Asian region.

Recently, Singapore's Foreign Minister, Dr. Vivian **BALAKRISHNAN** said: "ASEAN remains a vital, viable, dynamic and growing area that is replete with many business opportunities".

Yes! The future holds well for ASEAN.

The International Institute of Management

The Next Twenty Years

Prof. Yue Chim Richard Wong,
AB, AM, PhD in Economics, Chicago

Dr. Yue Chim Richard Wong (AB, AM, PhD in Economics, Chicago) is Professor of Economics and the Philip Wong Kennedy Wong Professor in Political Economy at the University of Hong Kong. He was Founding Director of the School of Business, Founding Dean of the Faculty of Business and Economics, and Deputy Vice-Chancellor and Provost.

His research focuses on the political economy of public policy – property, housing, labor and population – and regional economic development in China. He founded in 1987 and 1999, respectively, the Hong Kong Centre for Economic Research and the Hong Kong Institute of Economics and Business Strategy. He is currently Director of the Institute for China and Global Development.

Wong was awarded the Silver Bauhinia Star in 1999 by the Government of the Hong Kong Special Administrative Region in recognition of his contributions to education, housing, and industry and technology development and appointed a Justice of the Peace in 2000.

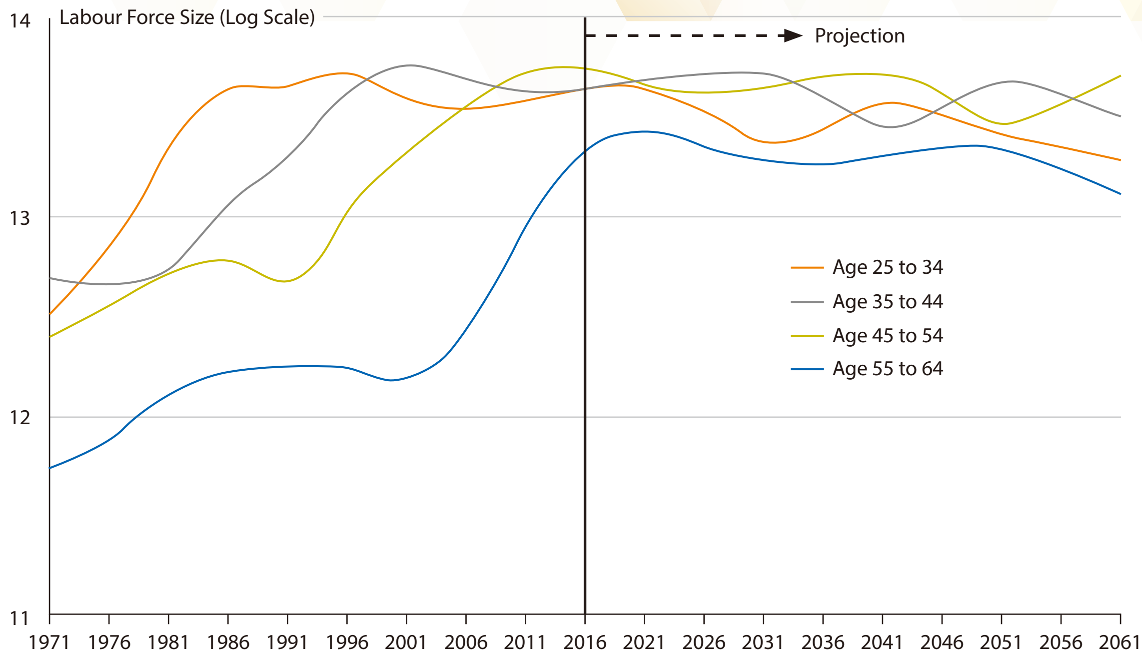
He writes a weekly political economy column for the Hong Kong Economic Journal.

Last Saturday Andrew Sheng, writing in the South China Morning Post about Asia's future in the next market adjustment, correctly pointed out: 'Ultimately, demographics and geography determine destiny'. Hong Kong has the most robust market institutions in Asia for weathering the looming uncertainties in the global economic environment. It also has the right geography. But unfortunately it has poor demographics.

The right geography is its location in the fastest growing area in the world. The share of world GDP of the G7 countries – the U.S., Germany, Japan, France, Britain, Canada, and Italy – declined from about 65% in 1990 to 45 per cent in 2010. This 20% share has shifted to six other countries, namely China, Korea, India, Poland, Indonesia and Thailand – four of them located in Pacific Asia. Hong Kong is at the center of this region. What better neighborhood is there?

Hong Kong's poor demographics are the declining size of its labor force and the slow growth of its quality. Government projections show that the labor force will shrink by 3.9% in 2016-26 and 2.2% in 2026-36. More worrying, the younger labor force of 25-44 year olds will decline by 10.4% and 7.3% in these two decades, respectively. Projected labor force numbers to 2061 are shown in **Figure 1**.

Figure 1: Hong Kong labour Forces Projection by Age Groups (1971-2061)



Sources: Hong Kong Census Department

Investing in Education and Attracting Skills and Talents

A declining and ageing labor force means investments and jobs will go elsewhere. To sustain investments in the highest value added jobs, the younger population has to be much better educated than it is today. Investing in the education of the young generation must be a top priority for the incoming government both for fostering economic growth and equity. Providing education vouchers to students attending self-funded tertiary programs will advance both goals.

In the absence of more investment in education, Hong Kong's aggregate human capital stock as measured by the average years of schooling multiplied by the size of the labor force will cease to grow after 2016 (see **Figure 2**). In fact the aggregate years of schooling has plateaued since 1996 among 25 to 44 year olds. For 45 to 64 year olds, they only began to plateau in 2016.

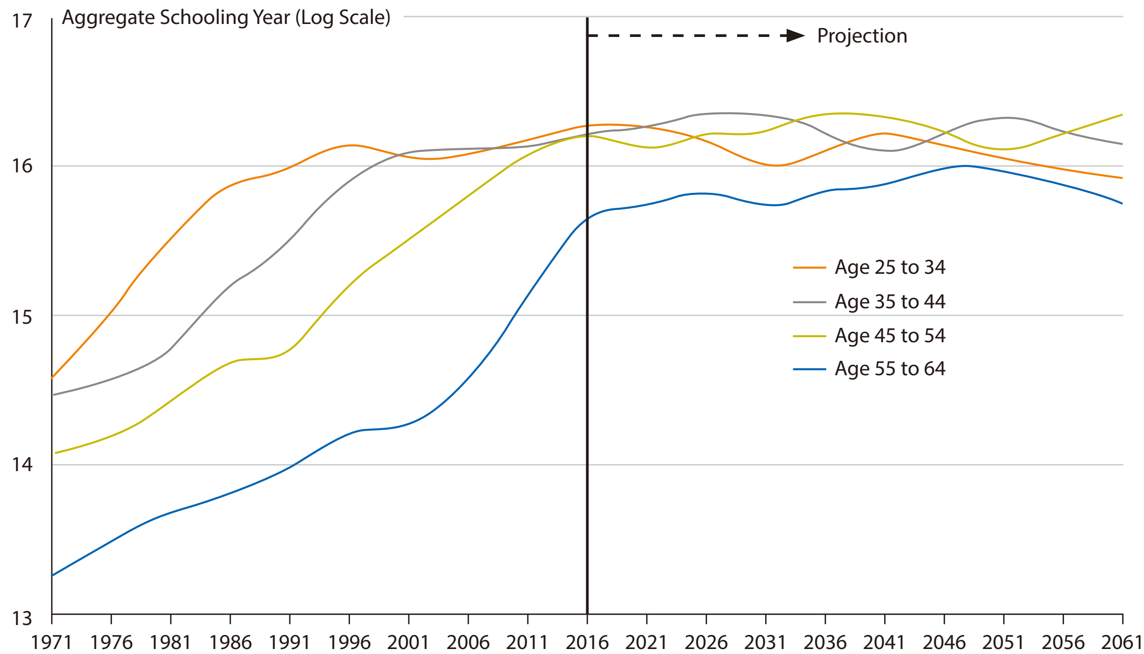
Obviously it does not pay to educate everyone to the point of no net returns. This would be economically wasteful. And not everyone would want to be so educated. But current estimates of private and social rates of return to education are still very high, in the order of magnitude of 23.6% and 13.1%, respectively, at the first-degree level. The questions of how much to expand education investment, at what pace, and in which areas have to be addressed as a matter of considerable urgency by the government as these things take time to bear fruit.

Education investment, important as it is, will not yield results quickly enough to prevent the loss of economic opportunities in an increasingly competitive global environment. A more proactive and sustained effort to attract skills and talents from outside Hong Kong will be necessary to protect economic growth and grow quality jobs.

Contrary to the fears of many, importing skills and talents need not lower the wages of local employees because investments will expand to create more and better paying jobs. The shortage of a skilled and talented population deters investments that are crucial for economic growth and quality jobs.

Experience from Israel, which received a massive influx of Jewish immigrants after communism ended in Eastern Europe and the Soviet Union, proves that the arrival of more skills and talents help create a booming economy to the benefit of all, including domestic unskilled workers. More new companies were started and better jobs were created. Immigrants were crucial in helping Israel grow its new technology economy.

Figure 2: Hong Kong labour resident's Aggregate Years of Schooling by Age Groups (1971-2061)



Sources: Hong Kong Census Department

Hong Kong's own experience after the war shows the important role immigrants played in bringing in new industries that did not exist previously. The idea that foreign workers can only drive down the wages of domestic workers assumes that the amount of investment will remain unchanged. This is not correct when there is no shortage of funds, but only of skills and talents.

Attracting skills and talents from overseas will not succeed without addressing housing and other necessary infrastructure to make Hong Kong attractive to them. The shortage of housing in particular is the most important issue and one that locals are most unhappy about.

Rethinking Public Housing Policy

Public housing is an area where government needs to fundamentally rethink its policies. The outgoing administration viewed the housing challenge as one of releasing sufficiently more land to build more housing. Increasing the supply of land and housing are viewed here as two stages of a single unified challenge – land is flour and housing is bread. So increasing housing supply must require finding more land. But this is not an entirely correct view.

Hong Kong's housing market is enormously complex and heavily regulated. In 2016, 30.4% of households lived in government subsidized rental housing, 15.9% in government subsidized ownership housing, 13.0% in private rental housing, and 36.2% in private ownership housing.

But there is a big difference between public and private sector housing units. Units in the public sector cannot be rented out and severe restrictions are placed on the transfer of public ownership units. Only housing units in the private housing sector (amounting to 49.2% of the total housing stock) are freely transferrable on the open market and can be used either for owner occupation or rented out.

Public renters were admitted through either resettlement or lack of means. The former are not means tested, only the latter are. Over time more households that were initially without means have become well off tenants. The exact number of well off tenants cannot be accurately defined and their identities are not easily identified.

Well off tenants that fail to declare their true income and assets, and are subsequently discovered are often only required to pay double the normal rent and not necessarily evicted. As a consequence, the public rental housing units are probably inefficiently allocated to a non-trivial extent. In 1994, a survey found that 15 per cent of public rental households own private property.

There have been several attempts to evict well off public rental tenants from the program, but these have been extremely divisive and confrontational because it is difficult to accurately identify well off tenants using a snapshot of current income and assets that can be manipulated.

The application of summary criteria that appear as uniform need not be fair because a family's true economic circumstance cannot be reduced to a few figures. Manipulation of numbers will further exacerbate the sense of unfairness and injustice of those victimized.

Before the 'double rent policy' was implemented in 1987 many households in public rental housing were living in very cramped conditions. The situation today has reversed. Cramped public rental quarters are no longer a serious problem. With the introduction of the 'double rent policy' many working children have deregistered themselves from their parents' home in order not to breach the income and asset eligibility criteria.

Instead they have joined the application waiting list for public rental housing and are renting in the private sector. Average household size in the public rental sector has declined rapidly and is now no different from that in the private rental sector. As a result, the public rental housing sector is less cramped relative to the private rental sector among units of comparable size.

This situation has arisen because public rental housing cannot be sub-divided, rented out, and sold like private housing on the market. Cramped living conditions in the public housing sector of the past, and in sub-divided housing in the private sector today, are both evidence of a misallocation of housing resources among the population.

Such situations often result from regulations that target public housing tenants but generate spillover effects onto the private housing sector. The reversal of cramped conditions from the public sector is exacerbated because a relatively small private rental sector comprising 13.0 per cent of the entire housing stock has to absorb the shocks emanating from a larger public rental sector of 30.4 per cent. Favorite locations for sub-divided housing are even more concentrated.

I will not be at all surprised if the initiative launched in November 2016 to tighten the eligibility criteria of well off tenants will further exacerbate the sub-divided housing situation in the private rental sector. The reason is because it will incentivize more tenants to downsize their households in order to meet the eligibility criteria and remain in the program. This only sends more members to join the applications list where the wait keeps expanding and is used by government as an indication of the demand for public rental housing.

This produces an inbuilt dynamics to keep growing the public rental sector that will increasingly crowd out the private housing sector. Divorced households that split into two also increase the demand for public rental housing. This too lengthens the application list.

Tackle Housing and Demographics Together

A housing sector that becomes increasingly dominated by public rental housing units will not be conducive to attracting skills and talents from outside Hong Kong for both economic and political reasons.

Homeownership is the most important means for the general public to benefit from a growing economy. As the economy prospers, housing prices in the city will rise over the long run. A city of homeowners implies nearly everyone can share in the prosperity of a growing economy.

A city increasingly dominated by public rental tenants encourages a redistributive mindset, breeds envy and jealousy leading to political divisiveness that is detrimental to economic growth, and nurtures a shared poverty ethos.

When most citizens are public housing tenants, they will resist the arrival of skills and talents in fear that they have come to take away what is rightfully theirs. When most citizens are owners of private property, then they will welcome the arrivals as the bearers of shared prosperity, not shared poverty.

How to Understand Twenty Years of Economic Performance

Prof. Yue Chim Richard Wong, AB, AM, PhD in Economics, Chicago

How has Hong Kong's economy performed in the twenty years since the establishment of the Special Administrative Region? Compared to the previous twenty years, economic growth has certainly slowed and economic inequality has increased.

Average annual growth rates of GDP and GDP per capita increased, respectively, by 6.6 and 4.8 per cent in the period 1977-1997 but 3.2 and 2.6 per cent in 1997-2017.

Among households with heads between aged 20 and 65 years old, the Gini-coefficients on the distribution of household income (before government transfer subsidies) increased from 0.432 in 1976, to 0.477 in 1996 and 0.507 in 2016. To avoid artificially distorting the measured Gini coefficient, I have excluded households with heads over 65 years old because these are mostly retired and without income.

The changes in growth and inequality are fairly large between the two periods. Why have these figures worsened by so much? And how should we judge this economic performance?

I have come across several popular explanations for our relatively poor economic performance since 1997 compared to the two decades before then.

First, some claim the more recent period experienced the detrimental effects of the Asian Financial Crisis and the Global Financial Tsunami, while the earlier period benefited from structural economic transformation due to China's economic opening. But these factors cannot explain why Hong Kong has not performed as well as Singapore in the past twenty years since both economies have faced the same external challenges.

Second, some claim the continued adherence to 'positive non-interventionism' as the policy guideline for conducting economic policy is outdated. But it is not clear to me whether it is due more to the adherence to such a policy as opposed to fewer adherences that might be contributing to the lower efficiency and rising inequality.

Before 1997, the government paid Hong Kong Telecom and purchased back its franchise on telecommunications in order to open up the market. Nowadays we put up hurdles to make it difficult for Uber, Airbnb, medical doctors and all sorts of businesses and skilled workers to operate in Hong Kong. Visitors from the Mainland scoff at the backwardness of our financial technology in Hong Kong. In so many areas regulatory barriers have held back innovation and competition; and in some cases worsened equality. The track record of the past twenty years is far from clear-cut.

Third, the finger has been pointed at the rapid structural transformation of Hong Kong's economy from export-oriented manufacturing to services, following China's opening in 1979. Since both consumer and producer services are often more regulated than export oriented goods industries, therefore, by default the Hong Kong economy has become less free, competitive, and efficient.

Fourth, some argue the rising cost of development due to regulatory costs has led to a severe shortage of property and housing that has slowed growth. Rising rents and property prices have also contributed to greater economic inequality, especially in propertied wealth, and the cost of doing business at a time when rising prosperity throughout Asia has fueled the demand for office space and domestic housing in Hong Kong.

In principle, some of these factors are not without merit, but it is not always easy to demonstrate empirically if their cumulative effects can account for Hong Kong's poor economic performance. Every industry, no matter how large, is still a small part of the overall economy so the negative impact is often greatly exaggerated.

When I was a student of Professor Robert Fogel's economic history course on strategic factors in American economic growth. I learned to appreciate that even as important a factor as railroads had a modest impact. He estimated that if the U.S. had not built railroads – considered by most economic historians to be the engine of American growth – the economy would only have grown slower by at most one-quarter of one per cent. And the reason is simple: there were always less perfect substitutes for railroads, implying the future would not be as bleak as imagined.

If a primary cause for Hong Kong's economic slowdown and increasing inequality could be found then, it is likely to be the changes in population and labor. Labor employment accounts for one-half to two-thirds of GDP in most rich economies. Gini-coefficients in most countries measure only labor incomes in a household because other sources of income are often missing or under reported; hence, observed economic inequality is mostly due to labor market income.

Hong Kong's poor economic performance in the past twenty years has its origins in the population structure it inherited from the immediate postwar years. In the period from 1945 to 1948, the population of Hong Kong increased from 600,000 to 1.8 million as a result of the influx of immigrants from the Mainland. Another 500,000 arrived between 1948 and 1951 and Hong Kong's population increased to 2.3 million.

These influxes probably shaped the future course of Hong Kong's economy up to the present time more than any other factor. They created waves of population surge and collapse by age cohorts.

The adult generation that arrived after the war from 1945 to 1951 was the largest cohort and they gave birth to an unusually large baby boom generation because they wanted large families. The baby boom generation that reached family formation age in the 1970s wanted small families. The third generation delayed marriage and wanted even smaller families so they only reached family formation age in the 2000s.

As a consequence, the number of children born in different age cohorts has changed dramatically. The number of children born in the 1950s was by far the highest among all postwar cohorts; but fewer were born in the 1970s and fewer still in the 2000s.

The large number of births in the 1950s cohort entered the labor market in the 1970s, ushering in a period of rapid economic growth. But the subsequent drop in the fertility rate meant that the number of new entrants to the labor force ceased to grow beginning from the 1980s and increasingly experienced periods of decline (see **Table 1**). Hong Kong does not merely have an ageing population situation; it also has an increasingly serious problem of tight labor supply because of the declining numbers of young persons.

Table 1: Ten-Year Change of Population Numbers by Age Group and Sex

Age group	Sex	1961-71	1971-81	1981-91	1991-01	2001-11	2011-21	2021-31
20-29	**M**	84,000	272,700	-66,900	-56,100	-14,400	-55,400	-36,800
	F	72,800	240,700	7,900	-4,600	8,000	-53,700	-25,100
30-39	**M**	-9,300	129,000	209,300	-14,900	-108,300	4,500	-59,600
	F	-29,000	93,300	259,800	137,900	-44,600	81,100	-15,600
40-49	**M**	64,300	36,900	71,600	241,100	-67,900	-70,400	6,500
	F	56,900	600	74,400	301,200	73,900	-42,600	50,300
50-59	**M**	82,700	70,100	25,200	82,100	204,000	-41,500	-72,000
	F	56,400	53,200	6,300	88,600	257,200	66,700	-65,000

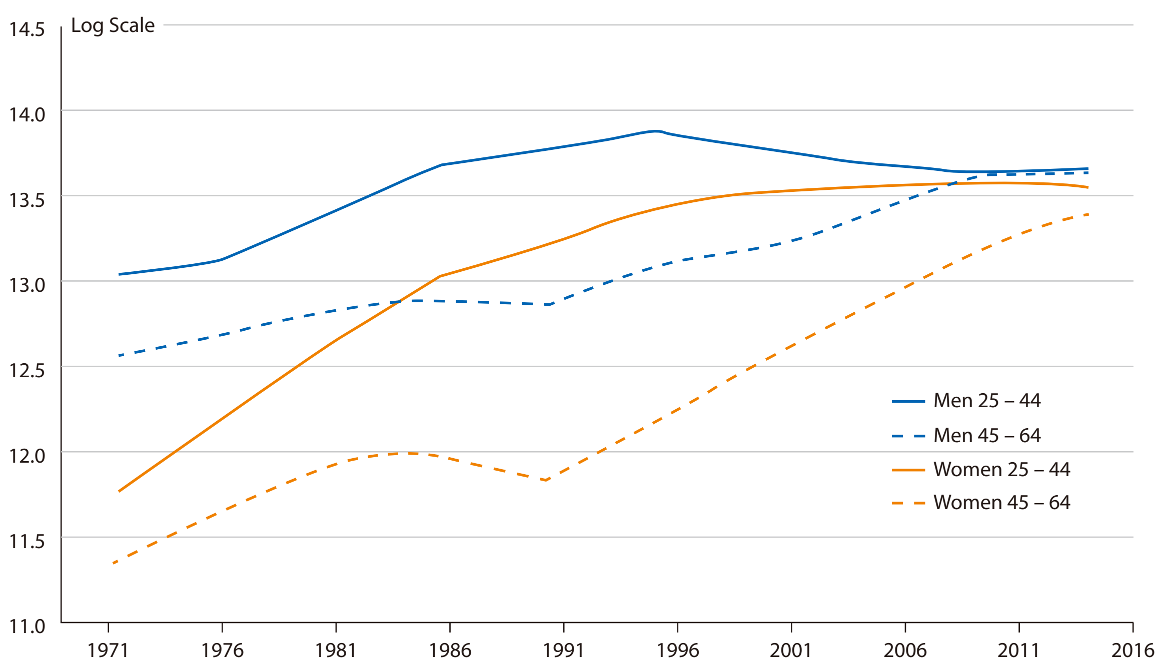
Note: Figures for 2011-2031 are projections.

During 1961-71 large numbers of 20-29 year old women entered their marriage and childbearing years. In the same period, the number of 30-39 year old women that had completed their childbearing years was in decline. This created an unusually tight labor market just at the time when the textile and garment industries were in ascendance. The result was the innovative emergence of outworkers as a new employment contractual form that allowed women to work at home and be paid by piece rates.

The decline of 20-29 year old women in the population from 1981 to 2011 was significantly less than that of men due to the rise of cross border marriages following China's opening. This also accounts for the projected surges of 30-39 year old women in 2011-21 and 40-49 year old women in 2021-31. I believe the minimum wage legislation that was enacted in 2010 reflected the political pressure exerted by the labor unions to mobilize these women into the labor force and become their voters.

The surges and collapses of population change by age cohort greatly affected the size and composition of the employed workforce. From 1971 to 1996, the number of 25-44 year old employed men and women grew rapidly, especially in the earlier part of that period (see **Figure 1**). But from 1996 to 2016, the numbers for men declined precipitously and only steadied towards the latter part of the period. For women aged 25-44, their numbers remained steady largely due to rising labor force participation rates and new immigrants through cross-border marriages.

Figure 1: Number of employed men and women by age cohorts



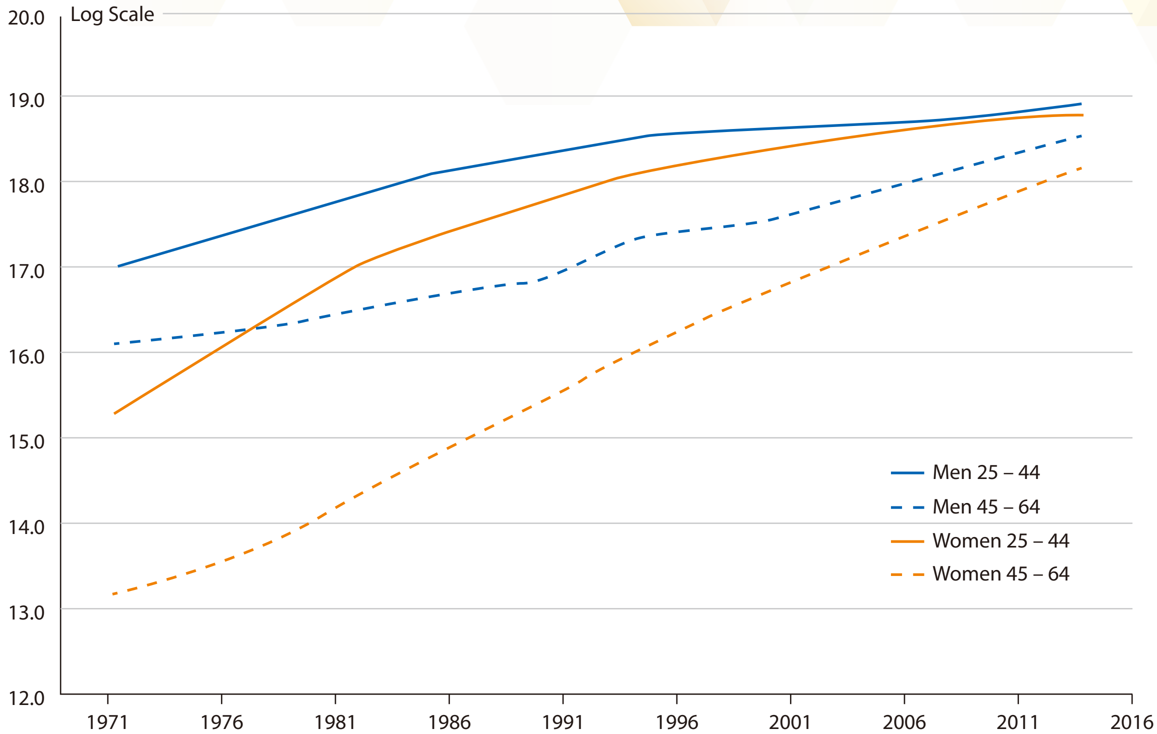
Sources: Population Census and By-census

The number of 45-64 year old employed men and women grew rapidly from 1971 to 1996, and continued to increase afterwards but at a somewhat lower rate without experiencing a downturn.

Although the average years of schooling in the population improved as a result of the expansion of education, this did not increase enough to make up for the decline in numbers. From 1971 to 1996, the aggregate years of schooling among employed men and women aged 25-44 years old grew rapidly (see **Figure 2**). But from 1996 to 2016, the growth slowed dramatically among employed men and more gradually among employed women.

Clearly the slowing and declining numbers of 25-44 year olds in the working population were not sufficiently compensated for by improvements in productivity as measured by more years of schooling. This has been the primary source of slowing economic growth in the past twenty years.

Figure 2: Aggregate years of schooling among employed men and women by age group



Sources: Population Census and By-census

It also explains why Hong Kong's economic performance has been less successful compared to Singapore, which has aggressively sought to increase the size and education quality of its workforce through investment in education and attracting immigrants.

Historically, Hong Kong's total factor productivity (which measures the productivity of an economy taking into consideration labor, human capital and physical capital) has been higher than Singapore's. In the 1970s Hong Kong's total factor productivity was 7.7% higher than Singapore's, in the 1980s 13.8% higher, and in the 1990s 46.8% higher, but in the 2000s the gap has narrowed significantly to 5.9%. In the period 2010-14 Hong Kong has actually fallen behind Singapore by 5.7% (see **Table 2**).

Table 2: Total Factor Productivity in Hong Kong and Singapore

	Hong Kong TFP	Singapore TFP	Ratio of Hong Kong TFP to Singapore TFP
1960-69	0.802	0.494	1.623
1970-79	0.998	0.927	1.077
1980-89	1.028	0.903	1.138
1990-99	1.010	0.688	1.468
2000-09	0.932	0.880	1.059
2010-14	0.736	0.781	0.943

The 25-44 year olds are usually the most innovative segment of the entire workforce. Their slow growth in terms of both numbers and human capital endowment is in my view the single most important factor that has slowed down Hong Kong's GDP and GDP per capita growth in the two decades since the establishment of the Special Administrative Region. It is also one of the reasons behind the increase of economic inequality. The imbalance in human capital distribution is in part a result of the failure of our population and education policies.

This does not rule out the relevance of other factors, but if the problem of human capital investment and its distribution is not remedied, it will be difficult to make any significant improvements to economic growth and inequality. Investing in the young generation is probably the single most important factor on which Hong Kong's economic future depends, assuming of course that 'one-country two-systems' will be in place.

The International Institute of Management

The MPF System: an Integral Part of Hong Kong's Retirement Protection System

by Dr David Wong, Chairman, Mandatory Provident Fund Schemes Authority

Dr. David Y.K. Wong, PhD GBS BBS JP

Chairman, Mandatory Provident Fund Scheme Authority

The Mandatory Provident Fund (MPF) System is the second pillar of the multi-pillar retirement protection framework recommended by the World Bank. It is a mandatory, privately managed, fully funded contribution system which aims to provide basic retirement protection for the employed population.

Mandating the local workforce to save for retirement is like mandating the wearing of seat belts to ensure people take action to protect themselves. The MPF System ensures that all members of the working population set aside some savings during their working years for their retirement, including those who would otherwise not do so.

Ever since its inception, the MPF System has evolved for the benefit of MPF members, expanding the range of MPF funds, introducing more flexibility in withdrawal arrangements, and giving members more control over their MPF investments through the Employee Choice Arrangement.

Issues of Public Concern

Despite the various improvements to the System, there is continual concern in the community about the fees, investment performance and adequacy of the MPF System.

In considering these issues, it must first be recognized that the MPF System is a large-scale social programme covering a large part of the population of Hong Kong. There are around 280,000 employers and 4 million employees, self-employed persons and personal account holders participating in the MPF System, and altogether 8.9 million member accounts administered by MPF trustees.

Fees

In administering MPF schemes, trustees have the statutory duty to perform a wide variety of administrative functions, which naturally incur costs. These administrative functions include collecting and allocating employers' contributions, assisting in chasing employers for outstanding contributions, handling transfers between schemes and fund switches within schemes, and administering how and when withdrawals can be made.

As a result, the overall administrative and investment costs for managing an MPF scheme are inevitably higher than those for managing a retail investment fund.

Nevertheless, the Mandatory Provident Fund Schemes Authority (MPFA) has been striving hard to keep fees as low as possible for the benefit of MPF members. Over the years, the MPFA has introduced a range of initiatives to bring fees down, primarily through enhancing disclosure, promoting competition in the MPF industry, and streamlining and simplifying MPF administrative processes to reduce administrative costs. Leading MPF providers have also responded to the call for better efficiency by consolidating less cost efficient schemes and funds. These initiatives have yielded solid results. In the past 10 years, the average Fund Expense Ratio of MPF funds dropped by 25% from 2.10% to 1.58%. As at the end of March 2016, 40% (189 funds) of all MPF funds are low-fee funds (i.e. funds with management fees at or less than 1%, or an FER at or less than 1.3%).

Investment Returns

In the 15 years since its inception, the MPF System has also added value to scheme members' retirement savings. As at the end of November 2015, the System had HK$590 billion in assets, of which one-fifth, or HK$114 billion, was investment returns. The 15-year annualized rate of return of 3.1% exceeded the average inflation rate of 1.8% over the same period.

There are sometimes queries from scheme members about why they must invest in MPF funds and cannot invest directly in stock markets, commodities or even property. Since the MPF is a long-term investment for the employed population to accumulate retirement savings, it is necessary to put in safeguards in the MPF legislation regarding how MPF funds may be invested for the protection of members' interest and have the funds invested by professional investment managers.

The investment returns of MPF funds are inevitably affected by the cycles in the financial markets, and the markets can be very volatile at times. However, scheme members should not be overly concerned about short-term volatility, because making regular contributions over a long period can even out short-tem fluctuations in market prices by averaging out the cost of the fund units. Members can also seek to reduce risk by means of a diversified portfolio across asset classes and regions.

Adequacy

The MPF System, as one of the pillars for retirement protection, has been designed to provide only basic protection, and only for the employed population of Hong Kong. MPF contributions are kept at a relatively low level, 5% for self-employed persons or employees, and another 5% from employers for their employees. Below a minimum income level, self-employed persons or employees do not need to contribute. The total monthly contribution is capped at HK$3,000 per month.

Having said that, there is room for increasing MPF contributions in the future. The extent of the increase would of course need to be consistent with the MPF's objective of providing basic retirement protection and the understanding that individuals may also use other investment vehicles to accumulate savings to meet additional retirement needs.

MPF Achievements

In the 15 years since it was set up, the MPF System has made a significant contribution to enhancing the retirement savings of the employed population of Hong Kong. Before the MPF System was implemented, it is estimated that only about one-third of Hong Kong's employed population were covered by any sort of occupational retirement protection scheme.

As at 31 December 2015, 85% of Hong Kong's employed population were covered by the MPF System or some other forms of retirement scheme. Most of the remaining employed population was not legally required to join any local retirement scheme.

The total asset size of the MPF System, at HK$590 billion as of November 2015, is almost equivalent to 70% of the Government's estimated fiscal reserves of HK$860 billion. This figure is a clear indicator of the power of savings.

The MPF is intended to be a vehicle for individuals to accumulate savings over their full working life of around 40 years and then to spread the accumulated sum over their retirement years to meet their basic consumption needs. The current 15-year-old System will mature in around 2040 because only by then will there be members who have contributed to the MPF for their full working life of 40 years and only by then will scheme members be able to see the full magnitude of the benefits that the System can produce.

Initiatives in the Pipeline

The MPFA has been continuously looking for ways to refine the MPF System and enhance its value to scheme members. At present, we have set two key tasks as priorities. First and foremost is the introduction of the Default Investment Strategy (DIS).

The DIS is designed to provide all scheme members with a simplified investment option that is consistent with the overall objectives of retirement savings. The DIS is a globally diversified investment strategy that will de-risk as the age of a scheme member increases. In addition, the funds invested in the DIS will be subject to a fee cap. The MPFA believes that the DIS will be appropriate for scheme members who find it difficult to make investment choices, or for those who do not have the time or do not want to do so.

The relevant bill is now being considered by the Legislative Council. We hope that the DIS will be launched as soon as possible.

In parallel with the DIS, the MPFA has embarked on another major initiative to explore possible measures to streamline and standardize the administration of MPF schemes as far as possible (tentatively called "eMPF"). The MPFA has developed a preliminary conceptual model of the eMPF infrastructure and processes to standardize, streamline and automate MPF scheme administration in the long run.

Apart from being a one-stop electronic portal for scheme members to access all relevant information about their MPF account, eMPF would provide centralized collection of MPF contributions and required information from employers through e-channels. The objectives of eMPF are to lower the operating costs of MPF providers, allow employers and scheme members to deal with various MPF matters more conveniently and efficiently, and provide scheme members with more flexibility and better-quality services and tools.

Retirement protection – a shared responsibility

Retirement protection is a complex and multi-faceted issue involving a balance between public and individual responsibility. Publicly-funded pillars and privately-funded pillars complement each other in providing total retirement adequacy for the population.

The MPF System is an integral part of Hong Kong's retirement protection. The stronger the MPF System becomes, the less reliant our working population will be on the publicly-funded pillar when they retire.

To enhance retirement protection in Hong Kong, all available pillars, including the MPF, should be optimized.

比「重中之重」還要重的房屋政策

曾淵滄博士

曾淵滄博士，新加坡華人，英國曼徹斯特大學哲學博士，為香港著名學者、財經分析員及專欄作家，曾任香港城市大學工商管理碩士課程主任、管理科學副教授，以及多家企業、機構顧問。

曾博士為中國、香港及新加坡多家機構及媒體撰寫專欄，並多次受邀在中國、美國、香港、新加坡媒體和研討會分析經濟投資與管理方面的課題。

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- 新加坡南洋理工學院數學系學士

歷任

- 香港城市理工學院（後更名為城市大學）應用數學系高級講師
- 香港城市大學管理科學系副教授
- 香港深水埗區區議會委任議員
- 中國江西省贛州市人民政府經濟顧問
- 香港運籌學會主席

榮譽

- 香港城市大學最佳商業應用研究獎
- 香港特區政府榮譽勳章
- 南洋理工大學校友獎

7 月 1 日，國家主席習近平為香港第 5 屆特區政府主要官員主持就職典禮的時候，發表了一篇很重要的講話，這篇講話的重要性，是因為這是中央最高領導人第一次對香港今日所面對的問題做出做出最直接的觀察，最清晰的解釋及指出中央政府的指示，習近平說他有 4 點意見，不過，從特區政府的角度來看，4 點意見就是 4 點指示，是對新任政府的期望與要求。

習近平指出，發展經濟的同時，民生問題也一樣重要，習近平罕有的公開指出香港住房民生問題比較突出，看來，住房問題在林鄭月娥的政策中，將得比梁振英任期內的「重中之重」還要重。

梁振英任內 5 年，代表香港二手樓樓價走勢的中原城市領先指數上升 53%，這還是在重重的辣招之下所維持的，要增加住房供應要很長的時間，因此，梁振英在無法加快供應的背景之下只能推出「需求管理」的辣招，有一定的成績但遠遠不能滿足香港市民的期望。5 年時間增加 53%，說多不多，說少不少，平均每年復式上升 9%，這與上世紀 90 年代，即 1990 年至 1997 年時代相比，差得遠，當時樓價上升幅度是好幾倍。

很明顯的，過去幾年香港樓價上升幅度遠比上世紀 90 年代港英政府時期低，但是，為什麼過去幾年，香港民間的怨氣比上世紀 90 年代高？過去幾年，許許多多的人都說買不起樓，而在上世紀 90 年代樓價上升幅度遠比今日高，但是社會怨氣比今日低，為什麼？

我認為原因有 3 個，一個原因是過去 5 年，香港人的收入增加的幅度很少，而上世紀 90 年代，收入增加的幅度很高，還記得上世紀 90 年代初的某一年，單是公務員的常年加薪就已經高達 20% 左右，樓價漲，薪水漲，人人爭着買樓，而當時的港英政府也沒有推出今日所謂的辣招來阻止人們買樓，樓房供應也很充足，市民加薪的幅度高，對樓價上漲所產生的壓力也相對小。今日，樓價升幅雖沒有上個世紀 90 年代高，但是，經濟停滯不前，人人加薪幅度很低，甚至無薪可加，特別是大學剛畢業的學生，5 年前的起薪與今日的起薪幾乎是一模一樣，這就是大學生怨氣的所在，5 年來薪水沒加而樓價加。

第二個原因是政治背景不同，上個世紀 90 年代，人人所關心的不是樓價上升，而是 1997 年是否能和平過度，因此，樓價上升被認為是好事。樓價上升表示人人對 1997 年的回歸充滿信心，社會一片歡欣，海外移民也紛紛回流，當時樓價上升的一個原因就是信心的復蘇，對 1997 年回歸的信心高漲，沒有人相信 1997 年回歸香港會變成死城。

第三個原因是當時的港英政府並沒有推出像今日那樣的辣招、特別印花稅、買家印花稅、雙倍印花稅、15% 印花稅 ……因此，當時全民炒樓，炒樓賺到錢的人很多，賺錢的人多了，樓價上漲被認為是喜事，正如股市上漲一樣，社會上喜氣洋洋，市場上充滿了年入百萬的地產代理，今日情況不一樣，雖説樓價上漲，但是種種的印花稅，各種各樣的特別印花稅壓抑了業主放售樓盤的誘因，看着樓價上漲而不能套利，歡喜的程度自然打折扣。

明白了今日樓價上漲，社會怨氣上升而當年上個世紀 90 年代樓價上漲，社會沒有怨氣的原因之後，下一步就是如何減少怨氣。

怨氣的第一個原因是香港人在過去年收入沒有增加，或是增加得很少，今日香港社會有許多人正在領取最低工資，領取最低工資是可悲的一群，這説明了這群人如果沒有政府為最低工資立法，他們今日所能領取的工資會遠低於他們今日所領取的，如果最低工資沒有增長，他們無法得到加薪，這説明香港有太多人缺一技之長，能賺取比最低工資更高工資的人，很明顯的，香港的技能 , 再培訓的工作做得並不夠，至少比新加坡差。今日新加坡家庭收入中位數遠遠高於香港，新加坡平均個人所得也遠遠高於香港，而新加坡是一個沒有最低工資立法的國家，這説明了新加坡人的技能水平比香港人高，不需要最低工資立法而能賺取比香港人高的工資。新加坡大學畢業生的起薪也遠比香港高，很明顯的，要減少怨氣的最佳方法是發展經濟，是培訓香港基層勞工的技能，發展經濟才是硬道理。上個世紀 90 年代，香港人對 1997 年的回歸充滿信心，海外香港人紛紛回來香港參與發展，建設香港，經濟蒸蒸日上，樓價上漲就不是怨氣的製造者。

上個世紀 90 年代的港英政府並沒有推出任何限制買樓、賣樓的措施，理由是樓價上漲被視為對 1997 年回歸的信心表現，是好事，不是壞事。今日，香港已經回歸，樓價上升就不代表對將來的信心，反而被反對派攻擊，反對派借內地人來香港買樓，買地大造文章，製造怨氣，製造仇恨，希望香港人仇恨內地來港買樓買地的人。目前額外 15% 的買家印花稅看來作用不算大，反而讓地產發展商用來促銷新樓盤，地產商的方法是將樓盤的售價抬高 15%，然後再提供 15% 的優惠，説是為買家代交買家印花稅，因此，表面看起來，樓價上升 15%，但實際上，扣除優惠之後，樓價實際上沒有變。

為什麼 20 多年前樓價上升被視為信心的表現而今日樓價上升，沒有人認為是投資者對香港未來信心的表現？因此，這是一場宣傳戰，上個世紀 90 年代，港英政府打贏了這場宣傳戰，而今日特區政府沒有打算打這場宣傳戰。

當年港英政府沒有推出任何打壓需求的措施，其中一個很重要的原因是當時港英政府很清楚，政府手上有大量的土地，只要大量的釋放土地，樓價自然會下跌，這也是為什麼 1997 年至 2003 年樓價會下跌的主因。1997 年至 2002 年，土地供應的確是大大的增加，因此，今日的特區政府，不論是目前的梁振英政府或是未來的林鄭月娥政府，增加土地供應是重中之重，是必須以最強硬的手法排除萬難，擊敗反對派對增加土地供應所搞的一切行動，土地供應多了，樓價自然會下跌，不必動用任何壓抑措施。

最新情況是，政府田土廳的樓價指數連升 13 個月，但是，從另一個角度來看，13 個月前，樓價正處於調整期，真實的情況是：在過去 5 年，樓價出現 2 次很明顯的調整，一次是 2013 年初至 2014 年年初，調整期長達一年，第二次是 2015 年 9 月至 2016 年 3 月，調整期比較短，但是也長達 7 個月，而且整幅度達 13%，2015 年 9 月開始的調整，要等到 2017 年 2 月才再度創新高，2015 年 9 月的高位與最新的樓價比較，上升的幅度是 8%，如此升幅是不是真的如傳媒所説的狂升，顛價？論樓價的升幅，回歸後與回歸前的確是相差很遠，而且長期不斷的面對一次又一次的調整。

真實的情況是，不論樓市是升是跌，香港傳媒都將之放大、誇張、樓價升，就天天説年青人買不起樓，説香港人不吃不喝數十年才能買一個單位的住宅，樓價下跌，就天天都是大劈價的新聞，什麼大劈價 3 成 4 成，除了大劈價外，就是財經界名人高調地預測説樓價還會再跌 5 成 …… 結果是：每逢樓價進入調整期，就有大量的自住業主賣樓，向其他業主租樓，他們都期望再過 2 年，以更低的價格買樓，可是，2 年過去，樓價沒有跌至更低的水平，反而高於自己賣樓時的樓價，這些人後悔了，於是再度入市買樓，今日我們看到的萬人爭買樓中的相當大部分就是這群在過去幾年樓價調整時低價賣樓者，政府的統計數字顯示這群人不少，有好幾萬人之多。

幸好，特區政府在過去幾年推出的種種「辣招」都不包括首次置業者，因此，過去一段時間，本地買樓者當中，以首次置業者為主，而這些首次置業者當中，不少人是曾經置業但在過去幾年因為誤判樓價走勢而賣樓者，賣了樓，就成了首次置業者，另有一批年輕的首次置業者，並非真正的買樓的，真正的買樓者是這批年輕人的父母，甚至沒有任何親屬關係的人，傳媒稱這批由父母出錢買樓的人為「成功靠父幹」的一群，實際上，這批人又可以分兩種，一種是真的靠父母的錢買樓自住，準備結婚，另一種實際上只是他們的父母借用子女的名字買樓投資，用來收租而非自住，而那批借用他們名義買樓的人，有欺騙政府，逃避印花税的可能，是犯法的，犯法的事相信不會有太多人幹，為買樓省點印花税而犯法是不值得的事，因為在過去幾年裡因誤判樓價走勢而賣樓的人不少，也因此這批人的購買力、搶購的熱情都很高。

站在社會穩定的角度來看，全民業主的社會是最穩定的，理由是身為業主的人最不希望看到社會動亂。新加坡是一個最好的例子，眾説周知，新加坡 90% 以上的家庭是自置物業的業主，比例全球最高，因此，新加坡的政治環境也是全球最穩定，新加坡人民行動黨在過去 50 多年的大選中全勝，執政至今，因此允許首次置業者不必繳交任何特加的印花税是正確的，可以協助這群人買樓。不過，我們應該鼓勵真正的首次置業者買樓自住，而不是利用子女的名字、其他人的名字買樓投資收租，因此，我建議首次置業者買樓之後，5 年內不許出租該樓盤，只能自住，我的這項建議也等於在排除利用首次置業者的名字來買樓收租的投資客，是目前特區政府所執的需求管理的另一種方法。

我也留意到，樓價走勢與股市走勢習習相關，從 2007 年至今的 10 年裡，股市出現過 4 次調整，樓市也同樣出現 4 次調整，時間的相關因素配合的很強。2007 年至 2008 年，股市大崩盤，樓市也同樣大跌，不過股市因為處於再創歷史新高的崩盤，再加上國際金融市場一體化，美國的金融海嘯對香港金融的市場的打擊也很大，因此，股市的跌幅高達 68% 而樓市的跌幅僅 30%，不過，30% 的跌幅實際上也夠大的，當時買樓一般借貸比例就是 70%，樓價下跌 30% 已經是負資產的邊緣了。2011 年，股市再遇上歐債危機的打擊而跌，股市跌後不久，樓市也下跌，2013 年，股市開始擔心美國聯邦儲備局加息，退市而下跌，同樣的，樓市也是在股市下跌後下跌，2015 年的情況也一樣，股市在當年的「大時代」之後崩潰，之後就是樓市的調整，樓市與股市息息相關，目前的股市也是在 2016 年年初開始見底回升，股市見底後不久也輪到樓市回升，因此，許許多多批評特區府沒有能力壓抑樓價的人根本就對股、樓市的基本相關因素一無所知，為批評而批評，我相信，如果今日股市崩盤，3 個月之內，樓市就一定跟着下跌。

Asia's best business platform

Soichi Nishimura
President of the Hong Kong Japanese Chamber of Commerce and Industry
Chairman & Managing Director of Mitsui & Co. (Hong Kong) Ltd.

Hong Kong has Asia's best business platform and is always friendly to overseas investors, including small- and medium-sized enterprises (SMEs) from Japan, says Soichi Nishimura, president of the Hong Kong Japanese Chamber of Commerce and Industry (HKJCCI).

He commends the Hong Kong government for listening sincerely to foreign chambers of commerce, including the Japanese one, and swiftly acting to deal with impediments to foreign companies' activities in the city. He also hails InvestHK and the Hong Kong Trade Development Council (HKTDC) for their approachable assistance to companies, including SMEs, thinking of entering the Hong Kong market.

HKJCCI now represents 666 Japanese firms (as of January), one of the highest numbers in 10 years. Its members include fast-food companies, logistics operators, real estate firms, consulting firms and others. Nishimura says these Japanese businesses take advantage of Hong Kong as an attractive location with easy access to every part of the world, having a vast variety of sophisticated services, functions and human resources.

In a nutshell, Nishimura says, Hong Kong provides Asia's best business platform under the "one country, two systems" principle, distinct from mainland China. The city's strengths also lie in its high level knowledge of and relations with mainland China and its excellent infrastructure that lures many U.S. and European companies.

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Governance recipe for sustainable development in Central Asia with One Belt, One Road

Professor Andrew K P Leung,
SBS, FRSA

Prominent international and independent China Strategist. Over 40 years' experience in senior Hong Kong Government positions. China Futures Fellow, Massachusetts Berkshire Publishing Group; Brain Trust Member, IMD Lausanne Evian Group; Gerson Lehrman Group Council Member; Thomas Reuters Expert; Senior Analyst with Wikistrat; and Member of Royal Society for Asian Affairs. Former Governing Council Member, King's College London; Advisory Board Member, China Policy Institute of Nottingham University. Visiting Professor, Sun Yat-sen University Business School (2005-10). Visiting Professor, London Metropolitan University Business School. In the 1980s, oversaw Hong Kong's industrial transmigration into Mainland China and helped launched Quality Campaign and Technology Centre. Invited by US government to month-long visit to brief Fortune 50 CEOs personally, including Steve Forbes of Forbes Magazine, on China post-1989. In 2002, invited by Prince Andrew for a private briefing leading to HRH's first visit to China as UK's Ambassador for Trade and Investment. Advised on cross-cultural management in Lenovo's take-over of IBM Computers. Invited as Editor-at-large of an international consultancy on China's energies. Regular contributor, commentator, and speaker on China at conferences and on live television worldwide including National Geographic. Topics include finance, economics, geopolitics, international relations, science and technology, sustainable industrial development, and green cities. Graduate qualifications from University of London, postgraduate qualifications from Cambridge University, PMD from the Harvard Business School, and solicitors' qualifying examination certificate from the Law Society, London. Included in UK's Who's Who since 2002. Awarded Silver Bauhinia Star (SBS) in July 2005 Hong Kong Honours List.

Abstract

As a case study with transferable insights, this Paper examines the socio-economic, geographic, ecological and institutional challenges faced by key Central Asian countries, namely Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan, in achieving sustainable development. These are relatively inaccessible, mostly water-stressed, land-locked nations with an ancient history, an amalgam of cultures and religions, a rugged terrain unevenly distributed with natural resources, and some basket cases of non-democratic governance. Even where growth seems to be stable, as in Kazakhstan, over-dependence on exploiting mineral, fossil fuel, or other commodities begs the question how, with collapsing commodity prices worldwide, the livelihood of the teeming populations can be sustained and improved in the long term. The Paper shows that their sustainable development depends on a combination of game-changing drivers - domestic economic linkages essential for diversification, regional infrastructural connectivity including China's One Belt, One Road initiative, and socio-political institutions for effective delivery of services and a more equitable social contract. Specifically, the Paper also looks at why these land-locked nations should leverage fresh water availability where it exists and respond to threats of climate change. What is more, it shows how the 5-S principles of ISO and TQM can help governments in the region to overcome their unique challenges to sustainable development – how they should Scrutinize their own unique economic, social and political dynamics; Systematize their own governance institutions; Sanitize their ecology; Standardize their intra-regional trade flows; and exercise Self-discipline to root out corruption and to provide good governance for long-term economic growth and stability.

Key Words

Oil and gas, Diversification, One Belt, One Road, Connectivity, Fourth Industrial Revolution, linkage industries, 5-S governance

Geography, history, and sustainability challenges (1)

Central Asia has historically been characterized by its nomads and the Silk Road. Over centuries, it has acted as a crossroads for the movement of peoples, goods, and ideas between Europe, Western Asia, South Asia, and East Asia. According to UNESCO, Central Asia historically extended to large areas in China (Mongolia, Tibet), North-east Iran, and Central-east Russia.

Central Asia geographically stretches from the Caspian Sea in the west to China in the east, and from Afghanistan in the south to Russia in the north. For the purpose of this Paper, a popular definition is followed, delineated by the republics that belonged to the former Soviet Union - namely Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan, with a total population of about 66 million. It excludes countries or areas sometimes grouped together e.g. Azerbaijan, Afghanistan, Mongolia and parts of China. These are sufficiently distinct economically, socially and politically to merit separate consideration.

During pre-Islamic and early Islamic times, Central Asia was predominantly habituated by sedentary Iranians and semi-nomadic Scythians and Parthians. Subsequent expansion of Turkic peoples, including the Kazakhs, Uzbeks, Kyrgyz, Turkmen, and Uyghurs, supplanted the Iranian influence, to such an extent that Central Asia is sometimes referred to as Turkestan.

Migration of Turkic peoples occurred between the 5th and 10th centuries, when they spread across most of Central Asia. The Chinese were defeated by the Arabs at the battle of Talas in 751, ending Tang Dynasty's western expansion. The Tibetan Empire sought to rule portions of Central Asia along with South Asia. During the 13th and 14th centuries, most of Central Asia became controlled by the Mongols who conquered and ruled the largest contiguous empire in recorded history.

The dominance of the nomads ended in the 16th century, as firearms allowed settled peoples to gain control of the region. Russia, China, and other powers expanded into the region and had captured the bulk of Central Asia by the end of the 19th century.

After the Russian Revolution, the western Central Asian regions were incorporated into the Soviet Union. The eastern part of Central Asia, known as East Turkistan or Xinjiang, was absorbed into the People's Republic of China. Mongolia remained independent but became a Soviet satellite state.

Central Asia is an extensive region of varied geography, including high passes and mountains (Tian Shan), vast deserts and grassy steppes which, together with the steppes of Eastern Europe, form a homogeneous geographical zone known as the Eurasian Steppe.

With the world's shortest distance (770 km) between non-frozen desert and permafrost, much of the land of Central Asia is too inaccessible, too dry or too rugged for farming. A majority of the people earn a living by herding livestock. Industrial activity centers in the respective countries' capitals and major cities - Almaty and Astana of Kazakhstan, Bishkek and Osh of Kyrgyzstan, Dushanbe of Tajikistan, Ashgabat of Turkmenistan, and Bukhara, Kokand, Samarkand, and Tashkent of Uzbekistan.

The region's water resources include the Amu Darya, the Syr Darya, Irtysh, the Hari River and the Murghab River, together with the Aral Sea and Lake Balkhash. With climate change, the latter bodies of water have shrunk massively in recent decades due to diversion for irrigation and industrial purposes. Water thus becomes an extremely valuable resource with significant risks of cross-border conflicts.

Overcoming barriers to sustainability

These land-locked countries, while mostly arid, mountainous and relatively inaccessible, are nevertheless endowed, albeit unevenly, with massive oil and gas reserves (Kazakhstan, Uzbekistan and Turkmenistan), minerals (Kazakhstan, Uzbekistan, Kyrgyzstan, and Tajikistan), cotton (Tajikistan and Turkmenistan), and in some cases water resources (Kyrgyzstan and Tajikistan). Following independence, they inherited a relative high level of literacy, a legacy from the former Soviet system. Moreover, their demographic profiles are exceedingly young, as in Uzbekistan and Tajikistan. This is a huge, potentially productive dividend, which should help provide dynamism for sustained economic growth.

However, these potential advantages have largely failed to be taken full advantage of. While all of these transitional Central Asian countries have been trying to stay ahead of the game, they have yet to show convincingly that they have the capacities and the wherewithal to break free from the traps of backwardness and poverty (7). The main reasons are several.

First, they all suffer from poor ***transport and power infrastructure*** which accentuates their inaccessibility. Inadequate roads, highways and railways, and limited power supplies do not lend themselves to efficient transportation, both domestic and international, for bringing their commodities to more dynamic markets across the continent. Nor would they help promote two-way trade or investments with more distant foreign markets. As a result, their major trading partners are mostly limited to Russia and other members of the former Soviet Union, a situation not conducive to long-term growth and economic upgrading.

Second, they lack a well-researched and determined national strategy to develop ***"linkage industries"*** to broaden and diversify their economies, including the necessary human, physical and institutional capacities. By way of analogy, a recent study on Africa (8) explains that these linkages can be upstream (backward linkages) e.g. offshore oil-drilling in Angola or mining equipment in South Africa; or downstream (forward linkages) e.g. diamond-cutting in Botswana and sustainable timber-exporting industry in Gabon.

Third, they all suffer from a ***deficit of good governance***, characterized by corruption, lack of strategic focus, and dearth of an inclusive and cohesive "social contract" that binds diverse ethnic and socio-religious groups together in face of acute inequalities. Indeed, they are all characterized with "extractive" political and economic institutions that are a recipe for state failure. (*Acemoglu* and *Robinson*, 2012) (9)

Fourth, where ***young demographics*** (e.g. Uzbekistan and Tajikistan) should promise higher productivity, the lack of demand for higher-skills in a stagnant, traditional economy acts as a disincentive to pursue higher education. This ***vicious circle*** entraps poverty.

Last but not least, as these countries are grappling with economic survival and socio-political stability, not much attention is devoted to preserving their fragile ***ecology***. In particular, where they exist, fresh ***water resources*** are threatened by unregulated or uncoordinated exploitation, (both domestically and across borders), inefficiencies or wastage, as well as climate change.

Nevertheless, there are plenty of possibilities for ***Central Asian countries*** to develop their respective ***linkage industries***. Specifically, oil and gas industries (e.g. Turkmenistan, Kazakhstan, and Uzbekistan) could be broadened to grow refineries and related chemical products. Base metals (e.g. Kazakhstan, Uzbekistan, Kyrgyzstan, and Tajikistan) could translate into production of semi-finished spare parts and components. Precious commodities can be utilized for a jewelry industry, such as gold in Uzbekistan, and gold and diamonds in Kazakhstan. Cotton production (e.g. Tajikistan and Turkmenistan) can extend to clothing and fashion businesses. Meat, diary, wheat and fruit (e.g. Kyrgyzstan) are amenable to branded packaged foods. An abundance of sunshine and water resources, where they exist, can drive a thriving solar energy or hydro-electric power industry (as in Tajikistan), both for domestic use and export. Scenic mountains, lakes or rivers (e.g. Tajikistan and Kyrgyzstan) are a treasure trove for eco-tourism. Given adequate socio-economic infrastructural support, young demographics (e.g. Uzbekistan and Tajikistan) promises a fertile ground for a digital and innovative economy, such as e-commerce, 3-D printing, robotics and artificial intelligence. These new businesses would then be able to support the upgrading and diversification of other industries and enterprises both nationally and in the region.

Overcoming barriers to capture these exciting opportunities, however, requires ***a vigorous state coordinated strategy to invest in and upgrade the necessary infrastructure, utilities, institutions as well as human capital***, including the provision of higher education and vocational training, and a connected "eco-system" of supporting businesses. There will also need to be good governance, including eradication of corruption, conservation of ecology, and development of policies and economic partnerships, both domestic and international, to promote exports and international trade, to create well-paid employment, and to share the fruits of economic development more equitably.

China's One Belt, One Road (OBOR) Initiative

To promote Central Asian countries' global inter-connectivity, there is perhaps nothing more breathtaking than China's One Belt, One Road (OBOR) initiative.

This grand trans-continental project will connect Eurasia to China (10) in the form of ports, energy pipelines, high-speed rail, expressways, power plants and other utilities, with trade, investments and other spinoffs. Projected investments are estimated to benefit 4.4 billion people in 65 countries, representing a third of the world's GDP. The total size, according to some estimates, could exceed twelve times America's post-World War II Marshall Plan for Europe, in comparable money-of-the-day terms (11).

OBOR comes at a time when there is an estimated shortfall of $57 trillion of infrastructure across the globe, according to a December 2014 Mckinsey analysis (12).

The OBOR initiative will create six transnational economic corridors spanning 60 countries: namely, a "New Eurasian Land Bridge" of freight trains connecting the port of Lianyungang near Shanghai to Rotterdam; a Mongolia - Russia Corridor; a Central Asia - West Asia Corridor; an Indochina Peninsula Corridor; a Pakistan Corridor; and a Bangladesh - China - India - Myanmar Corridor, according to a business report (13).

OBOR is supported by a $40 billion Silk Road Fund, the BRICS New Development Bank, and the China-led Asia Infrastructural Investment Bank (AIIB). The latter has attracted 57 founding members worldwide, including many Western allies, with more than 20 countries on the waiting list to join as members.

OBOR will reinforce the global energy network of China, as the world's largest energy customer, across Eurasia, Central Asia and the Middle East. This reinforces China's leading role in the Eurasia-centric Shanghai Cooperation Organization (SCO), of which four of the five Central Asian countries in this study are Members. (Turkmenistan, for now, is only a Guest Attendee). Project-wise, China is a lynchpin in the Iran-Pakistan (IP) and Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipelines. Both are to connect to the China-Pakistan economic corridor, linking Xinjiang (China's energy base) to the Persian Gulf.

Besides infrastructure, there are ancillary private sector investment opportunities in real estate, telecommunications, e-commerce, financials, tourism, education, creative industries, and green technologies. The last-named informs China's proactive role in the Paris COP21 Climate Change Agreement and her development of the world's largest green bond market (14).

OBOR is not a one-way street of China's energy needs. There is also huge potential for exporting other products, technologies and services to China, including those from Central Asia, Based on interviews with 10,000 consumers in 44 cities, a Mckinsey Report (15) finds that, despite current economic downturn, Chinese consumers remain confident. There are distinctive shifts in consumer preferences from products to services, from mass products to premium brands, from consumer goods to lifestyle and well-being, from Online to O2O (Online-to-Offline), from in-store shopping to on-site ancillary leisure experiences in restaurants and cinemas, and from individual shopping to joint family activities.

China is already the world's largest e-tailing marketplace. According to Nielsen, a global market research company, there is massive untapped potential for global businesses (16). All countries along the OBOR, including Central Asian countries, are well placed to take advantage of these new dynamics.

All these opportunities are concurrent with rapid internationalization of the renminbi, including currency swaps, trade-financing deals, and off-shore bond issuance. The Chinese currency has been included in the International Monetary Fund (IMF)'s elite basket of reserve currencies (17). Many banks and financial institutions across the globe are poised for a greater slice of the action. This would include Islamic finance, where Central Asian countries could play a role.

With a privileged relationship with Mainland China under One Country, Two Systems, including a world-respected legal system and independent judiciary, Hong Kong, as a leading international financial centre and a regional business hub, is well endowed to capitalize on the OBOR initiative, including Islamic finance. Opportunities include the provision of financial, management, legal, arbitration and other professional services. There is a wealth of ideas in Hong Kong Chief Executive's 2016 Policy Address (18).

Naturally, OBOR is not paved with gold. There is no lack of risks, pitfalls and uncertainties, as in any new business realm. (19)

For example, worries remain as to the stability of countries and territories covered by OBOR. Concerns have been expressed whether the China-led AIIB is likely to erode corporate governance standards set by the World Bank, the Asian Development Bank (ADB) and the IMF. Nevertheless, the AIIB Chairman has openly stressed that there is vast room for cooperation with the World Bank (20). A cooperation agreement between AIIB and the World Bank has been signed, whereby the latter will prepare and supervise joint projects "in accordance with its policies and procedures in areas like procurement, environment and social safeguards." (21)

OBOR has gone off to a good start. According to Xinhuanet.com (22), more than 70 countries and organizations have expressed their support and willingness to join OBOR. 34 countries and international organizations have signed inter-governmental cooperation agreements with China.

In April, 2016, China also signed a letter of intent for cooperation of OBOR with the United Nations Economic and Social Commission for Asia and the Pacific.

The roll-out of OBOR across the globe will take many years. This would give time to Central Asian countries to re-invent themselves with the necessary skills, institutions and other capacities to take full advantage of this globally-inclusive initiative.

Application of the "5-S Methodology"

The 5-S methodology related to specifications of the International Standardization Organization (ISO) and Total Quality Management (TQM) normally applies to business operations across the globe. The methodology can be subsumed as a search for perfection through "five constant activities" - "Scrutinization", "Systemization", "Sanitization", "Standardization", and "Self-discipline". (23)

Nevertheless, these five constant activities also happen to capture well the essence required to turn Central Asian countries' struggling economies and governance around to meet their unique challenges and opportunities in attaining sustainable development.

Here is how.

First, the world has changed dramatically over the decades. We are now in the digital Age of the Fourth Industrial Revolution (24) with paradigm shifts characterized by new technologies such as artificial intelligence, robotics, cybernetics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing. There is much greater awareness of ecological connectivity and sustainability, and the importance of social well-being rather than simple growth. Physically, too, the world is more mobile and inter-linked across geographical boundaries, not only through the internet but also through expressways, high-speed rail, and aviation networks, what Parag Khanna calls "*Connectography*" (25). To catch up, Central Asian countries should ***Scrutinize*** their own unique economic, social and political dynamics, in order to develop a strategic vision and plan of action to realize their respective potential for sustainable development, taking full cognizance of a changed world order affected by ubiquitous global connectivity, geopolitical power shifts, new business modes and the impact of climate change.

Second, as explained, Central Asian countries should ***Systematize*** their own governance institutions, in order to root out corruption, to deliver public services more efficiently, to upgrade human capital, to take advantage of new technologies, and to foster a better social contract with their peoples with a view to sustainable socio-political stability and harmony.

Third, they should ***Sanitize*** their ecology, in particular, by developing a sustainable model of development suited to their respective socio-economic and political realities, in order to conserve natural resources including water, fauna and flora, and to guard them from pollution and wasteful or reckless exploitation.

Fourth, in trading with neighboring and other countries in the larger Eurasian region, they should ***Standardize*** intra-regional trade and investment flows, in order to dismantle trade and non-trade barriers, and to create greater mutual efficiencies and benefits through deepening bilateral and regional free trade agreements and investment treaties, similar to the process in realizing the Regional Comprehensive Economic Partnership (RCEP) and the Free Trade Area of the Asia-Pacific (FTAAP) initiatives applicable to the Asia Pacific region (26).

Fifth, and last but not least, Asian countries should exercise ***Self-discipline***, in order to root out corruption and to provide good governance for long-term economic growth and stability.

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The International Institute of Management

Promote friendship & harmony, add value through education & lifelong training; welcome future opportunities, including China's Belt and Road strategy for producing win win situations for all.

Prof. Dr. David H.T. Lan, GBS, ISO, JP
President
The International Institute of Management
藍鴻震 博士教授
國際專業管理學會會長

Preface by Prof Dr D LAN

At the formal invitation extended by its President Dr Myina Q. MALLARI who cordially invited me to be the Guest of Honor and Speaker during the 28th Commencement Exercises of the Tarlac State University (TSU), the Graduation Day being described as one of the most important events of the year at the University, on August 27, 2017 at the TSU Alumni Center, Lucinda Campus, Tarlac City , Philippines. Formal invitation letter with copy at scan 433 was received now at attached. I accepted the offer for the following three very good reasons:

Number 1, Hong Kong and Philippines have a long history of friendship and good relations not only because of the food we all love, such as mangoes and bananas but also that our long history involves long association of business relations with over 1.5 million HK permanent residents who originate from Fukein Province, in addition to some 300,000 migrant workers & other long term Filipinas who already are permanent residents of HK etc.

Number two on the Education side especially at the higher end of education, there has been very close relationship between universities and institutions, including the International Institute of Management IIM.

Number three, Hong Kong and Philippines for decades, have very close working relationship in business and trade, as we both are long term members of APEC as well as WTO. In addition our history of cooperation both at governmental and quasi government levels have maintained cordial , friendly and positive relationship, particularly now, in view of the China's very big business strategy at CPG level on One Belt One Road, OBOR; hence, Hong Kong and Philippines can certainly find benefit to numerous opportunities of working together hand in hand, with China' s strong backing in the provision of capital funding, technology, strategic planning and other forms of economic factors that could bring wealth to all, ie every participant, with Hong Kong playing an active role as partner and the super connector in the overall strategy.

TARLAC STATE UNIVERSITY

TSU 28th Commencement Exercise 2017

Speech by

Prof. Dr. David HT LAN, GBS ISO JP

President, International Institute of Management

National Committee Member, CPPCC 10th& 11th sessions, PRC

Secretary for Home Affairs, Hong Kong Special Administrative Region, PRC (1st one appointed)

Introduction

To our esteemed President, Dr. Myrna Q. Mallari, distinguished guests, highly respected members of the faculty and administration, graduates, family members, friends, ladies and gentlemen.

My heart is very close to Filipinos. During my childhood days, I have many Filipino classmates in my HK school-days who became my good friends. Since then my association with the Philippines continued in my various capacities including as Hong Kong's Principal Economic and Trade Representative to Japan from 1991 through 1997 where Former Philippine Ambassador Mr. and Mrs. Domingo L. Siazon became our close family friends. From 1997 to 2000, in my capacity as Hong Kong's Home Affairs Secretary & thereafter, I had good and meaningful encounters with various very top Philippine officials in the likes of Former Philippine President Joseph Estrada, likewise with Former Philippine Vice-President Gloria Macapagal Arroyo (She served as the 14th President of the Philippines from 2001 until 2010) & with Former Foreign Secretary Domingo L. Siazon.

Philippines Japan Society Medal of Merit Awardees

Gloria Macapagal Arroyo

Vice-President of the Philippines in Hong Kong 1999

Joseph Estrada

13th President of the Philippines.
In office: June 30, 1998 – January 20, 2001

DOMINGO L. SIAZON, JR.

Foreign Minister & Ambassador to Japan

That is why when I was invited to speak before you today, there was no hesitation in saying yes.

As a Visiting Professor of this great University and a Doctor of Humanities degree awardee (honoris causa) of Don Honorio Ventura Technological State University, I consider this opportunity to officiate this momentous Degree Awarding Ceremony as my duty and distinct honor.

TSU background and achievements

The Tarlac State University (TSU) as a chartered public university established in 1906 is the flagship of academic institution of higher education in the province of Tarlac offering a wide range of degree programs and educational services through its 10 colleges in 3 different campuses to more than 15 thousand students of Tarlac and the rest of Central Luzon region and to hundreds of International Students.

Under the able leadership of our beloved University President, Dr. Mallari, who was recently elected as the President and Chairperson of AACCUP, (the main function of AACCUP is the accreditation of curricular programs in the Philippines, particularly for state universities and colleges), the University has earned Level 4 status awarded by the joint committee of the Commission on Higher Education (CHED) and the Department of Budget and Management (DBM) in recognition as an excellent institution, active involvement in research programs and community-wide extension services. Throughout its more than 100 years of glorious existence, it has exceeded all expectations in providing advance instruction in literature, philosophy, sciences, arts in addition to professional and technical training courses. TSU is the first University among other State Universities and Colleges that has been granted with a Government Authority to conduct Transnational Education Programs. The University has a well-established international linkages.

The following are some of the major Recognition of the University:
Royal Institution's Accredited University
Accredited Programs in Graduate Studies, Engineering, Education, Business and Accountancy, Computer Studies, Architecture, Arts and Social Sciences, Technology, and Chemistry by the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACCUP)
Center of Development in Education
State Universities and Colleges (SUC) Level 4
One of the Philippine Educational Institutions recognized by the People's Republic of China
Accredited by the Bureau of Immigration of the Philippines to accept foreign students
Listed in the International Association of Universities (IAU) database
ISO 14001:2015 and ISO 9001:2015 compliant
Occupational Health and Safety Assessment Series (OSHAS) 18001:2017 compliant

I. Some notable persons associated with Tarlac State University include:

Hon. Benigno Aquino III, the 15th president of the Philippines, is an honorary alumnus of the university. He was conferred a Doctor of Humanities degree (honoris causa) by TSU on May 14, 2015 at the Malacañang Palace for his "distinguished political career and service to the Filipino people as Representative of the Second Legislative District of Tarlac Province in the House of Representatives from 1998 to 2007, Senator of the Philippine Senate, 14th Congress of the Philippines from 2007 to 2010, and as Fifteenth President of the Republic of the Philippines starting 2010.

Former President Aquino was the second in his family to receive the doctoral degree in humanities after his uncle, former ambassador and former Tarlac governor Eduardo Cojuangco, Jr., was awarded the same degree in 2011.

The country's first president of the Philippine Republic, Emilio Aguinaldo, was TSU's first recipient of an honorary degree in 1998.

II. Recognition of Philippine degree especially in ASEAN

Philippines is a member country of the Association of South East Asian Nations (ASEAN). The ASEAN Framework Agreement on Services (AFAS) was signed by ASEAN Economic Ministers in 1995, and contains Article V, which states that "ASEAN Member States may recognize the education or experience obtained, requirements met, or licenses or certifications granted in another ASEAN Member State, for the purpose of licensing or certification of service suppliers".

The ASEAN Mutual Recognition Arrangements (MRAs) contain the list of Professional Regulatory Authorities (PRA). A PRA is a body authorized by each ASEAN Member State government to regulate and control practitioners and their practice of the profession.

The Commission on Higher Education (CHED) is the body that recognizes university degrees while the Professional Regulation Commission issues and recognizes professional licenses in the Philippines.

In summary, ASEAN Integration, with various efforts being pushed and undertaken in the field of recognition of university degrees and qualifications including professional licenses, will result in enhanced mobility of students and professionals in the region. The ASEAN MRA, in particular, contains criteria for the recognition and eligibility of foreign practitioners, a mechanism for their recognition, and the monitoring and evaluation of their performance and conduct.

III. Close relationship between China and the Philippines

Early in his term as Philippine President, Rodrigo Duterte quickly appointed a special envoy to China and made Beijing his first official state visit destination in October of last year.

Since then, there have been three significant positive achievements of both leaderships: the South China Sea (SCS) tensions have de-escalated, the overall bilateral relations have been normalized, and China has become more involved in Philippine domestic and socio-economic agenda.

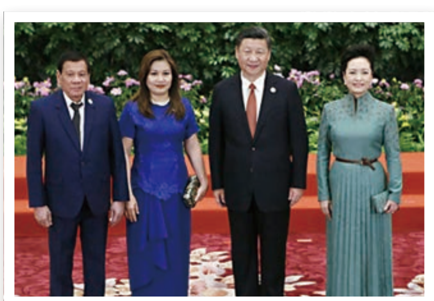
First, both nations are on track toward restoring political mutual trust after years of diplomatic hostility. For instance, an agreement at Scarborough Shoal was reached as Filipino fishermen now have unfettered access to the area. More importantly, a Joint Coast Guard Committee (JCGC) on Maritime Cooperation and a Sino-Filipino Fishery Training Exchange had also been established.

Second, high-level diplomatic meetings and economic bilateral mechanisms such as the Philippines-China Trade and Investment Forum and the Joint Commission on Economic and Trade Cooperation (JCETC) have been reinstituted. Similarly, restrictions on the import of Philippine agricultural products and travel advisory to the Philippines have both been lifted. In fact, as of January this year, the number of Chinese citizens applying for Philippine visa has already tripled, while the volume of Philippine agricultural exports to China have also doubled.

Third, China is becoming a partner in the provision of Philippine domestic public goods. This is evident in the planned construction of the 414-km China-Laos railway, 150-km Jakarta-Bandung high-speed railway, 845-km China-Thailand high-speed railway, and the Kunming-Singapore railway (Pan-Asia Railway Network), among others.

President Duterte's deeper engagement and constructive approach towards China has already started to yield economic dividends: bilaterally, multilaterally, and institutionally.

In terms of hardware capital infrastructural development, the recent very warm reception given by President Xi Jinping (習 近 平) to President & Mrs Duterte at the May 13-14th One Belt One Road Summit held in Beijing as widely reported internationally, clearly indicates the good will & great potential for close co-operation to be possibly implemented soon in the form of sizable Chinese investment initiatives in roads, highways, railways, container ports, power plants & other heavy & institutional infrastructural projects. Hong Kong (HKSAR) being an integral part of China, under the Basic Law, & its international financial centre and, at the same time, the world's China financial centre, will effectively act as a Supper-Connector, helping to efficiently finalizing deals with China internationally under the Belt & Road initiative.



Of the 25 submitted for feasibility study support, nine projects ($1 billion) aim to link the country's main islands (Visayas and Mindanao), increase tourism, build a flood-control system, and ensure a steady power source in Mindanao.

In terms of security, China has thrown its full support behind Pres. Duterte's war on drugs and anti-terror campaign. In one of the major bilateral agreements signed (Agreement on Economic and Technical Cooperation), Beijing will provide Manila with $14 million for anti-illegal drugs and law enforcement projects.

IV. Parting words

And so my friends, the future is very bright between our two nations, particularly with HK acting as a lubricant, facilitator & Super-connector. Indeed, in applying this concept to education, through the auspices of our Alma Mater, Philippine education which remained unknown to many Chinese nationals until the late 90's has risen in popularity through word of mouth & factual or real demonstrations. Quality indeed speaks for itself. Slowly but surely, different avenues for cooperation have opened up. These changes in the form of developments offered not only opportunities for those who value quality education but also opportunities for those who demand academic excellence

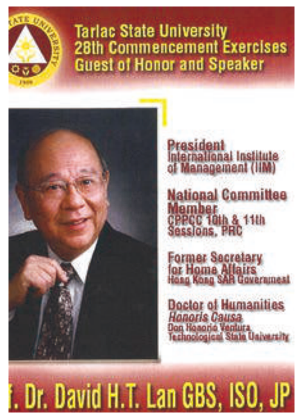
My Institute, IIM, with the brilliant but warm guidance given by President, Dr. Myrna Q. Mallari & her close associates, have over the past many years enabled IIM to play our role as Super-connector in education between the Philippines & other countries including China, & other Asian countries. I also welcome you to join my Institute IIM at the appropriate level, as it helps you gaining access to valuable knowledge, maturity & wisdom in management excellence & life experience.

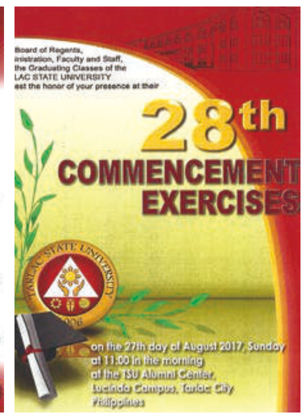
You have been nurtured with tender loving care by your alma mater. As future ambassadors of goodwill of TSU, I would like to end this message with a call on all of you to take on the challenge. The world out there has big expectations that you need to fill in. The world is in need of change for the better through your scholarly contributions that are expected to positively affect the lives of countless individuals.

And with that, I take this opportunity to congratulate you for your hard work and dedication, for empowering your selves with knowledge and wisdom and for having the courage to accept change.

Thank you.

Photos taken at a TSU





Republic of the Philippines
TARLAC STATE UNIVERSITY
OFFICE OF THE PRESIDENT
Romulo Boulevard, San Vicente, Tarlac City
Tel. No. (045) 982-5574 Fax No. (045) 982-0110
Official Website: http://www.tsu.edu.ph E-mail Address: pres_office@tsu.edu.ph

TSU-OUP-240-17

August 7, 2017

PROF. DR. DAVID H.T. LAN
President
The International Institute of Management
750 Nathan Road, KLN, Hong Kong

Dear Prof. Dr. Lan,

Greetings from the Tarlac State University (TSU) in Tarlac City!

Graduation Day is one of the most important events of the year at the Tarlac State University. After years of ardent studies and related activities, the freshmen are now candidates for graduation in one of the emerging premier universities in the Asia-Pacific region.

As a final gesture of love and compassion to the Graduates of 2017, and to give them a send-off inspiration to the world after graduation, it is but fitting and proper that we invite the best Guest of Honor and Speaker during the Graduation Ceremony, who has a sterling track record of public service, honorable life, and a living role model to the Graduates and all citizens.

It is with the greatest pride and honor that I respectfully invite you to be the Guest of Honor and Speaker during the **28th Commencement Exercises of the Tarlac State University on August 27, 2017 / 11:00 A.M. at the TSU Alumni Center, Lucinda Campus, San Vicente, Tarlac City.**

Your presence and enlightening message will truly bring significance to the Commencement Exercises of 2017. God bless you and God bless the International Institute of Management!

Very truly yours,

DR. MYRNA Q. MALLARI
President

The Challenges Faced by the Promotion of Chinese Culture and Language: Development of Confucius Institutes Around the World

Prof. Au Chi Kin
History Department, Hong Kong Shu Yan University

Abstract

Due to the rapid economic growth of China, many overseas people have started learning Putonghua, the official Chinese language. For this reason, since 2004 the Beijing authorities have opened many Confucius Institutes to promote the Chinese language and culture, as well as to teach the overseas people to attain better Putonghua proficiency. Confucius Institutes are playing a major role in promoting Chinese language education and introducing the contemporary Chinese cultural, society and economic situation. People can learn more about China through the Confucius Institutes around the world. Thus, the Confucius Institutes are transformed from a merely teaching institution to a platform for promoting national culture and tradition nowadays. They become a medium to help foreigners understand the Chinese society. This paper focuses on some examples of the operation of Confucius Institutes around the world in order to present the challenges in promoting the Chinese culture by comparing with the promotion of Korean culture by the South Korean government.

1. Introduction

In recent years, many developing countries do not only take note of expansion of military, business and political forces, but also pay attention to strengthening the "soft power" development and proper matching of "soft power" and "hard power". "Hard power" is used as a tool to control internal affairs and expand outwardly, especially using "hard power" for force expansion and economic development, which is internationally criticized as "imperialist" power. However, "soft power" is used to promote public diplomacy and cultural diplomacy. In the international political environment and competition, it uses cultural resources to influence other countries. Also, some Chinese scholars believe some national sovereignties can use cultural tools to achieve specific political intentions and external strategy . In this regard, cultural diplomacy can construct the affinity of one country and another country and can construct the image of the country, and even display to

[1] Frank A. Ninikovich, *The Diplomacy of Ideas, U.S. Foreign Policy and Cultural Relastions,1938-1950* (Cambridge: Cambridge University, Press,1981), pp. 846-853.

the other countries the peacefully co-existing ambassador image[2]. Furthermore, the scholar Joseph Nye argues that cultural capital plays an important role in the international diplomatic relations. Soft power can influence and persuade others to believe or agree with some of the codes of conduct by going through spiritual and moral demands, and even make the concept exporters to latently influence the concept importers' lifestyles, values and social systems.

Especially important carrier of "soft power" is culture. Culture has become an important resource for "soft power". If a culture has become mainstream values and cultures of other countries and the international community, and even become a force of international rules and the establishment of international mechanisms. So, the culture exporting countries can use constructing "culture" standards and rules to establish their positions in the international arena, and even become the model for the other countries to imitate. In turn, the sense of honour of the people in the culture-exporting countries strengthens the national identity and promotes the implementation of national economic policies; so, "cultural diplomacy" and "soft power" are important to the declaration and the establishment of a sovereign country's image and foreign policy[3].

In terms of national conditions in China, in recent years, more attention is paid to the matching of "cultural diplomacy" and "soft power" - the Chinese government supports business organizations to present "pleasant" cartoons in languages used by more than ten countries. It also supports private commercial organizations to prepare to make "Confucius" move. More importantly, it organizes Confucius Institutes overseas. The first Confucius Institute has been established in South Korea since November 21, 2004. Up to 2011, China has established nearly 358 Confucius Institutes in 105 countries and regions, conducted Chinese tests and courses about Chinese and Chinese culture in the Confucius Institutes and organized festivals related to Chinese culture.

China mainly establishes language and cultural education and exchange activities overseas to spread Chinese social culture and messages about political situations in contemporary China. Confucius Institute has become an important bridge for the foreigners' understanding of China and made Chinese language popular internationally. Many commentators also believe that the Confucius Institute has become China's public diplomacy and cultural diplomacy. Nevertheless, some scholars question the effectiveness of Confucius Institute . This paper describes the development and present situation of Confucius Institute and investigates the problems encountered by Confucius Institute when improving the "cultural diplomacy" and "soft power".

2. Organization of Confucius Institute

Scholars regard that the so-called "soft power" is to use media such as movie stories, television programs, fiction stories, advertising, organizing courses and festivals, etc. in order to convey the constructed moral and cultural values of the sovereign countries, thus persuading others to learn, absorb and accept the concept, perspectives and values of message-distributing sovereign countries, further making the message-receiving countries to accept the lifestyle and social system of the message-distributing countries, and, moreover, assimilating and regulating the government and the people's points of view in the message-receiving countries and using "soft power" to build up friendly relationship between the message-distributing countries and the message-receiving countries.

In the past, many studies have pointed out that the US government is good at using the media such as the American Salon, American radio and television news programs, movies and cartoons, newspapers, etc. to promote American values (i.e. "freedom", "democracy" and "equality"). Research results reveal the success of the adoption of "soft power" by the US.

Cultural institutions such as British Council established overseas by the British, Alliance Francaise established overseas by the French, and Goethe Institute established overseas by the German are all well-known language and cultural training and promotion agencies in overseas countries and locations. The language and language education examinations provided by them have become the standard assessment of language proficiency. More importantly, some scholars note that "cultural

[2] Li Zhi, *Cultural Diplomacy : An Interpretative Mode of Communication* (Beijing: Peking University Press, 2005), p23.

[3] Joseph S. Nye , *Soft Power The Means to Success in World Politics* (N.Y.: Public Affirs 2004),pp.5-15. The development of Confucius Institutes is mostly referred to Dai Rong, *Confucius Institutes and Chinese Language and Culture Diplomacy* (Beijing: Shanghai she hui ke xue yuan chu ban she, 2013) and Gao Jinping, Guo Zhien, "Confucius Institutes and Public Diplomacy", *Zhongguo Wen Hua Yan Jiu*, Spring vol. (2013), pp.189-196.

[4 5] Michael Barr, *Who's Afraid China? The Challenge of Chinese Soft Power* (N.Y.: Zed Book Ltd.,2013).

diplomacy" is to use the content of cultural dissemination, exchange and communication to expand diplomacy which encompasses diplomatic activities helping the sovereign countries to spread their specific political purpose and intention[5].

After 2000, the Korean music, movies and television (TV) programs such as music TV programs of Giril's Generation, Ganam Style and Wonder girls, as well as the earlier TV program Dae Janggeum are all welcome in South Korea, Asia, Europe and America. The programs construct the active and modern image of South Korea, fuse the traditional and modern ways, present the Korean "perseverance" and "bravity", and spread the Korean values overseas. Even the famous American singer Madonna cooperated with Ganam Style in singing and imitations of Ganam Style dance mode appear in many regions. These facts show the success of landing and development of Korean culture in the Western world. The result is the rise of interest of the global community to learn Korean and Korean popular culture. South Korea's music program K' Pop has become the prevailing hot spots.

In contrast with the rise of Korean trend, the effect of Confucius Institute established overseas by the Chinese government in 2004 was once again discussed by the Chinese scholars. By comparison with the Korean "soft power", how can Putonghua boom be promoted through cooperation with overseas institutes? How can Confucius Institute be brought up at the International Chinese academia? Also, how effective the promotion of Chinese national image in the overseas Confucius Institutes through developing Chinese language overseas? As we all know, China's economy has rapidly developed and China's international status has enormously risen since 2000. With the trend of the "Learning Chinese fever", development of Chinese language and Chinese culture becomes China's foreign soft power as well as "public diplomacy" strategy. So, Confucius Institute becomes the representative of the Chinese language cultural diplomacy and cultural "soft power".

According to the "Confucius Institute constitution", Confucius Institute is an institute that teaches Chinese language, spreads Chinese culture and promotes friendly exchanges between Chinese academic institutions and the world[6]. The rationale behind establishing Confucius Institute is to meet the global demand for learning the Chinese language in the regions around the world, and to enhance the community's understanding of Chinese language in the regions around the world and strengthen education and culture exchanges and cooperation between China and the regions of the world to build harmony in the world.

Confucius Institute also presents the views of "harmony is precious" and "harmony in diversity" when teaching Chinese culture and language knowledge overseas and promoting cultural exchange and integration. The business scope of the Confucius Institute includes:

1. organizing Chinese teaching activities;
2. training Chinese language teachers and providing Chinese language teaching resources;
3. holding Chinese language examination and Chinese language teachers' qualification assessment;
4. providing information on all aspects of Chinese education and culture, etc.;
5. Organizing foreign language communication activities.

On 21 November 2004, the first Confucius Institute was established in South Korea. In April 2007, the Confucius Institute Headquarter was set up in Beijing. Confucius Institute is an independent non-profit-making organization owning the name of the Confucius Institute, logo and brand name. The headquarters in Beijing manages all Confucius Institutes in the world. It founded the Council which contains the chairman, vice chairman, executive director and director. Specific candidates are proposed by the Chinese educational and administrative departments of the State Council to the State Department and approved by the State Department. There are fifteen council members of which ten are held by the chairman of the Confucius Institutes overseas. The first members were appointed by the Headquarters. The members will be elected in the future. presently the remaining five members are held by the representatives of the organizations in cooperation with Confucius Institute and appointed by the Headquarters. The term of a member is two years which can be renewed for a year. The members cannot get any remuneration during their term of service. The council contains the director and deputy director. The Council is responsible for formulating and amending the Articles of Association of the Confucius Institute, planning the development of the Confucius Institute in the world, approving and evaluating the headquarters' annual work

[6] *Confucius Institutes Protocol*, Please refer to http://www.hanban.edu.cn/cn_handban.

report and work plan, and studying the major issues of constructing Confucius Institute. The Council meets once a year in plenary session. The meeting was convened by the chairman. If necessary, the chairman can hold provisional meetings for the council members or the executive members.

The officials of each region and country can approach Confucius Institute's headquarter to apply to establish Confucius Institute in their region and country. The conditions are:

1. there are legally registered education organizations and cultural needs in the region to which the applicant belongs to;
2. there are needs for learning Chinese language and culture in the region to which the applicant belongs to;
3. there are personnel, premises, facilities and equipment qualified for education institutes;
4. there are necessary educational funding and stable source of funding.

The applicants for establishing Confucius institutes shall apply to Confucius Institute's headquarter in Beijing. The application should include:

1. the application document signed by the person in charge of the applying institute;
2. the applicant profile, certificate of registration and introduction of the person in charge of the applying institute;
3. teaching premises, facilities and equipment for Confucius Institute;
4. market demand budgeting, management and business plan;
5. sources of funding and management methods;
6. other documents as required by Confucius Institute's headquarter.

Confucius Institutes are mainly funded by Sino-foreign joint ventures. Confucius Institute in Beijing mainly invests a certain amount of money. Each year project is funded by national or foreign organizer together with Confucius Institute in Beijing. Funding for Confucius institutes is mainly used in:

1. establishment of new Confucius institutes, including housing repair, purchase of equipment and so on;
2. promoting Chinese language teaching activities;
3. training for Chinese language teaching faculty and providing Chinese teaching resources;
4. promoting the teaching of Chinese language teaching qualification;
5. providing information about the Chinese education and culture and consultancy;
6. Chinese-foreign language and cultural exchanges;
7. various activities provides in the agreement with Confucius Institutes.

Confucius Institute also has rights and obligations. These are:

1. The enjoyment of the rights under the Charter and Protocol of the Confucius Institute;
2. the right to use the name of the Confucius institutes and uniform logos;
3. priority access to the teaching and cultural resources provided by Confucius Institute's Headquarter.

Confucius Institute obligations are:

1. to comply with the provisions of "Confucius Institute statute" and the agreement;
2. to maintain the reputation and image of Confucius Institute;
3. to receive guidance and assessment of Confucius Institute's Headquarter.

Confucius Institute's headquarter has the right to pursue if:

1. setting up Confucius Institute Without permission of Confucius institute's headquarter;
2. usurping the name of the Confucius Institute to promote activities;
3. violating Confucius Institute's statute and agreement that makes the investment and industry to suffer, undermines and seriously endangers the reputation of Confucius Institute.

In sum, education mode of Confucius Institute summarized by Dai Rong[7] includes:

1. Sino-foreign mode of business-school partnership;
2. cooperation mode between Chinese and foreign business organizations and higher education institutes;
3. cooperation mode between foreign government and Chinese universities;
4. cooperation mode between foreign social organizations and Chinese universities.

There is concrete development of Confucius institute in 2012. There are 84 Confucius Institutes in about 31 countries in Asia - 14 Confucius Institutes in 9 countries in Africa; 108 Confucius Institutes in 32 countries in Europe; 104 Confucius Institutes in 12 states of the US. These Confucius institutes set up the important media for "spreading" Chinese language and culture. Currently, the Confucius Institutes in the countries and regions are engaged in the following main activities:

(1) Language education activities – Many overseas regions have their own set of assessment standard of Chinese language. For the regions in which pinyin failed to be correct and do not have an international consensus on the standards, Confucius Institutes all over the world provide a set of standard Chinese language training and assessment system for the students and those involved in taking Chinese courses. Confucius Institutes provide "the most authoritative", "the most systematic" overseas Chinese language learning and training institutions for the development of Chinese language around the world.

(2) Language and cultural services for overseas countries – Confucius Institute provides consultancy and assistance for overseas businesses including specialized Chinese language teaching for China business, tourism and Chinese medicine. Confucius Institute at the University of Maryland also has: 1. Short-term Chinese language training which includes 5-day Chinese Pinyin training and 2-month listening and speaking courses; 2. organizing seminars and exchange tour to China, enabling foreign students to China to learn about Chinese culture, system and the teaching environment; 3. Chinese language for business courses which provide students with the skills of listening, talking, reading, speaking, and so on and help professionals understand mainland China's political, institutional and environmental situations; 4. intensive Chinese training courses for the students; 5. Basic Chinese writing training for students; 6. Sino-foreign comparative culture and exchange activities.

(3) Cooperation between Confucius Institute and local organizations to organize activities to promote Chinese language and Chinese culture and history – Confucius Institute cooperates with the local organizations to sponsor the study tour to study Chinese culture, politics and economics, organize Chinese culture courses such as courses on "Appreciation for the Chinese Movie", "Chinese Style for Good Health", "Appreciation for the Chinese Poetry " organized by the Confucius Institute at the University of Hokuriku in Japan. Confucius Institute in Stockholm also launched "Confucius Institute Open Day", "Chinese Salon" and other activities, and held "Forum about China's development and its role in the world". Confucius Institute in France conducted Chinese language training courses, held calligraphy classes, painting classes, cooking classes, tai chi classes, and held locally "Chinese culture week" which contained seminars, lectures, and "Experiencing Chinese culture Exhibition". With the help of Confucius Institute, the Wuhan University students were successfully invited to perform arts and calligraphy and Chinese, French, English experts were invited to share and exchange in a series of lectures. Confucius Institute also held the fair about China in France to introduce Chinese history and culture, and exhibit Chinese cultural relics such as bronze, musical instruments, paintings, etc., so that overseas people understand the characteristics of Chinese culture. Germany's Confucius Institute also held Chinese painting and calligraphy exhibition, German students' Chinese writing contest, and "China Night" literary appreciation party. It also invited scholars from China and Germany to organize lectures on "Confucius and Confucianism", "Sino-German cultural exchange," "Confucianism and Chinese culture", "Chinese religion" and other cultural lectures. Confucius Institute also locally published culture and language education books, journals and textbooks, produce videos and used education and media to actively carry out Chinese culture and Chinese language teaching and learning activities in the area.

(4) Strengthening the economic and trading exchange around the Confucius Institutes – Together with local business organizations, Confucius Institute can promote Chinese teaching activities, thus reducing expenses of the Confucius Institute and effectively using Chinese language knowledge around local business organizations. For example, France's Confucius Institute, worked with local universities and local ZTE Corporation to organize Chinese language education. Cooperating with Confucius Institute and other institutions to carry out research and customer service, ZTE Corporation has become exchange platform for French business organizations and Confucius Institute. In 2006, Confucius Institute organized Chinese language teaching activities in the Chinese business organizations in Thailand

[7] Dai Rong, *Confucius Institutes and Chinese Language and Culture Diplomacy, p.39.*

and invited automobile companies and motorcycle manufacturers in Chongqing in invest locally, opening up trade markets in Thailand, hiring Thailand local employees for their locally established factories and effectively promoting business in Thailand.

(5) Adoption of new technology to spread knowledge of Chinese language teaching in the Confucius Institutes – In China, a Confucius Institute's course requires everyday attendance and its lecture hours are about 20 hours each week. It is short course with about 15 to 20 chapters to cover in short time. As most foreign students are full time workers, so lectures for them are about 4 to 8 hours each week. With regard to academic requirements and limited lecture time, CD-ROM teaching materials are produced to facilitate the students to learn by themselves. Many textbooks note the daily life and business knowledge as the starting point and pay more attention to the words, texts, oral practice teaching model as well as training in listening, speaking, reading and writing skills. Also, in the library at Confucius Institute, there are one to two professional Chinese training staff members providing consultancy services on Chinese language to the students. During the holidays, professional Chinese language staff members are hired to provide students with face to face inquiries in order to facilitate the students to learn Chinese in their spare time.

(6) Diversification of Chinese language teaching in Confucius Institutes – 21st century is the era of Internet culture, the network breaks through the constraints of time, thereby increasing the global number of people learning Chinese. Students are not restricted by their work. They can learn at any time. Confucius Institute has published audios, graphics, CDs and various media teaching materials. In 2005, Confucius Institute set up its online institute (China.org.cn) in English, French, German and Arabic languages. It also contains scene teaching, poetry appreciation, Chinese idioms, etc. In 2006, Confucius Institute at Michigan State University established Internet Chinese teaching and teacher-student interaction networks for Chinese teaching and designed Chinese TV programs, games and Chinese language teaching-learning practice.

In conclusion, the present development of the Confucius Institute teaching mode is the diversified and multi-channel teaching mode. Confucius Institute cooperates with local government and cultural institutions to reduce local people's rejection and resistance. In addition, Confucius Institute organizes Chinese language to show Confucius' role of "harmony" and "affinity" so as to show China's development will not endanger the safety of other countries and oppose "China threat theory". With Confucius Institute's financial support and assistance from local Chinese organizations and local non-governmental organizations, Chinese forces in overseas development can be supported.

3. Evaluation and recommendations

Turning to whether the establishment of the Confucius Institute will help promote the "public diplomacy", "peace diplomacy" and to improve China's image abroad, accessing the effectiveness of Confucius Institute, which is supposed to be the representative of Chinese cultural soft power in recent years, can be used to evaluate the success of China's cultural "soft power".

First, cultural "soft power" is primarily a national image to the public. Confucius Institute builds a successful brand in many countries and regions. Confucius Institute is considered to be a tool for the Chinese government to construct Chinese government's peaceful image. Confucius Institute uses China's peaceful image to announce that China is peacefully developing in spite of China's continuous international influence. Confucius was an "amiable" scholars, spreading "peace" cultural image. From global message, Confucius Institute is supported by many national governments. For example, in 2009, the Austrian government issued "Confucius Institute in Vienna" commemorative stamps. Confucius Institute in South Korea collaborates with Confucius Institute in Beijing to organize courses on Chinese language, history and culture courses and seminars. Confucius Institutes in many states of the US organize education classes and seminars. Confucius Institute in the UK has successfully organized Chinese language culture and history seminars. Especially, the Chinese communities and trade organizations in South Korea and Thailand cooperate with Confucius Institute to organize Chinese language teaching activities, exceeding the first establishment of Confucius Institute to gradually immerse Chinese language knowledge into the folks.

Second, Confucius Institute has been immersed into folks, but is not yet widely immersed into the Western mainstream media and government agencies, failing to change the overseas advocated "China threat theory". In contrast with Alliance Française and British Council which operate independently, Confucius Institute does not work directly with schools in other countries, are not led by any nations and do not provide financial assistance to another country and academic institutions To make matters worse, some commentators believe that Confucius Institute is funded to collect foreign information and influence other governments' policies. Many regions and countries do not want organizations in their campuses to be supported by Chinese government and even think that Confucius Institute helps to steal university, industrial and military information. As seen nowadays, these views are incorrect because in 50s and 60s, the Chinese University of Hong Kong Sino-US relations and cultural exchange has long been set up and funded by the US government; the situation is similar to Confucius Institute – how come the foreign-funded research center was set up by the US in the Chinese University of Hong Kong, but Confucius Institute cannot be set up. This shows the double standards of the US and some Western countries. More, so far there is no evidence that Confucius Institute steals the secrets and research results in the other countries.

Third, many countries are worried about that the Confucius Institute has destroyed the local institutions of higher learning courses, colleges and universities only hope Confucius Institute or Chinese government to give financial aid, and not to be affected by Confucius Institute. In recent years, financial difficulties have been faced by colleges and universities in Western countries. For examples, there is big increase in tuition fees in the British universities. The Japanese private universities absorb more Chinese students that provide operational funding. Many countries hope Confucius Institute can provide financial assistance to schools to employ teachers who can also help students learn important language for future development, which is Chinese. With the "make a dream in China" slogan, people in many countries of the West are learning Chinese, but people in many areas are worried about that Confucius Institute courses will affect students' ability to think independently. In 2010, the US Congress denounced the US government allowed the development of Confucius Institute in the US, the Indian government rejected the establishment of Confucius Institute in the universities in India, In Japan, Kyoto University and University of Tokyo have not yet opened Confucius Institute. Thus, people tend to think that Confucius Institute is set up by Chinese government's foreign propaganda. It does not only spread the language and culture, more importantly, under the influence of the "China threat theory", but also, as believed by many people, Confucius Institute promotes Chinese force and affect the internal affairs of the other countries.

4. Conclusion

Many scholars have regarded that Chinese language teaching in Confucius Institutes supported by today's Chinese government as a successful overseas "soft power" project, its results are more effective, more specific and more endurable than those of the "Pleasant" and "Jinling Thirteen Nobiles" movies in spreading China image overseas, more acceptable for foreigners. Confucius Institute is better than other channels in spreading Chinese culture and public peaceful diplomacy image overseas. Of course, its effectiveness has yet to be tested, but it is China's first development strategy of systematic thinking of "soft power".

More importantly, the Government and the people of the overseas countries and regions have to lay down their points of view about the China threat theory. They still criticize that the Chinese government uses Confucius Institute to steal secrets of their countries, but there is yet no one case to show that the Confucius Institute is used as a tool to steal secrets and research results of their countries. So, we can see that the West failed to lay down. This is misconception on the replacement of English by Chinese as universal language If Chinese language is widely spread. Many countries in Europe and America can only think conduct of foreign language education, and China cannot conduct Chinese language education, they only pay attention to how Chinese language education helps to expand trade relations in China, but failed to pay attention to the interaction between language and culture.

創科新基地

Prof Tony F. Chan
President
The Hong Kong University of Science and Technology
陳繁昌教授
香港科技大學校長

２００９年剛回流香港時，才耳聞河套區這個地方，十年前被列為香港政府十大基建工程之一，希望在該區大搞辦學、創科及文化產業，連當時浸大都有意遷往河套。那時的河套發展計劃曇花一現，雖有美好願景，可惜卻被閒置多年，這幾年我一直追問進展，以為無疾而終之際，上周我欣然得悉計劃有突破進展，港深政府宣布於該區合建「港深創新及科技園」，河套土地業權正式歸港。

這個河套新園區名副其實是港深的通道，業權歸港，加上採用本地法律及土地行政制度，香港順理成章取得河套發展話事權，在更明朗的框架下商討其策略性發展。大前提是要有清晰的定位，所謂近水樓台，我一直強調香港要善用港深合作的優勢，集兩地之長，度身訂造政策、税務優惠與配套去吸引創客及投資者，以及促進兩地科研基金流通，切實推動創科。我希望河套應善用其港深窗口優勢去發展產學研項目，而並非只為香港供地，公眾難免會疑慮這創科平台會否淪為另一個地產項目，幸而政府已重申新園區不設住宅。回看數碼港或早期的科學園為例，被有些人認為是偏離原本發展科技之目的，前車可鑑，決心不要重蹈覆轍。

對於發展計劃，反對或爭議聲音在所難免，首當其衝的是出入境問題，膠著的一地兩檢問題仍未釐清，要方便深圳人員通關往河套，政府建議發放如目前亞太經合組織的商務旅遊證，這絕對值得考慮。當然，要由河套到香港，那深圳人員必須要通過正式渠道過關。很多人又認為河套地區偏遠，但其實河套是香港最接近深圳的地方，佔盡兩地優勢，同時是創業人才的平台，礙於人們不大適應深圳的居住環境及文化，造成思想上的抗拒，期待深港高鐵盡快落成，拉近兩地距離。

新園區首座大樓預料於七年半後才落成，老實説，時間有點長，如能精簡繁複的審批或行政程序，才不致錯失良機。有時做大事，要不拘小節，希望社會各界能明白這是千載難逢的機會。根據我多年經驗所得，我同意新園區所訂的四大發展領域—機械人技術、生物醫藥、智慧城市及金融科技，然而，科技日新月異，從前興納米，今天講航拍，無人有水晶球能預知未來，我們不必局限自己，更不能急功近利，這個港深創科園並不為今天的香港帶來一時三刻的利益，而是為明天的香港鋪路。真正的成功是要為香港締造一個培育創新的良好大環境、氛圍，而非僅僅在某些特定項目與範疇出類拔萃。

在推行這新計劃，不停打著吸引國內外頂尖企業、高等院校及科研機構來港的旗鼓之時，有國際專才的支持，彼此互利雙贏，當然是美事，同時我們應勿忘初衷，緊記要將香港創科發揚光大，而非只為他人作嫁衣裳。我認為香港絕對有本事有實力去搞好創科，然而外間未對ＳＴＥＭ有深入了解，社會就是欠缺了些信心，其實，外國的月亮未必特別圓。

我希望年輕一代能夠把眼光放遠點，著眼港深協同效應所帶來的龐大機遇，大學在這方面的教育亦擔當重要角色。香港，請不要小覷自己的實力，我們其實可以走得更遠。

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香港應有對前景論述和戰略發展的共識 —
大灣區才是我們的本土：下一站， 南沙？

2017 年 7 月 1 日（香港回歸祖國 20 週年）

關品方教授

（作者为香港大学名誉教授，香港特区政府中央政策组特邀顾问，浙江杭州青山湖科技城建设发展智库首席顾问）

香港应有前景论述， 让年轻人有提升竞争力的志气，接受时代的挑战。为重拾昔日的光辉，港人需要有共识 - 别的不说，光谈经济 - 中国是香港的大客户！中国经济发展，香港会受惠， 可分一杯羹。但过去二十年来， 我们这羹分得少；因为对全局看歪了，吃不透。

论述前景， 不能只有下一盘棋的概念，需要有全局的大环境战略观念。本世纪科技的进步是颠覆性的，其规模比较欧洲工业革命前的大航海时代带来的突破尤为庞大。全球一体化， 就是从那时开始。现在是互联网时代，赢者独取，香港略有蹉跎， 已输掉阵势，定要翻盘。今后的世界趋势，是科技突飞猛进，经济开放 / 市场全球化，导致环境恶化和人口老化， 对有限资源的竞争和文化宗教意识形态的冲突。

中国的改革开放，导致 13.5 亿人民当中，绝大部分受惠。香港是细小而开放的经济体，决定了香港和内地一定要互相依存。长远而言， 香港应聚焦三个中心 :（1）离岸人民币金融中心（好像伦敦是欧洲美元中心）， （2）一带一路筹融资服务中心， （3）大湾区综合商业中心。我们要肯定发展大方向，认识和认同中国的总体规划， 在开放贸易，金融服务和创新科技三方面平衡发展， 重点是国际金融商业服务。

香港不能封闭自己， 意识上应重新开放起来，面向中国和全球。要及时解决土地资源不足的问题，出路在跟珠三角西岸连接。港珠澳大桥通行后， 可参照澳门在横琴的模式， 争取在江门 / 中山 / 南沙觅地发展。香港人口老化， 2047 年将会到顶。解决方法是欢迎内地的移民。他们来自相同文化背景，对香港而言十分幸运 (西欧国家的移民来自不同文化背景 - 种族冲突是恐怖主义生成的根本原因)。

坚持开放吸纳包容，反对狭隘本土主义。中国崛起，是不可逆转的趋势， 其基本原因是顽强的民族意志，丰富的人力资源 （当中不乏企业家精神） ，庞大的资本资源。政府施政较有效率，政策容易落实。相信内地的政治改革会逐步落实，民主体制会逐渐改善，我们乐观其成就是。

如何判断中国的现状， 十分关键。中国在复兴的过程中，百年屈辱问题尚未完全解决。现在内地已不再是通过革命手段可以推翻政权的时代。要超越传统的革命起义思维， 扮演改革改良改造的角色，提出建设性的深刻批评，超越敌对党派在意识形态上的局限。要解决人心问题，就要聚焦在文明复兴和文化崛起，强调人类命运共同体的概念， 共建共存， 共融共业。

我们应该相信中国开拓中的未来，应该以做中国人为荣，以正面的态度和积极的取向，接受时代的挑战，承担改革中国的部分责任。我们当然可以长期抱有批判性的怀疑，但不能否认中国现阶段的发展，正为下一代提供历史上从未有过的大显身手的好机会。

历史上各民族例如汉满蒙之间，哪怕是血海深仇也能和解。国共恶斗期间， 多少人为主义信仰奋斗牺牲，尽管可歌可泣，都是俱往矣的历史陈迹。港人应深刻理解大湾区的构思，把本土主义的眼界开拓到广东省各地，包括肇庆、江门、广州、佛山、中山、东莞、惠州、珠海、深圳和澳门。我们祖辈大都来自广东，我们的根就在大湾区， 它才是我们的本土。在

大湾区内， 要能够真正做到人、财、物、资讯的互动交流，目标要赶上美国硅谷（硅谷仅约四百万人口 / 四千平方公里 / 人均 GDP 全球第三！）。要扭转香港抗拒和中国融合的思潮，要鼓吹理性的爱国主义和地球主义， 反对信仰式的反共心态。中国一下子发展得这么快，令全世界瞠目结舌。国际舞台正不断洗牌，环球局面快速地变化，香港人不易适应， 绝对不奇怪。只有在中国强盛的环境下，香港才会有安居乐业的”小确幸”。国际上两极分化，一边是激进的国家主义抬头，另一边信奉极端的自由主义，两者皆不可取。只有互联互通，双赢共融的国际化才是根本的视野。我们应该开启对前途有信心，对人民有信任，对理性有信赖的论述，争取市民的认可。

香港是一个多元城市和国际城市，是二元结构型的社会，两极差异只有阶层，没有阶级。中下阶层向上流动，基层年轻人看到前途和希望，根本出路在经济的成长和发展。现在是时候总结香港过去二十年的经验，重新定位以重拾信心，千万要避免误堕温水煮蛙的绝境。五十年不变，只剩下三十年了。时间无多，如果再不清醒地看到危机就在目前，香港逐步坠落必不可免。

连接香港和内地的高铁快要开通，港珠澳跨海大桥行将落成。香港回归祖国已二十年，大湾区的发展宏图令人鼓舞。但是，香港面临土地短缺的局限，不易解决。笔者建议，可参考横琴之于澳门，是否可在一国两制的前提下，让香港特区能够在南沙租地 100 平方公里，具体落实粤港融合？

大湾区是香港的本土。香港居民先祖来自珠江三角洲的，占绝大多数。回顾历史，早在公元前 214 年，秦统一岭南时已在南海设郡。公元 331 年东晋年间，南沙隶属宝安县。公元 757 年唐朝时期，南沙转属东莞县。其后历经各朝变迁，从东莞县析出香山镇，升格为香山县，内有南沙。1925 年，香山县改称中山县。解放后南沙最初属珠海县，后又改入番禺县，名大岗公社。1983 年撤公社改区， 1987 年撤区改镇。1990 年，中央确定南沙为重点对外开放区域和重点开发区，成立南沙经济区管理委员会，由番禺县政府管理。1992 年，番禺撤县改为县级市。1993 年，国务院批准成立国家级南沙经济技术开发区。2005 年，南沙晋升为独立行政区。2012 年，国务院通过《广州南沙新区发展规划》，南沙新区成为全国第六个国家级新区 。

关心粤港区域发展规划的人们，都会留意到今年 4 月 7 日由国家法改委制定印发的《2017 年国家级新区体制机制创新工作要点》。其中，南沙新区的工作要点是为深化粤港澳深度合作探索，推动建设粤港澳专业服务集聚区、粤港澳科技成果产业化平台和人才合作示范区，引领区域开放合作模式创新与发展的动能转换。这里面包括三大方面的任务。南沙新区首先要创新与港澳在资讯科技、专业服务、金融及金融后台的服务、科技研发及成果转化等领域的合作方式，推进服务业执业资格的互认，吸引专业人才到来落户。其次， 南沙新区要完善“智慧通关”体系，推动建设全领域、全流程“线上海关”，构建国际国内资源双向流动的投资促进服务平台。第三，南沙新区要探索建立法院主导、社会参与、多方并举、法制保障的国际化、专业化、社会化多元纠纷解决平台，优化法治环境。

这三个方面， 香港具备不少有利条件， 内引外联， 协助配合南沙新区完成任务， 达到互利共赢。南沙新区位于广州市南端、珠江虎门水道西岸，是三江汇集之处，是珠江出海口和大珠江三角洲的中心，珠江流域通向海洋的通道和连接珠江口岸城市群的枢纽，距香港 38 海里，常住人口约 65 万人， 总面积 784 平方公里。作为国家重点对外开放区域和经济开发区， 在保税业务和港口物流业，发展国内外商贸旅游和招商引资，以至外贸进出口等方面， 都可以和香港互补支持。香港特区在南沙租地 100 平方公里，制定长中短期的综合发展规划，在租用的地区内采用香港特区的法律制度，是香港真正能够和广东省融合的必由之路，也是协助年轻一代向大湾区本土寻根的最佳方法。

科学技术和文化教育两大领域的互动合作，前景十分瑰丽。过去几年，南沙新区投入的科技三项经费，高新技术企业数目，专利申请量 (包括发明专利和授权专利)，获得国家和省市支持的科技项目以及获得中央和地方各级科技部门支持的经费，都有长足的增长。近年南沙新区成功吸引工信部“锂离子动力电池制造工艺装备技术基础服务平台”和国家发改委“物联网标识管理公共服务平台”两个国家级平台落户，南沙新区政府安排专项资金支持香港科技大学霍英东研究院拓展国际科技合作的步伐，与德国和加拿大的两家知名高校合作设立研发中心等，都是令人瞩目的成就。广东省与香港将在南沙新区里面的自由贸易区建立的“粤港深度合作区”，产业发展将围绕八大方面 :- 1. 研发及科技成果转化、2. 国际教育培训、3. 金融服务、4. 专业服务、5. 商贸服务、6. 休闲旅游及健康服务、7. 航运物流服务、8. 资讯科技， 让它们发展为有生命力可持续发展的综合互动的产业群。 这个伟大构思和宏观安排，要在大湾区内具体实现，一定要有从根本上落实人才和资本，资讯与物资真正流动融合成圈的，生产生活生态结合的共同体，才有脚踏实地的真正出路。

笔者去过虎门炮台遗址数次， 就在南沙新区虎门水道主航道西侧。鸦片战争时先有虎门销烟，随后虎门炮战。林则徐铜像，迎著珠江口岸的罡风，昂然屹立。他的名句，”苟利国家生死以， 岂因福祸趋避之”，发聋振聩。从炮台登高望远，伶仃洋，珠江口，沙角一一在目，进出船舰尽收眼底。往事浩瀚如烟，前路曲折光明。香港要坚持一国两制不动摇，今后要从投身大湾区建设开始。租用南沙 100 平方公里，当然不能一蹴即至，一切还看未来数年形势的发展和中央的战略决定。

The International Institute of Management

My three recent articles published in :

1. Ming PAO Monthly Journal July 2017 issue – 香港回歸祖國二十周年所感
2. HK Commercial Daily 2017-06-26 香港商報 — 言論自由非絕對港獨煽動有害
3. TA Kung PAO 2017- 3-30 — 修補社會撕裂的好時機

Above 3 articles all touching on some aspects of HKSAR's 20^{th} Anniversary.

作者簡介：

藍鴻震教授博士

香港特區首屆民政事務局局長

國際專業管理學會會長

香港回歸祖國二十周年所感

香港回歸祖國轉眼二十周年，在慶祝香港脫離殖民地身份回歸祖國，成功實踐一國兩制、港人治港及高度自治之餘，二十周年也確實是一個別具意義和代表性的里程碑。身為以香港為家的香港人，此際同時是一個好時機讓我們總結過去二十年的經驗，思考香港未來應該怎樣走下去。

回想九七前後，筆者加入香港政府逾三十載，從港英年代一直到回歸，見證著香港社會一日千里的發展，也和各位朋友共嘗辛酸苦辣，其後成為特區政府首任的民政事務局局長，為實現港人治港、高度自治出一分力，自然是筆者的榮幸。事實上，香港在回歸之前就一直遇到各種不同的挑戰和難關，在回歸後也經歷了大大小小的風浪，包括九七年的亞洲金融風暴，零三年的「沙士」疫症爆發，零八年金融海嘯等等，香港並沒有被輕易擊倒，反而「關關難過關關過」。 當中除了香港人打不死和堅忍不拔的精神，克服種種挑戰，也有賴於國家的大力支持。「一國兩制」是一個全新事物，並無先例可循，因此在回歸前夕，有不少海內外的人對香港前途作出較為悲觀的預測，甚至提出「香港已死」的莽言，事實證明這些過分悲觀甚至不排除是惡意的論調，皆屬錯誤至極的。

時至今日，香港仍然被視為全世界最佳的營商城市之一，宏觀經濟情況大致穩定，生產總值維持在每年二至三個百分點的增長，在全球金融不穩的年代，香港的經濟增長比起歐洲以至全球不少國家及地區更佳；香港失業率維持在約三個百分點的水平，就業不足率亦維持在較低水平，基本上是全民就業。瑞士洛桑國際管理發展學院發表的 2017 年世界競爭力年報，香港連續兩年獲評為全球最具競爭力的經濟體，同時美國傳統基金會連續 23 年將香港列為全球最自由經濟體。基金會稱讚「香港司法制度良好，為法治及產權保障提供強大支持，是本港的重要基石」，而與內地的聯繫亦是香港的一大優勢。

然而，這二十年來，香港也有走過不少冤枉路。特區政府在管治和施政上遇到很多想像不到的困難，當然也有不少需要學習和改善的地方。事實上，筆者認為香港自回歸以來，尤其是近十年的發展緩慢，彷彿處處受制，固然有外在因素影響，但一部份的原因，也確實由於特區政府欠缺長遠視野及願景，對長遠建設及內在問題未能提出解決辦法，反之卻投放過多時間及能量不時用於「撲火」和非建設性的工作。在不少人眼中，特區政府長期處於弱勢，不時被評處於管治危機，在很多關鍵性的時機，往往由於特區政府退讓，以至功敗垂成。

遊筆至此，筆者忽然想起一件快將二十年前的往事，這事不大不小，但以筆者的個人觀感及看法而言，卻為特區政府處事作風起了一個壞先例：時為九七年回歸初期，行政長官董建華邀請了鍾士元爵士出任特區政府的首任行政會議召集人，鍾爵士當時答應並真誠地表明只做一年，好讓特區政府在創立之初更添順暢。同年十一月正好是鍾爵士八十歲大壽，當時董先生為表達對鍾爵士服務香港多年的尊敬及謝意，決定在禮賓府辦一個小型祝壽飯局。豈料消息傳出，祝壽飯局換來「濫用公帑大排筵席」的指罵，傳媒展開輿論攻擊，最終特區政府取消了祝壽的安排。在港英政府時代，當時的港督府為本地或外來賓客設宴，本是一件不值一提的閒事。這個賀壽事件鬧大，可以說是針對特區政府的小題大造。當時筆者是官員之一不便公開回應，只是暗自搖頭，心想祝壽本為一件美事，對此特區政府自可有應對之法，但唯獨取消宴會的決定，很可惜地將會被視為示弱的表現。在筆者眼中，這也許就是特區政府走向弱勢的開端。當然，事實是否如此，讀者可以有自己的答案。

二十年過去，還看當下香港最大的問題是貧富懸殊愈趨嚴重，經濟成果未能惠及社會不同階層，樓價上升，土地房屋供不應求等等。事實上，這些問題不少是源自於特區政府早期政策例如八萬五建屋計劃遭受的批評，又適逢接連的天災人禍（如非典一役及兩次金融危機），導致後來有長達七年時間特區政府沒有在土地房屋政策方面著力。特首梁振英上台後的特區政府雖然致力針對上述問題，例如以增加房屋供應為重中之重的要務，積極增加私人住宅物業供應，然而政策落實與成果展現總有時滯，遠水救不了近火，是故種種經濟和資源分配的問題，在不少公共政策及政治問題上火上加油。從二零一二年的反國教運動、至二零一四年的佔領運動、政改諮詢、針對內地遊客的滋擾事件，直至去年年初一的旺角暴亂等等，社會分化對立嚴重，即使在最近有稍為緩和的跡象，但餘波未了，對香港將來的發展仍構成一定的隱憂。

另外一個問題，則是部份港人對「一國兩制」的誤讀，加劇了一些無謂爭論，數年前更滋生了本土分裂思潮，談起所謂的前途問題，實際上是庸人自擾。一些鼓勵、慫恿甚至帶頭呼喊港獨的政治人物，更簡直是要把香港葬送。猶幸，最近中大傳播與民意調查中心發表調查，發現市民對中央在港落實「一國兩制」的滿意程度，以及對特區政府和中央政府的信任程度均創下新高，支持「港獨」的受訪者亦較去年調查明顯下跌，證明了大部份港人眼睛是雪亮的。面對分裂、港獨這些病態思維，香港社會無需懼怕，但必須有勇氣和決心正視及堅定地處理問題，根治病源。因為香港的繁榮安定不能也不應再承受任何動亂和衝擊。

在過去的港英年代，培訓政務官及其他高級公務員時比較著重其執行能力，是故回歸後不少高級公務員以至問責官員均被批政治歷練和能力不足，在關鍵時刻未能抓緊機會，對症下藥。除此以外，以往的政務官培訓某程度上局限了官員視野，令他們善於作中短期規劃，卻不善於計劃長遠政策。不過，世界上並沒有管治的速成班，即使國際間的領袖也需要從經驗中學習，相信回歸二十年的經驗對於將來的特區政府有相當的參考價值。另一方面，在二十一世紀，面對世界和內地發展的瞬息萬變，香港特區政府的官員也需要改變管治風格，香港人也需要重整心態，思考我們現今身處在甚麼位置，將來應當走到哪裡，如何去走，並依此設立新的目標，重拾我們失去了的勇於創新、冒險嘗試的精神和膽色，全力再創高峰。

二十年前，我們佔中國全國國內生產總值的比例約**十八個百分點**，到二十年後的今天不足三個百分點，當中香港經濟仍然有實質增長，比不少經濟體來得穩健，只是在中國經濟過往二十年雙位數字的急速增長下相形見絀。儘管如此，香港在中國以至世界的地位仍然重要，在一帶一路覆蓋東南亞、南亞、中亞、西亞及中東的六十多國及地區的環球經濟發展藍圖下，香港可以擔當「超級連繫人」角色，把握「一帶一路」的發展機遇。縱使我們面對其他城市的激烈競爭，我們仍然擁有獨一無二的制度優勢和實力，香港人應保持樂觀務實，分秒必爭地急起直追，以免後悔莫及。話說回頭，香港從來不是一個簡單的城市。我們在過去總能譜出一個個成功的傳奇：從五十年代的轉口港，在十多二十年間演變轉型為一個輕工業及製造業城市，再在六、七十年代成為與韓國、臺灣及新加坡齊名的亞洲四小龍，逐漸發展成今日的國際金融中心。展望未來，香港的問題並非無法解決的，年輕一代必須要明白及理解「一國兩制」之下香港與內地的關係，並把握從中的優勢和所長，延續香港的成功故事。

President Jiang Tzeming in Hong Kong 1999

President Jiang Tzeming in HK celebrating HKSAR's first Anniversary on 1 JULY 1998

Vice President HU Jintao in HK celebrating HKSAR's second Anniversary on 1 JULY 1999

前民政事務局局長，國際專業管理學會會長 藍鴻震 博士教授
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言論自由非絕對港獨煽動有大害

中聯辦法律部部長王振民在 4 月 12 日出席一個座談會時談及「港獨」和言論自由，指出香港市民的言論自由受《基本法》所保護，但言論自由也有其限制。有關這一點，筆者希望也分享一下個人看法。

國際公約：言論受規限

言論自由是一項基本權利，但它不是絕對的。基本法第 39 條使《公民權利和政治權利國際公約》適用於香港的有關規定在回歸後繼續有效，通過香港特別行政區的法律予以實施。《公民權利和政治權利國際公約》第 19 條就清楚列明人人有保持意見不受干預及發表自由之權利，但所載權利之行使，附有特別責任及義務，故得予以某種經法律規定及必要之限制，包括尊重他人權利或名譽及保障國家安全或公共秩序、或公共衞生或風化。

筆者有讀過、聽過不少「港獨」言論，有人提出香港可以自給自足，漠視了香港食水、食物以至不少日常必需品都從內地入口，內地向香港持續供應考慮到香港屬於中國一部分的事實。也有人主張與中國割裂，忽略了香港與祖國關係和歷史淵源，香港一帶早在秦朝已被納入管治；唐朝軍隊曾在今天的屯門駐紮；1997 年在馬灣出土的新石器時代古文物，被列為當年中國考古十大發現之一等等。這些人的所謂「港獨」理據，根本完全脫離大眾對歷史的認識和客觀現實。

港獨違反法律規定

提出「港獨」的人士，表示自己在行使他的言論自由，無錯，香港市民的言論自由，是受到法律保障，不同人士可發表不同政見，可是，當有人提出實則行動或計劃，牽涉到國家安全或公共秩序，即使是《公民權利和政治權利國際公約》也列明是應該予以限制的。香港尚未就 23 條立法，但也不代表這些越界言論不會違法。有意見認為，如果這些言論牽涉煽動，就有機會干犯《刑事罪名條例》的叛逆罪和煽動罪。這些法律觀點，還有待研究，但在「一國兩制」下，保衛國家安全，是香港的責任。如果香港有實際的「港獨」行動出現，特區政府必須認真處理的。

原則上，相信絕大部分香港人認同「一國兩制」和高度自治，也尊重香港特別行政區是中國不可分離一部分的政治現實，不可能認同「香港獨立」的主張。絕大部分香港人也以維持香港繁榮和穩定為最重要的原則，鼓吹「港獨」對香港沒有丁點好處，反之有大害。一方面，香港回歸 20 年，部分人心尚未完全回歸，當中有很多因素，但絕大部分的港人會堅定反對「港獨」的思潮，假如讓這些思潮成風，勢必進一步撕裂香港社會，加上激進分子的暴力手段，香港定必亂局四起。另一方面，香港以往的成功除了靠幾代人的努力和付出，也有特殊的政治經濟因素配合。今天包括香港在內的全球經濟也少不了中國因素，假如讓「港獨」思潮製造和激化內地和香港的矛盾，影響關係，對香港的發展也是百害而無一利。

香港在基本法下的確有言論自由，但鼓吹「港獨」的言論卻是違背了基本法和「一國兩制」的精神，假如有任何行動組織起來，定必會受到法律制裁。支持「港獨」的人士在「享受」香港的言論自由時，如採取實際行動，必會帶來嚴重後果。同時，請別忘記，違背道德價值如忠孝廉恥都不算犯法，但又絕非該做的事。筆者看來，任由「港獨」思潮發展，不止會令香港原地踏步，簡直是走上絕路。香港將來應該如何發展，往哪個方向走，特區政府有責任帶領社會各界明辨是非，以及在適當時嚴厲執法，守護香港。

前民政事務局局長，國際專業管理學會會長 藍鴻震 博士教授

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修補社會撕裂的好時機

林鄭月娥高票當選特首，她在發表勝選演講時提出：修補撕裂，解開鬱結，團結大家向前。筆者認為這正正是管治香港亟需的思維和願景，林鄭的勝選也造就了香港修補撕裂、同行向前的好時機。

回首過去五年，香港先後發生「佔中」、旺角暴動，政改亦無法通過，政治矛盾撕裂社會，法治備受衝擊。另一方面，即使在現屆政府努力下，民生及經濟問題尚未得到顯注改善，少數「港獨」的聲音加劇了兩地矛盾，各種管治問題及社會困局阻礙了香港應有的發展。包括筆者在內的不少香港市民，都對林鄭在未來五年與港人「同行」，帶領香港繼續前進，抱有極大期望和信心。

與五年前梁振英當選特首的情況相比，林鄭當選後的形勢可謂「贏在起跑線」。首先，梁振英當時是後來居上力壓唐英年，也導致本來較為團結的建制派出現了所謂的「梁營」和「唐營」；加上梁的部分政綱惹來商界不滿，故此對於梁特首執政初期的情況仍然造成一定的不確定性。相反，林鄭今次獲得整個建制派的支持，商界亦普遍支持她，令今次的結果某程度上團結了建制派；加上多年任職政府的經驗和人脈，對於她在組班、進行準備執政的前期工作等等，相較之下的優勢更為顯注。

其次，林鄭當選後有望與反對派修補關係。五年前梁振英當選後反對派馬上遊行示威，隨後又有國教風波，之後有「佔中」，反對派的攻勢一輪接一輪。反觀今屆選舉，林鄭在民意上屢遭反對派攻擊，更被標籤為「梁振英 2.0」。因受中央支持，反對派遂通過支持曾俊華去打擊她的選情。可是，當林鄭獲勝後，大部分反對派並沒有像五年前即時惡言相向，只抱以審慎觀望態度，從此道出彼此關係大體上屬正面。事實上，市民對反對派的政治運動感到疲倦甚至不滿，反對派亦欠缺打擊林鄭管治威信的彈藥，因此現在正是修補社會關係的好時機。

林鄭從事公職三十六年，在不同崗位上處理過不少棘手難題，包括清拆皇后碼頭、新界村屋僭建等等，在面對巨大壓力時，她往往能合適地表達政府立場，執行政策，筆者認為「好打得」這個説法十分貼切。

在林鄭擔任發展局局長時，筆者曾經會同陳永棋、戴德豐和其他香港友好協進會的代表，就設立香港回歸博物館一事多次接觸林鄭，討論可行性及有關細節。當時我們做了大量準備工作，包括邀請愛國愛港的知名設計師、畫則師、工程專家等，為我們義務設計和起草圖則，亦到過景賢里、舊灣仔警署，以及位於炮台里的終審法院前址等作實地考察。我們與發展局來回研究討論了超過兩年時間，雖然到最後回歸博物館這個甚有意義的計劃遺憾地未能落實，但在過程中我們深深感受到林鄭當時竭盡所能地工作，她的專業態度、言行和表現亦令我們十分敬佩。

林鄭正式上任後，將成為香港的首任女特首。事實上亦是香港自開埠以來二十八任總督，加上回歸以後的四任特首後，百多年以來首位女性領導人及代表。未來五年的香港，需要一位能夠帶領特區政府有力管治及執行政策的行政長官，也需要一位兼聽、真誠、能夠團結社會向前的領導人。適逢回歸二十周年，筆者寄望林鄭能夠繼續與香港七百萬市民同行，建設更美好的香港。

前民政事務局局長，國際專業管理學會會長 藍鴻震 博士教授

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Forensic Anthropological Excavation and Management: A Review

Winsome H.S. Lee

Winsome (MA, BA (Departmental Honor) MIIM) is currently a graduate student in Forensic Science (Forensic Anthropology and Forensic Archaeology). She has been trained in bioarchaeology, and physical anthropology. Her current research primarily focuses on upper extremity traumas.

Aside as a student, She also works as the forensic anthropologist of National Police of Timor Leste, in hope of providing clues, answers and even closures for civilians that had been killed in massacres in the 70s and 90s. Her educational background includes degrees in Philosophy (with Departmental Honor, BA, University of Oregon), Anthropology (MA, The Chinese University of Hong Kong), and is currently a candidate of Forensic Sciences (Forensic Anthropology and Forensic Archaeology) (MSc, University of Leicester).

She has a strong commitment to interdisciplinary work. She has conducted research in bioarchaeology in University of Warsaw, Poland, interned as a forensic anthropologist in Miami-Dade County Medical Examiner Office, Florida, and took part in forensic excavation for humanitarian cause in Cyprus. In the summer of 2017 and 2018, she was/ and will be one of the supervisors and researcher in the humanitarian project in Cyprus.

At the same time, her research, and her field experiences merge together with her writing avatar. Her first book << 屍骨的餘音 >> was published in May 2017 as public literature and reprinted the second edition in June 2017. She is constantly a contributor to the online Hong Kong news platform, Stand News, with a column on bones, archaeology, anthropology and forensics. Her second column << 骸骨傳記 >> with CUP Magazine has been commenced since June 2017. Her food and culture ego also contributes in a Taiwanese online platform, FLiPER Magazine where she writes about Greek food culture.

Most people are fascinated by forensic sciences. And most people have heard of archeology, or anthropology. Or, at the very least they could link the profession with the movies of Indiana Jones. Yet, not many of them could comprehend the synthesis of the two to be one storyteller of bones, forensic anthropology.

The highlight of forensic anthropology is that it has a role of human rights investigation. We use what has left behind after death to deduced what happened before or right at death. It is part of forensic anthropologists' duties to recover and locating suspicious remains by applying scientific method from archaeological sciences, as well as theories from geology.

Burying human remains involves disturbing the ground surface. The disturbance could be from the decomposition of the body itself, or the burial. Some people may think that job related with anthropology or archaeology is a relatively lonely or solidary practice. Meaning ones works only in own square or section to excavate, record, clean and process findings. In fact, in order to locate remains or burial require a relatively good team effort for observing vegetation, soil color changes, and or even maggot activities. All recovery processes are rather invasive, thus only systemic and organized approaches are allowed. In order to maintain the excavation fluidity, a strong team identity is a must for all the field aspect in forensic anthropology. This heavily relies on the site supervisor management, and the efforts of the team. Though as distant as it may seem, in the following space I would endeavor to unconcealed, with help of three common scenarios an excavation would encounter, the intertwined linkage between team building management and forensic anthropology is overlooked. This, on the one hand, shows a wide spectrum application of management to professions, and manifests the humanistic side of management on the other.

Forensic Anthropology and Management: A brief introduction

Forensic anthropology is an extension of physical anthropology. It is also an application of science onto the medicolegal realm and process. Quoting the American Board of Forensic Anthropology definition, "the identification of skeletal, badly decomposed or otherwise unidentified human remains is important for both legal and humanitarian reasons." Forensic anthropologists implement developed standards and scrutinized scientific techniques to identify human remains, and assist prosecution procedures. These foundations of forensic anthropology were built in the academic research of biological anthropology starting in the 1900s, precisely after World War II. Through understanding the maximum amount of information can be retrieved from skeletal remains of the past peoples and the osteology related professions, the knowledge has enveloped information not only biologically but too culturally. In other words, though forensic anthropology is a realm in death investigation, it inherits the holistic approach of anthropology to put full pictures of any incidents together.

Like any death investigation aspects, forensic anthropology is an interdisciplinary profession, as it is not uncommon for forensic anthropologists work closely and "in conjunction with forensic pathologists, odontologists, homicide investigators to identify a decedent, discover evidence of foul play, and/or the postmortem interval." (DiMaio and DiMaio, 1993) Unlike forensic pathologists, forensic anthropologists emphasize not on the cause of death— "the injury or disease that produces a physiological derangement in the body that results in the individual dying." (DiMaio and DiMaio, 1993). Rather, our foci are the manner of death— "the circumstance that gave rise to the cause of death: natural causes, accident, homicide, suicide, and undetermined," and the identity identification for the deceased individual (Klepinger, 2006).

Recovery of suspicious remains is rather invasive thus requires systematic and organized approach. A systematic management model requires a set of models, behaviors and a set of combined resources that would be favor for delivering useful results. It would be the foundation for the manager to make and defend decisions. Before each excavation, the team is briefed about the Standard Operation Procedures (SOP)—which contains set of forms, tools, site journal, as well as sets of protocols. It acts as the management model for the excavation. The model might need to modify to accommodate and adapt to unpredicted factors. It is true that archaeologists and anthropologists can perform many tasks by themselves, yet it is never practical or enjoyable. This management model for the site is rather important, as it reminds the significance of team effort at the site.

In general, managerial directions are usually divided into five categories: increasing productivity, organization of activities, managing and motivating people, acts accordingly and wisely to the changes and uncertainty on site, as well as making rational decisions. In any excavation contexts, problems needed to encounter range from human body physical capability to trench safety in order to maintain the level of productivity, as well as the fluidity of excavation project as a whole. By showcasing the relationship of following three scenarios encounter in excavations and the Frederick Taylor's "Scientific Management," teams were set to adapt the model for the sake of operation and to maintain productivity.

Scientific management theory is one of the first management theory implemented in applied sciences, especially engineering. Taylor purports that by simplifying jobs, productivity would increase (Gladwin, 1995). Furthermore, his team was the one of the first to advance the idea for workers and managers needed to cooperate. His proposition is strongly supported by the premise of money incentive drives the productivity and efficiency of workers (Gladwin, 1995). Though this premise might not be applicable in excavation setting, but the scientific approach of Taylor's theory still applies.

Scenario 1: Attempts on recovery decomposing remains over years of time

One of the most difficult challenges when overseeing an excavation team is to deal with changes and uncertainty in a trench. Within the archaeological and anthropological culture and community, it is said that the field would never disappoint archaeologists with unexpected findings. For this particular case, the team was contacted for a rapid exhumation over 7 years of time in hope of repatriating the remains back to the family. In standardized scenarios, a set of remains will complete its decomposition process and reach skeletonization stage in an average of 5 years. Attempts of recovery for this particular temporary grave were conducted repeatedly. Every attempt ended with the body was not fully decomposed. The body was not lifted according to the regulations of the local health department. As a result, learned from previous experiences, a test pit was created within the trench in order to examine if any soft tissues are found in the latest attempt. This is not a normal approach, but given the possibility that the bodies are not fully decomposed and based on other hygienic concerns (e.g. odor), test pit would reduce the team a lot of hassles.

Secondly, the grave was not found in a built structure. In addition, since the grave was repeatedly disturbed by the previous exhumation attempts, the soil was not compacted. It is in fact quite challenging for the team. The soil type is also majority in a form of sandy clay. Given the dry climate in Cyprus, the soil is rather loose, a slight misstep would make the wall of the grave collapse. In this case, the team members have to act creatively: using spray bottle to gently spray-watering the walls of the trench, in hope of the moisture will make the sand clay a bit more packed. While other members keep an eye on the status of wall, and help with the water duty regularly. Figuring this solution is critical, since the trench wall would eventually collapse, and endanger the team member working

Thinking out of the box and act according to the conditions in the field are two important elements to keep the excavation under control in terms of safety and operation concerns.

Scenario 2: Setting milestones for trench work (in challenging environments) with flexibility

Setting excavation milestones are crucial in order to increase productivity on the one hand, and maintain motivation of the team on the other. Working in an excavation site, making rational decisions do not only regard and limit to excavation tasks but also have to encounter human biological limits. Standardizing working or rotating interval allows teammates not to lose focus of their physical capabilities. Most importantly, fixed rotation schedule gives them time to look at the excavation project from other perspectives.

Excavating in Cyprus summer means exposing your body constantly in a 40 degrees' Celsius environment without shades. In general, we would rotate trench duties every 15 minutes until a short snack break. When later in the morning the weather was already about 35 degree Celsius, the local health department would put out evacuation notice and prohibit any of outdoor activities. Depends on how the weather goes, we would occasionally get to continue our excavation, yet swapping with a shorter interval and more frequent. In this case, normal way of timing rotation intervals would not work at best. As a site supervisor, we urge team members to "listen" and observe their physical changes that speak for their body conditions, especially for those do not have any excavation experiences before. Instead of setting up a standardizing interval, supervisors have to check on the member in the trench each minute and a half to make sure their body is still capable on working in a relatively lower air pressure environment. Some teammates might be too indulged, thinking they did not need any breaks that frequent, and would refuse to leave the trench. Not long after, they would feel extremely dizzy. This unawareness of one's own body condition and refusal of listening to differential opinions only decreases the productivity of the team and efficiency.

Using a layer interval (meaning the depth of soil in the trench the team will go for every layer) as a milestone is also needed. At the beginning, the team would start with smaller interval such as 10-20cm per layer, and using smaller tools (e.g. trowels) to encounter the possibilities that there might be a shallow burial. After two layers with smaller intervals, the team would be advised to use heavier tools such as shovels, and pickaxes, and going for a greater interval (e.g. 40cm) for each layer. When reached first piece of bone, the interval and tool choices change again to prevent any damages or marks on the remains.

Flexibly setting milestones during an excavation allows the supervisor of the site tackle unexpected and unpredicted situations accordingly. It also manages to keep motivating the team to work fruitfully under a stressed environment.

Scenario 3: Building a system at each trench to maintain efficiency and operation fluidity

Rotating trench duties benefits team members from assistance and listening to differential opinions. It allows them to learn about what they are more comfortable or good at handling in particular. A study by Warwick Business School (2013) with chimpanzees were published on the ability to cooperate and coordinate actions. Prof. Melis states that chimpanzees, human's closest ancestor, do not only coordinate actions intentionally but also understand the necessity to help members performing in order to reach a common goal. Alike human, chimpanzees are pretty competitive in terms of gaining access to food and would rather work alone for most of the achievement. This study shows that the willingness of strategically support others if they realize they are working for the same goal and would allow them to reach it quicker.

That said, strategical task assignment for each exhumation is necessary, for it keeps the team efficiency. Each excavation tem for an individual burial usually consists of 3-4 people. The labor division among the team is rather intense. Unless the size of the burial site is stated otherwise, it always fits only one person inside the trench each time. The other person of the four would carry out "bucket duty"—pouring spoil, or the soil, dirt, or rubble that results from an excavation—to the designated collecting spot. While the next person, most likely the one just came out of the trench, would be documenting his or her finding on the field journal according to the SOP. Occasionally, teams would get an extra pair of hands, and that person would be responsible for piling up the spoil to free up more space. It is said that "there is always something to do while you are in the field." The system of knowing you always catch some duties hanging around the trench speaks a lot the significance of teamwork in archaeology or excavation.

In sum, excavation practices solitary. It undoubtedly benefits from a group of people working together for a common achievement. In the forensic context, it would be ranging from recovery of suspicious remains, exhumation for legal purposes, or locating unidentified bodies. Excavation management plays a crucial role for excavation productivity and control. It does not only maintain a systematic and strategic approach for such an invasive operation. It also identifies a humanitarian aim of the excavation as the ultimate goal. The ultimate goal was not to compete for the crown of fastest exhumation. Rather, it is more about the individual the team is dealing with. The team identity is thus built up with the premise of treating the remains as once a human with respect. After all, it is forensic anthropologists' ultimate task to give a positive identification back to the set of remains, and to repatriate back to the families for a grieving closure.

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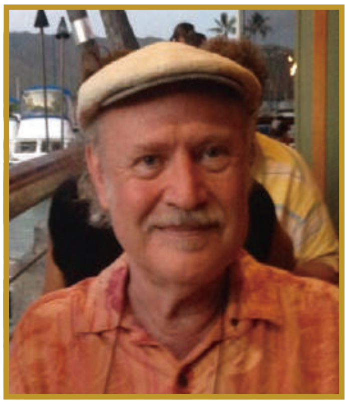
The *Zhongguo* Trademark in Modern East Asia



Kirill O. Thompson
Associate Dean
Professor, Department of Foreign Languages and Literatures
唐格理 教授
國立臺灣大學外文系
國立臺灣大學 人文社會高等研究院

Thinking about the fall of the Tang (618-907) and the horrors of the Five Dynasties period (907-960), Confucian thinkers of the Song (960-1279) noted the socio-cultural resilience of Han peoples during the drawn out horrific Five Dynasties period and reflected on the significance of "*Zhongguo*"-- in effect changing it from a purely geo-political term to an appellation infused with the Confucian *Dao* 道 (Way) of an intellectual-cultural-ethical tradition. They effected this change by recasting the *Dao* as a *Dao*tong 道統 (succession of the Way) that set conditions on the sort of politico-socio-familial conditions that would constitute a *Zhongguo* 中國 worthy of the name.

In working out their new notion of the Confucian *Dao*tong 道統, i.e., philosophy, practices, virtues, rites, arts, etc., Song Confucians were thinking of educated Han peoples who would cultivate the Confucian *Dao*-- whether or not they still dwelt in the nostalgia laden "Central Plains" of Chinese civilization. At the same time, the resulting new Confucian *Dao* was general enough that other peoples could master and apply it even if they weren't Han peoples themselves. Hence, the Mongols could be Sinicized by mastering the *Dao*tong and "adopt[ing]Han ways" (Liu 1988, 2) during the Yuan (1271-1368), as could the Manchus in the Qing (1644-1912). In fact, Zhu Xi's account of the Confucian *Dao*tong was canonized and made official by the Mongols during the Yuan and remained so until 1908 when the imperial examination system was terminated. By the same token, regionally, Japanese Tokugawa Confucians (1603-1868) immersed themselves in the Confucian canon, and sincerely asked whether Japan wasn't better qualified-- by Confucian *Dao*tong standards -- to be called "*Zhongguo*" than was geographic Imperial China (Huang 2014). Moreover, Chosen Koreans (1392-1897), who had striven to master and even improve upon the classics associated with the new Confucian *Dao*tong, asked whether any country, especially Korea, wasn't *Zhongguo*-- in its own perspective (Huang 2014). Interestingly, Confucians in both Korea and Japan were utterly shocked when the celestial Chinese Ming Empire fell to the "barbarian" Manchus in 1644; that is, they wondered how grand old "*Zhongguo*" could so easily fall while at the same time they took considerable pride in their own Confucian cultivation, culture, and relative stability.

What was the genesis of this new Confucian *Dao*? Initially, during the Tang dynasty, Han Yu (768-824) and Li Ao (fl. 798) circulated the idea of an "orthodox succession" of early Confucianism. In this effort, they elevated the position of the Mencius, the *Great Learning*, the *Mean*, and the *Book of Change*, and demoted that of the *Xunzi* (fl. 298-238 B.C.E.), Yang Xiong (53 B.C.E.-18 C.E.) and the Han Confucians in the Confucian pantheon. They presented the "orthodox succession" as running from the early sage kings through Confucius (551- 479 B.C.E.) and Mencius (371-289 B.C.E.). As Qian Mu points out, Han Yu emulated the writing style of the pre-Qin Confucian masters, especially Mencius, and thus differed markedly from the Han Confucian predilection for plodding commentary and their realist "art of statecraft." Moreover, Han Yu promoted the ancient literary style, which stressed clarity and basic truth in sharp contrast to the baroque rococo of Tang literary traditions (Qian 1971, I: 9). Three of Han Yu's essays were particularly influential in breathing fresh life into Confucian values and culture: "Offerings to the Alligators," a critique of the negative impact of Buddhism on family relationships and Chinese society, "Inquiry into Human Nature," and "Inquiry into the Way" (Chan 1963, 450-456, Hartman 1986). Drawing on the *Mean* and creatively adapting early Confucian concepts, Li Ao argued for the deep ontological and practical roots of the Confucian human nature in "Restoring the Original Nature" (Chan 1963, 456-459).

By and large, Han Yu and Li Ao's Confucian movement languished in the Tang and Five Dynasties period; however, their ideas about human nature, the Way, ancient literary style, *Dao* succession, etc. were noticed and taken up in the early Northern Song by thinkers like Ouyang Xiu (1007-1072), Zeng Gong (1019-1083), and others. Ouyang Xiu also wrote a critique of Buddhism in the spirit of Han Yu titled, "Inquiry into Fundamentals" (Lunben 論本) (Qian 1971, I:19, Eagan 1984). Notably, Northern Song Confucians took a renewed interest in the pre-Qin masters--- after which Mencius' standing in the Confucian pantheon rose markedly. Qian Mu remarks that these Northern Song scholars honored Confucius by elucidating the Confucian succession in order to "restore stability in the realm and dispel the pervasive lingering disorder" (Qian 1971, I:14). We needn't go into further detail about these scholars at present. Soon after this generation of innovative Confucian scholars, six seminal thinkers arose who contributed directly to the formation of the new Confucian *Dao*tong and Neo-Confucianism: Zhou Dunyi (1017-1073), Shao Yong (1011-1077), Zhang Zai (1020-1077), Cheng Hao (1032-1085), Cheng Yi (1033-1107), and the Chengs' disciples. Fundamentally, these thinkers honored Confucius, Mencius, the Great Learning, and the Mean and grounded and connected their ideals and virtues under several binding concepts, such as the *Dao* 道 (the Way), *tian* 天 (heaven, nature), *taiji* 太極 (supreme polarity), *li* 理 (principle, pattern), *qi* 氣 (vital vapor), *xing* 性 (natural propensities), qing 情 (emotions), etc. Zhou Dunyi stressed cultivation and integrated all of the constituent concepts under the dynamic Supreme Polarity (*taiji)* and brought them into daily experience with yin, yang, and the five phases: earth wood, fire, water, metal (Adler 2014). A student of the *Book of Change*, Shao Yong stressed the ideals of governance and the probabilities of evolving phenomena (Birdwhistle 1989). Following Mencius, Zhang Zai was alert to the vital vapor giving rise to sensitivity, vitality, sentience, and order, the cultivation of which he deemed necessary to moral perspicacity and efficacy (Kasoff 1984). Cheng Hao had a deep personal insight into the single root of the original mind and the moral compass that it provides for human propensities, particularly those of humaneness and appropriateness. And finally, Cheng Yi's new formulation that human nature is a manifestation of principle/pattern laid the solid groundwork for the Confucian naturalized theory of ethical relationship and sensitive interaction (Graham 1958, esp. 1986).

In the 12th century, Zhu Xi (1130-1200) of the Southern Song redefined and remolded the new *Dao* succession by viewing the Confucian teachings of antiquity through the spectacles of the Northern Song masters, and picking out the best lines of insight and thought that they had channeled. Notably, Zhu Xi saw the early sage kings as nurturing and transmitting not only institutions and regulations but harmony- engendering rites and music. He saw them as acting on a keen sense of *zhong* 中 (utmost propriety) through which they were tolerant and always tried to strike a balance and create harmony among the nobles and their subject people. He saw them as manifesting humaneness and appropriateness and applying the Golden Rule through their choices and practices of the rites and music, and exercises of discretion. He saw Confucius as teaching and manifesting the way of humaneness and appropriateness in light of Heaven, the Golden Rule, and sensitivity to others in their own perspective (*shu* 恕). He saw Yan Hui as a devotee the Way and master of filial piety and ritual propriety. He saw Confucius' disciple Zisi as articulating the way of utmost propriety (*zhong* 中; the mean) as the path to achieving tranquility, equilibrium, balance, and harmony in the empire, and Zengzi as teaching the purpose and steps of Confucian education and cultivation in realizing and sustaining the great Way. Zhu Xi saw Mencius as bringing Confucius' virtues back to their roots in authentic human emotions, here and now. Indeed, he saw Mencius as recovering the sensitivity and compassion as well as the great spiritedness that lay at the heart of Confucius' Way. Finally, he fused and re-articulated the contributions of the various Northern Song masters from Zhou Dunyi to the Cheng brothers and their followers.

Zhu Xi articulated his notion of the new *Dao* succession several times, each time with subtle variations. In recent decades, scholars have pondered these articulations of the Confucian succession (Wilson 1995, Adler 2014), particularly in regard to Zhu's selection of which Northern Masters to uphold. According to my analysis, Zhu Xi was attempting to construct the most well integrated and compelling system of ideas he could work out, and ultimately found that he was able to bind the leading ideas of these particular five Northern Song masters in a tight yet balanced and dynamic system of complementary ideas (Adler 2009, 2014, Thompson 2015). For present purposes, suffice it to say that Zhu Xi constructed a notion of new *Dao* succession which bore every appearance of applying to universal humanity and not just to Han or even just to regional peoples. The early sage kings, Confucius' and Mencius' schools, and the Northern Song masters, all lived in ethnic Han communities in geographic China. Nonetheless, their ideas bore lessons which people everywhere could learn and draw inspiration from, and in many instances did. Their "upright" *Dao* transmission of ideals, cultivations, arts, and associated institutions could be adopted (and adapted) to other peoples and cultures not only within geographic China but regionally; on a much broader, more intellectual level, they could be learned and adapted by intellectuals around the world. In either case, the people and intellectuals could imagine and possibly realize the living spirit of this refined China/*Zhongguo* in their life, cultivation, and relationships as defined in the new Confucian *Dao* succession.

While the new Confucian *Dao* succession perhaps had a civilizing effect in geographic China and regionally, at the same time within China it can be said to have overly sanctified Han traditions and cast an ice-cold eye on the traditions and values of other peoples who were equally indigenous to geographic China. Moreover, representing agrarian continental traditions, this *Dao* was conservative, static, inward looking, and distrustful of difference, otherness, and change. This set of limitations came to fore in the early Ming (1368-1644) when outward looking leaders initiated overland and maritime contacts and interactions, epitomized in the expeditions of Zheng He (1371-1433) (Dryer 2007), and culminating in the exploits of Zheng Chenggong (1624-1662) and his lineage (Clements 2014). Unfortunately, the main lesson of Zheng He's voyages to conservative Confucian officialdom was that the outer world was inferior to the Middle Kingdom; hence, the court eunuchs and ministers henceforth kept external contacts, mercantilism, and trade to a minimum, and cast Zheng Chenggong as a mere sea pirate. Their view continued to prevail even as the Western powers competed to pry open the gates of Chinese markets and trade in the 19th century.

China was ill-prepared to face the onslaught of the Western Powers in the 19th century largely because the inward Chinese thinking in accord with the new *Dao* succession had, on one hand, cut China off from the technological developments going on in the rest of the world, and gridlocked China in enervating dynastic cycles, which reached a nadir precisely during the high tide of European imperialism in the 19th century, on the other. At the same time, Tokugawa Japan-- which had illustrious academic opponents as well as supporters of Zhu Xi's philosophy (Tucker 2002, 2006)-- was very inward looking and fell to the more outward and forward looking Meiji regime soon after Admiral Perry landed at Kurihama in 1853. And, Chosen Korea, the Hermit Kingdom, remained defensive and inward looking for centuries, nested uneasily between China and Japan (Chung 1995, Deuchler 1992). Nonetheless, the learning and cultivation deployed in mastering the new *Dao* succession did pave the way for these lands in the Far East to begin to receive modern learning and to establish modern institutions and universities to modernize their infrastructures and economies, and thus improve the people's lives.

Above it was mentioned that, on an intellectual level, the transmission of ideals, cultivation, and institutions associated with Zhu's new account of the Confucian *Dao* succession could be studied, cultivated, and adopted by intellectuals around the world. In the early to mid-19th century, several prominent American Transcendentalists celebrated and embraced this body of Confucian teachings. Henry David Thoreau (1817-1862) not only published selections from the *Four Books* in the Transcendentalist literary journal *The Dial* but quoted from this text several times in *Walden* (1849) in "extolling the vital sphere between heaven and earth, the cultivation of virtue and integrity, and the possibility of daily self-renewal" (Thompson 1993, 2). Thoreau's mentor Ralph Waldo Emerson (1803-1882) stressed the sociability, ritual civility, and harmony engendering civic virtues of the Confucian Way. Thoreau and Emerson both envisioned a revival of the Celestial Empire (i.e. China/*Zhongguo*) in New England as a place of, at once, Emerson's celebrated public civility and grace and Thoreau's sense of at oneness with nature and living in the present moment (Thompson 1993, Versluis, 1994). Over a century later, an intellectual-ethical movement called "Boston Confucianism" arose under the leadership of Tu Wei-ming, formerly of the Harvard-Yenching Institute, and Robert Neville and John Berthrong of Boston University. Tu Wei-ming espouses both Thoreau's sense of at oneness with nature and Emerson's sense of civility and grace while promoting their ideal of the committed public intellectual as society's conscience. In many publications, Neville and Berthrong elaborate on the Neo-Confucian metaphysics of creativity, natural and moral, as well as its notion of cultivation and ethics as a living philosophy. Finally, Roger Ames and David Hall have devised a unique Hawai'i Confucianism in harness with the American Pragmatism of William James and John Dewey to inculcate a vital, holistic conception of nature and society through which to view human life as contextual, interactive and based on role modeling in relational contexts (Ames 1987, 2001, 2011). Taking their cue from the Confucian *Dao* succession, they admire, study, and teach the relational connectivity and mutual responsibility of all people-- across classes, cultures, and ethnicities-- so as to promote the formation of a richly diverse yet harmonious and intimately interactive humanized world, one which equally respects the sanctity and diversity of the natural world – from which humanity draws not only sustenance but ceaseless inspiration.

The new Confucian *Dao* and notion of orthodox succession were harshly criticized in China for nearly a century, starting with the May 4th Movement of 1919 at Peking University, which promoted Science and Democracy, and culminating with Chairman Mao's radical Marxist call to "Close Confucius' Shop" and the moral and cultural devastation wreaked during the Great Proletarian Cultural Revolution of 1966-1976. In the 21st century, however, the rebirth of prosperity and free economic and social life without value underpinnings in China now leads people to feel an acute sense of meaninglessness, and existential crisis. As the Chinese have financial security and material comfort, they increasingly seek deep and sustainable life values and ethical guidance. Consequently, they display renewed interest in the Confucian *Dao* succession-- throughout China and across all sectors of society, including officialdom and academia. High schools and universities all across China now offer "National Studies" programs, which stress Confucian thought and values. Moreover, expensive private Confucian academies teach traditional values, cultivations, as embodied in the Six Arts, and respectful conduct, to children of the affluent and well-heeled. Meanwhile, Taiwan-- where Confucian values have flourished uninterruptedly in family and society and scholars study the classics and practice the cultivations-- is actively exporting the learning, values, and virtues of the Confucian *Dao* succession back to the leadership, society, and academia in the PRC, particularly Mencius' liberal notions of inborn sense of commiseration, heart that cannot bear to see the suffering of others, virtues of humaneness and appropriateness, inborn knowledge of the good, inborn capacity to carry out the good, and kingly Way, all of which will contribute to the development of a more compassionate and humane polity and society there.

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Systems Research Company (SRC)
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黃寶琦
Wong, Po Kee Ph.D.
Chief Executive Officer
9716 WATER OAK DR, FAIRFAX, VA USA 22031

Education : BS, Mechanical Engineering, Taiwan National Cheng Kung University, 1956; MS, Mechanical Engineering, University of Utah, 1961; Engineering Degree, Mechanical Engineering, Caltech, 1966; PhD, Aeronautical & Astronautical Engineering, Stanford University, 1970.

Appointments : Various teaching positions : University of Santa Clara; Caltech; University of Utah; Taiwan Cheng Kung University, 1958-1971; Owner and Chief Executive Officer, System Research Company, 1976; Teacher, Boston Public Schools, City of Boston, Massachusetts, USA, 1979-2001; Retired from teaching, 2001;

Industrial positions: Lockheed Missile & Space company; General Electric Breeder Department; Stone & Webster Engineering, etc.

Publications : Owns US Patents in aerospace and hydrospace objects detecting, tracking and targeting; unclear power plant safety code licensing; curriculum development in mathematics and physics for education of learners of all levels.

Honors: Graduate School Scholarships: Utah, Caltech and Stanford University; Lockheed-Stanford Fellowship; China Institute in America CT Loo Fellow, etc.

Memberships: ASME Life Member; AIAA Associate Fellow.

Wong's angles to determine trajectories of objects
US 5848377 A

Abstract

A set of three geometric angles is initiated to track the trajectories of moving objects. The objects to be tracked include but not limit to: satellites, space shuttles, airplanes, missiles moving in aerospace; submarines, ships, fish groups and other moving objects in hydrospace; cars, trucks, trains, human-beings and animals moving on lands; planet motions in the solar system; particle motions in a controlled experiment in our national laborites; contaminants, and hazardous materials in a variety of environmental conditions. All these objects can be detected and monitored by means of various sensing technologies which include seismic, acoustic, electro-magnetic, thermal, chemical, electro-optical and infrared. Mapping and monitoring systems could be deployed in unattended arrays or aboard ground, air, or maritime vehicles.

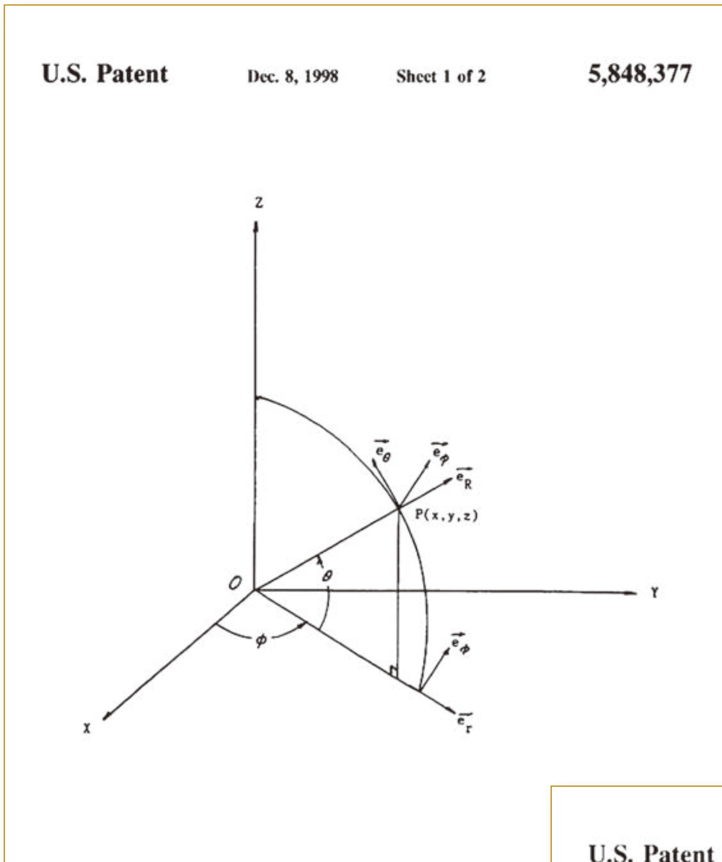
U.S. Patent
Dec. 8, 1998
Sheet 1 of 2
5,848,377
Z
Y
X
O
P(x,y,z)
θ
φ

FIG. 1

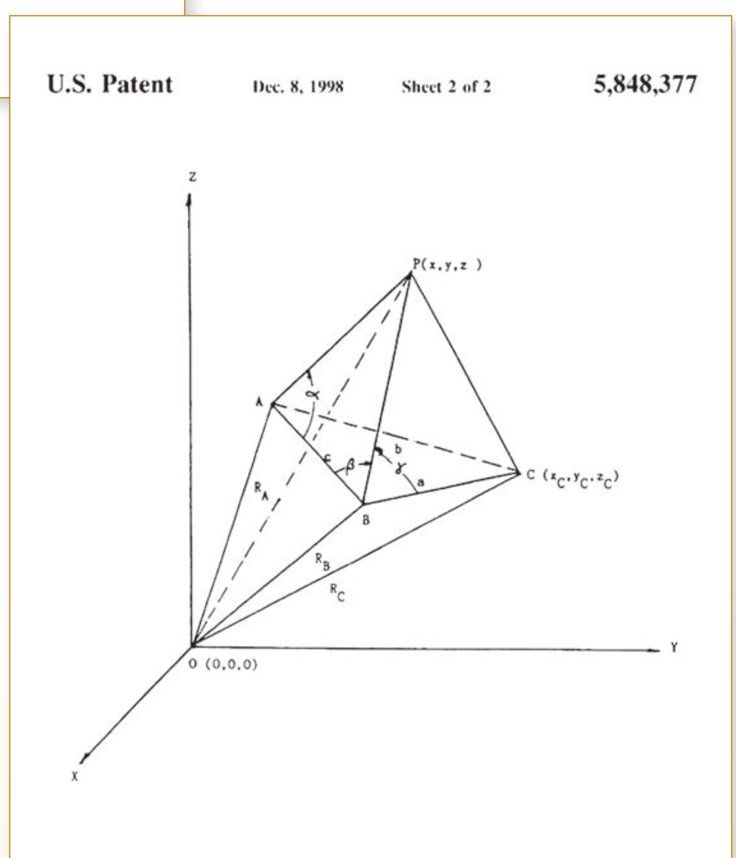
U.S. Patent
Dec. 8, 1998
Sheet 2 of 2
5,848,377
Z
Y
X
P(x,y,z)
A
B
C (xC,yC,zC)
O (0,0,0)
RA
RB
RC
α
β
γ
a
b
c

FIG. 2

Description

Field of the invention

The present invention provides a unique algorithm to determine the real trajectories of moving objects that are under the actions of various force fields. The moving objects include but are not limit to satellites, space shuttles, airplanes, missiles in aerospace; submarines, ships, fish in hydrospace; cars, trucks, trains, tanks on land; planet motions in the solar system; particle motions in a controlled experiment in our national laboratories; human-being and animals and materials in forensic analyses; pollutants, contaminants, and hazardous materials in a variety of environmental conditions; etc. All these objects can be detected and monitored by means of various sensing technologies which include seismic, acoustic, electro-magnetic, thermal, chemical, electro-optical and infrared. Mapping and monitoring systems could be deployed in unattended arrays or aboard ground, air, or maritime vehicles.

Background of the invention

The tracking of a moving object and determining its trajectory has long been regarded as a part of the famous previously unsolved P2 targeting problem which was proclaimed solved in October 1974 and it became a U.S. Pat. No.: 5,084,232 entitled "TRAJECTORY SOLID ANGLE'S IMPACTS TO PHYSICS AND HIGH TECHNOLOGIES". Recently, the U.S. Army issued a solicitation under the Small Business Innovation Research (SBIR) Program topic No. A93-308 seeking for the solution of a topic entitled "Global Positioning System (GPS) Error Modeling for incorporation into Post-Mission Trajectory Estimation" which is in reality as a part of the P2 targeting problem.

According to abstracts and summaries of reports by relevant scientists, engineers and mathematicians who have been doing research work in (GPS) questions on the accuracy of the (GPS) have been raised.

Summary of the invention

The errors, contributed from all previous models as of to date, can be summarized from repeatedly using the following techniques and methods for measurements:

(1) The measurement of the range (distance) between the (GPS) ground station and the (GPS) satellite is by means of either using radars and/or lasers.

(2) The measurement of the range is done from only one (GPS) ground station at a given time and that the geometric and trigonometric laws among the same measurements from the other two stations at the same time have been overlooked. As a result of this, it produces numerous incompatible data and that none of them can be chosen as a standard base for calculation of errors.

It is obvious that the range (distance) measurement by method (1) is affected by all the uncertainties of all physical parameters between the space from the point where the (GPS) satellite is located and to the point where the (GPS) ground station is located. It is also obvious that the measurement by method (2) is not sufficient to describe precisely the trajectory of the (GPS) satellite with respect to the center of the earth, therefore, the true altitude of the (GPS) satellite has always been in question as having been shown by reports in the prior art. Thus, the successive usage of measurement by method (1) and then followed by method (2) will compound all the errors and uncertainties.

In accord with the invention, a unique and original method of measuring the position vector, the velocity vector and the acceleration vector for moving objects including but not limiting the (GPS) satellite has been obtained. This method will be able to reduce the number of uncertainties of both physical and geometric parameters from numerous into only three angles to determine the position vector of the moving object/(GPS) satellite. They are called the Wong's Angles in order to simplify the title of this application and to distinguish from the well-known Euler's Angles which are used to define the position of a rigid body rotating about a fixed point. The combined use of both the Wong's Angles and the Euler's Angles that are set for a spinning satellite will determine not only the trajectory of the center of mass of the satellite but also the trajectory of any point in/on the satellite in rotation about a certain point.

In summary, the advantages of the invention over all other methods in the past to determine the trajectories of moving objects are:

(1) The invention of the Wong's Angles provides the most precise (GPS) satellite position vector that has never been obtained by all other methods as of to date.

(2) All the parameters of uncertainties affecting the position vector of the (GPS) satellite are reduced into the minimum of only 3 Wong's Angles which are measurable with much less uncertainties from the (GPS) ground stations.

(3) It follows that the velocity vector of the (GPS) satellite can be determined from only six parameters which are the 3 Wong's Angles and their 3 first derivatives with respect to time all of which are measurable with much less uncertainties from the (GPS) ground stations.

(4) It follows that the acceleration vector of the (GPS) satellite can also be determined from only 9 parameters which include 3 Wong's Angles; 3 first order time derivatives of the Wong's Angles and 3 second order time derivatives of the Wong's Angles. As a result, the forces acting on the (GPS) satellite can also be determined while the gravitational force acting on the (GPS) satellite is already determined from (2) at any time.

(5) Applying the Wong's Angles to determine the precise position vectors of 3 (GPS) satellites in the space which are formed as a new triangular base to determine other moving objects relative to the 3 (GPS) satellites such that the trajectories of other moving objects can also be determined. This particular application is important to measure objects moving far away from our solar system because the 3 (GPS) ground stations position vectors to the far-distance moving object (for example 1,000 time the radius of the earth) can no longer be distinguished. It is important to choose the proper distance scales for the ground stations as the bases of measurement of the Wong's Angles depending on the type of moving objects which can be airplanes approaching to the airport; submarines moving underneath the ocean; baseball moving in the ball park . . . etc. Thus, the Wong's Angles are applicable for determination of the trajectories of all moving objects that can be detected and pointed by means of sensing technologies which include seismic, acoustic, electro-magnetic, thermal, chemical, electro-optical and infrared. Its application to determine the precise position vector of the (GPS) satellite is merely one of its numerous applications.

(6) The invention of this set of Wong's Angles can be used to confirm the truth TRAJECTORY SOLID ANGLE (TSA) in U.S. Pat. No. 5,084,232:

(TSA) provides the precise definition of the probability functions for targeting problems in theory.

The Wong's Angles provides a precise method to determine the real trajectories of any objects under the action of many-force fields and to guide the using of the appropriate instruments for measurements in experiments.

Putting both the (TSA) and the Wong's Angles together provides a complete solution of the targeting problem.

(7) Like (TSA), the invention of the Wong's Angles provides the most precise method with the least number of uncertainties (3 angles) for measurements to determine the trajectories of any moving objects relative to the earth. While the use of other methods will compound the errors of measurements.

(8) The definition of the Wong's Angles is explicitly defined with all parameters implicitly contained within the definition while all the other methods do not.

(9) The Wong's Angles appeared in the position vector, the velocity vector and the acceleration vector of the moving object are closed-form analytical solution that provides a good conceptual and optimal analysis for the trajectory problems to be solved.

(10) Algorithms developed from using the Wong's Angles provide simplified parametric study of computing outputs.

(11) The computing time of the algorithms developed from using the Wong's Angles and their costs will be drastically reduced.

(12) The accuracy and the precision of the numerical values from the algorithms developed from using the Wong's Angles are thus far more better than other approaches.

Brief description of the drawings

FIG. 1 shows a rectangular Cartesian coordinate system about the center of the earth; and

FIG. 2 illustrates how Wong's angles are defined with reference to GPS ground stations and a representative moving object.

Detailed description of the invention

FIG. 1 shows that a rectangular Cartesian coordinate system is set up at the center of the earth. The plane surface XOZ formed by the coordinate axis OX and OZ cuts through the center of the earth at 0 (0,0,0) and through Greenwich in England. OZ is the rotating axis of the earth and it is perpendicular to OX axis which is in the plane surface XOY that contains the equator of the earth. Thus, OX ⊥ OY ⊥ OZ and OX ∩ OY ∩ OZ=0 (0,0,0)=the center of the earth. P(x, y, z) represents a point at the center of mass of the moving object/(GPS) satellite relative to the center of the earth. OP is the position vector of the moving object/(GPS) satellite. Thus, OP=R=xex +yey +zez =ReR and ##EQU1## where φ is the longitudinal angle and θ is the latitudinal angle; ex , ey , ez and eR are the unit vectors of OX,OY,OZ and OP respectively.

FIG. 2 shows how the Wong's Angles are defined with reference to the locations of the (GPS) ground stations A(xA, yA, zA); B(xB, yB, zB); C(xC, yC, zC) as a triangular base to locate the position of the moving object/(GPS) satellite at point P(x, y, z). Assuming that there is no earthquake at the moment of making measurements, the distances between the (GPS) ground stations and the distances from each (GPS) ground station to the center of the earth are constants without variation with respect to time. Thus, these distances can be determined uniquely from 3-D coordinate geometry as: ##EQU2## The set of Wong's Angles determine the position P(x, y, z) of the moving object/(GPS) satellite from the FIG. 2 are clearly marked and defined as:

α= ∠ PAB β= ∠ PBA γ= ∠ PBC

It is obvious that the Wong's Angles vary with the moving object/(GPS) satellite.

Certain details of the invention can be found with reference to U.S. Pat. No. 5,084,232, incorporated herein by reference, and with reference to Appendix A hereto. These details are summarized as follows: The range (distance) from the moving object/(GPS) satellite P to the (GPS) ground station B is ##EQU3## The range (distance) from the moving object/(GPS) satellite P to the (GPS) ground station A is ##EQU4## The range (distance)from the moving object/(GPS) satellite P to the (GPS) ground station C is ##EQU5## The components of the position vector of the moving object/(GPS) satellite are: ##EQU6##

Notice that zo has two values for a given set of Wong's Angles. Taking the positive sign for the radical term means that the moving object/(GPS) satellite is above the geometric plane formed by the (GPS) ground stations A,B and C. Taking the negative sign for the radical term means that the moving object/(GPS) satellite is underneath the geometric-plane surface formed by the (GPS) ground stations A,B and C. In fact, the position vector obtained by taking the positive sign and that with the negative sign represent the object point and its image point reflected with symmetry about the geometric-plane surface formed by the (GPS) ground stations A,B and C. The perpendicular from the moving object/(GPS) satellite to the geometric-plane surface ABC is d which can be obtained as: ##EQU7## Please note that this perpendicular d is entirely different from the altitude h of the moving object/GPS) satellite which is formally defined as the difference between R (distance from the center of the earth to the moving object) and Ro (average or sea level radius of the earth=6,378 km.). Thus h=R-Ro.

The gravitational acceleration of the moving object/(GPS) satellite in the direction of eR toward to the center of the earth is g which can be expressed as: ##EQU8## As a result, both the velocity vector v and the acceleration vector a of the moving object/(GPS) satellite can also be obtained respectively as: ##EQU9##

Claims

What is claimed is:

1. A process of locating a moving object relative to earth, comprising the steps of: sensing the object through electro-magnetic or electro-optical means;

   selecting three ground stations on earth, each ground station having unique coordinates, relative to the earth's center, of altitude, longitude and latitude;

   processing, by three-dimensional coordinate geometry, distances (a) between the three ground stations and (b) between the center and each of the three ground stations;

   calculating Wong's angles for each of the ground stations to the sensed object;

   obtain, by trigonometry, a range from the moving object to each of the ground stations, the range being defined in terms of the Wong's angles and of the distances;

   obtain a position vector defined by the Wong's angles and the distances;

   specifying an altitude of the moving object by taking a difference between the position vector and the earth's radius;

   defining, by Newton's gravitational law, a gravitational acceleration of the moving object in terms of the Wong's angles;

   determining object velocity by taking a first derivative of position vector with respect to time;

   determining object acceleration by taking a second derivative of the position vector with respect to time;

   predicting object trajectory in terms of a trajectory solid angle; and

   locating the object at a predetermined time following the step of sensing the object.

2. A method according to claim 1, wherein the step of selecting three ground stations comprises assigning Cartesian coordinate positions as points A(xA, yA, zA), B(xB, yB, zB), and C(xC, yC, zC), where A,B and C represent Cartesian coordinate (x, y, z) positions for the stations relative to the earth's center.

3. A method according to claim 2, wherein the step of determining distances between the center and each of the ground stations comprises calculating ##EQU10## for points A,B and C, as earth's center is located at point 0,0,0.

4. A method according to claim 3, wherein the step of determining distances between the three ground stations comprises calculating. ##EQU11##

5. A method according to claim 1, wherein the step of determining the Wong's angles comprises defining a triangular base for the ground stations as points A(xA, yA, zA), B(xB, yB, zB), and C(xC, yC, zC), where A,B and C represent Cartesian coordinate (x, y, z) positions for the stations relative to the earth's center, and determining angles α, β and γ as $\angle$ PAB, $\angle$ PBA, and $\angle$ PBC, respectively, where P represents a Cartesian coordinate position of the moving object relative to the earth's center.

6. A method according to claim 5, wherein the step of determining a range comprises calculating ##EQU12## where c defines distance between stations at A and B, and where a defines distance between stations at B and C.

7. A method according to claim 6, wherein the step of determining a position vector comprises calculating ##EQU13##

8. A method according to claim 1, wherein the moving object comprises a GPS satellite.

9. A method according to claim 1, wherein the ground stations are GPS ground stations.

10. A method of locating a GPS satellite relative to earth, comprising the steps of:

sensing the satellite through electro-magnetic or electro-optical means;

Non-patent citations

	Reference
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2 *	Massachusetts Inst. of Tech., Lincoln Laboratory, Report 741, Feb. 11, 1986, by L.G. Taff, Distance Determination via Triangulation .
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Classifications

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International Classification	G01S5/04, G01S19/48, G01S5/02, G01S5/14
Cooperative Classification	G01S5/02, G01S19/42, G01S5/04
European Classification	G01S19/42, G01S5/02

From The Origin Of The Earth To The Rise Of Humanity: Its Geological Imprints In The Hong Kong Region And Impacts On The Global Environment

从地球的起源到人类文明的升起：
它在香港地区的地质遗迹 及 对全球环境的冲击

Foo Wah Yang
M.Sc. Petroleum Geology, D.I.C., Imperial College
General Manager
Energy Business,
Polytec Resources Ltd., Hong Kong

Mr. Foo Wah Yang, a Malaysian Geologist, graduated from the University of Malaya with a B.Sc. (Hons.) Geology degree in 1979, and obtained a M.Sc. Petroleum Geology degree from the Imperial College of London in 1985 under PETRONAS Scholarship programs. He has close to 40 years' solid working experience as Petroleum Geologist; starting from PETRONAS in 1979 till his retirement from the company in 2009, and then continued his career as Petroleum Advisor to the Sudan Ministry of Petroleum till 2012. Since 2012 till to date, he is the General Manager, Energy Business, Polytec Resources Ltd., a wholly owned subsidiary of the Hong Kong Polytec Group.

He is the lead author of the book, "Petroleum Geology & Resources of The Sudan", 2015, published by Geozon Science Media UG, and the technical paper, "An Integrated Approach to Petroleum Resources Definitions, Classification and Reporting", 1997, published by the Society Of Petroleum Engineers (SPE 38044). His latest work is on "Five Global Mass Extinction Events In The Geological History: Their Fossil Imprints In Hong Kong Region And Implications To The Future Survival Of Humanity（全球地史上五次生物大灭绝事件：香港地区古生物遗迹 及 对人类未来生存的启示)", 31 August 2017, published in the Geological Society of Hong Kong, Earth Science Department, University of Hong Kong.

Origin of the Universe and Lives on Earth: No more Myths

I noted with great interest on 18 December 2016, Pope Francis declared that the "Big Bang" and "Evolution" theories are real and no magic; and they are "compatible with divine Creator" (ref. 1). These theories are now considered as not in conflicting position with the churches but rather complementing each other! This official declaration of the Pope himself has finally put aside and reconciled some of the most disputed theories for centuries between the churches and natural sciences.

The "Big Bang" theory is postulated as the origin of the Universe, occurred about 15 billion years ago, subsequently leading to the birth of the Solar System about 4.6 billion years ago in which our planet Earth forms an integral part. Ultimately, it is the Sun would decide the Earth's fate. Billions of years from now, as our aging Sun begins to run out of hydrogen fuel and dies out like any other dead stars in the universe, the Earth's would be vanished eventually. In astronomy, nothing is perpetual, not even the universe; but that would only happen billions of years from now, far beyond any humanity could have imagined!

The first live forms on Earth started shortly after its formation as basic single cells bacteria about 4.3 to 3.8 billion years ago, based on the oldest fossils (single cells bacteria) found recently in Quebec, Canada (ref. 2). They are the World's oldest fossils discovered to date which provide the "direct evidence" of life on Earth when our planet was still at its infancy. According to BBC Nature Pre-Historic Life, updated Oct 2014 (ref. 3), the single-celled marine live forms multiplied rapidly, initiated photosynthesis and evolved rapidly into multi-cellular microorganisms, then evolved into land plants and animals, flourished and prospered. For the past 450 million years, these living species, long before the birth of humanity, had gone through many cycles of mass extinctions and recoveries as dictated by the changes in the Earth's natural environments, cosmic and solar systems' natural processes. These living species evolved according to the prevailing environment and went through natural selection, made changes to better adapt, survive, reproduce and propagate in the natural environment (ref. 4). The well adapted stronger species would thrive while the weaker ill-adapted ones would perish naturally. These are the basic concepts of "Darwin's Theory of Evolution" with a famous motto of "Survival for the fittest".

Five Global Mass Extinction Events in the Geological History (Fig. 1 & Fig. 2)

Bearing in mind that Geology has no boundary, in this paper the "Greater Hong Kong Region" means the Hong Kong SAR and its adjacent South East China areas, unless otherwise stated. Also take note that the geological timeline is extremely large, measured by "**million years ago**" which is abbreviated as "**Ma**" for ease of citation.

Over the past 450 million years, life on Earth has been devastated by five Mass Extinction Events that are widely recognized by geologists from paleontological evidences (Fig. 1). There are undisputable fossil proofs of at least five Global Mass Extinction Events had occurred and exterminated more than half of the living species on earth in each happening (ref. 5). These global catastrophic events as identified by the geologists coincided with the wiping out of the entire living Reefs on the Earth for durations of at least 4 million years in geological time creating "Reef Gaps". Living Reefs have been used as the indicator because they are environmentally sensitive; and their massive extinctions in geological history could be directly linked to global environmental disasters, no different from the present day pollutions and global warming. Note that these five calamities of global scales were natural, occurred well before the birth of the humanity and therefore our modern humans bear no responsibility to their happenings.

These five mass extinction events in the geological past were due to drastic or sudden change in Earth's natural environments that offset the dynamic balance of Earth's ecosystems in which the living species could not adapt and exterminated in massive quantity as show up in the fossil records today. These catastrophes of global scale were associated with atmospheric carbon dioxide (CO_2) levels, acid rain, hydrogen sulfide (H_2S), catastrophic methane (CH_4) explosions, and changes in oceanic chemistry & pH, worldwide sea-levels, temperatures and salinity (ref. 3). These ancient disastrous events have direct relevance to the present day adverse environmental changes, and therefore they provide the actual analogs of the aftermath and lessons learnt on how to mitigate the endemic global warming today.

According to the fossil records and evidences, these Earth's Five Mass Extinction Events could be listed below:-

1. The 1st one is the "***End Ordovician" Mass Extinction Event*** happened in about 440 Ma during which around 85% of sea life forms exterminated globally. In Hong Kong, no rock older 400 Ma was found but from regional geological evidences this region was probably covered under deeper sea conditions (ref. 5).

2. The 2nd one is the "***Late Devonian" Mass Extinction Event*** happened in around 360 Ma during which around 75% of live forms exterminated and all (100%) living reefs wiped out globally. The oldest rocks found in Hong Kong Bluff Head Formation which were deposited around 400 Ma. Among the oldest live forms ever found in the Hong Kong area was a fish fossil called "Placoderm" dated about 370 million years old (ref. 6). It is an extinct armored prehistoric fish discovered by a fossil expert of the Hong Kong Polytechnic Mr. Lee Cho-min in Harbour Island, Plover Cove in 1980. These Devonian fish evolved and later killed off during the onslaught of this mass extinction event. These fossils bearing areas are now part of The Hong Kong UNESCO Global Geopark of international significance showcasing a complete 400 million years of Hong Kong's geological history.

3. The 3rd one is the "***End Permian" Mass Extinction Event*** happened in about 250 Ma, also famously known as "The Great Dyeing", which caused a staggering 96% of all life forms on earth exterminated! Only 4% of the remaining life forms globally survived this merciless onslaught to continue the dissemination of lives on the Earth. Many causes have been proposed for this colossal catastrophic event: asteroid impacts, flood basalt eruptions, catastrophic methane release, oxygen level drop, sea level fluctuations or some combination of these causes. In Hong Kong, the marine life forms during this period suffered almost total extermination. The "Great Died Out" of marine species included the fusilinid identified at Tung Chung limestone, brachiopods; most of the bivalves bryozoans, crinoids and 100% of the rugose coral reefs in the entire Greater Hong Kong Region were wiped out.

4. The 4th one is the "***End Triassic" Mass Extinction Event*** happened in 205 Ma, half of marine life and around 80% of land life forms on earth exterminated. Before the event, during the Triassic Period, the first dinosaurs, mammals and flowers appeared and they survived through the "End Triassic" Mass Extinction Event and evolved. After this event, active volcanism in Hong Kong started in the early Jurassic, and the evidence for the oldest volcanoes occurs in the Tuen Mun area, where volcanic ash and lavas 180 million years old were found.

5. The 5th one is the "***K/T" Mass Extinction Event*** happened in 65 Ma at the well-known "K/T" or Cretaceous/Tertiary Boundary. This event is notoriously associated with the extinction of all dinosaurs attributed to a huge asteroid struck the seabed near the Yucatan Peninsula in the Mexico. We have reasons to believe that before the K/T Mass Extinction Event, dinosaurs could have been roaming freely in the Greater Hong Kong Region landmass. After the disaster, the Hong Kong area became stable landmass without volcanic activities; the climate was tropical, hot and dry. The Eocene Ping Chau siltstones with fossil insects and land plant fragments were deposited as Hong Kong's youngest rock formation around 50 Ma (ref. 6).

   The wiping out of the ferocious dinosaurs that ruled the Earth for almost 200 million years till the K/T Mass Extinction Event had led to the evolution of other surviving species. Their demise actually paved the way for the rise of the mammals, our precursors, in the Tertiary.

Geological Vibrant Periods of The "Pre-K/T" Greater Hong Kong Region

Geologically, before the K/T Event, the Jurassic and Cretaceous Periods (199 Ma – 65 Ma) are the most active and vibrant periods of The Greater Hong Kong Region which left remarkable footprints in the rock records. Fossil evidences show that during these turbulent periods, life forms were booming, terminated by active and explosive volcanisms, but they quickly recovered and flourished again thereafter.

During these periods, Earth's Plate Tectonics operating in the Greater Hong Kong Region had initiated active volcanisms and igneous intrusions that shaped Hong Kong into its unique landscapes we see today covered by over 80% of granite and volcanic rock outcrops, hills and mountains. Volcanisms started in Early Jurassic around 180 Ma, which peaked between 165 Ma and 140 Ma. The last episode of volcanism ended with a gigantic volcanic explosion, known as the "Hong Kong High Island Super Volcano" eruption around 140 Ma associated with a huge caldera collapse, marking the end of the Mesozoic volcanism in Hong Kong (ref. 7). This ancient super volcano exploded 1,300 km^3 (>1,000 km^3 is called "Super Volcano") of volcanic ash and tuff. The Downtown Hong Kong and Kowloon areas are actually sitting on the 18-km-wide caldera (large volcanic crater), the remnants of an extinct super volcano. Comparing with the well studied "Toba Super Volcano Eruption" which is twice the size, the estimated destructive forces of the "Hong Kong High Island Super Volcano" eruption is equivalent to about 30,000 Hiroshima nuclear bombs exploding together at the same time! From here, we could speculate that this super volcano eruption could have produced a global environmental impact and caused mass extinction of many life forms in the Greater Hong Kong Region. It is speculated that the more vulnerable giant-sized dinosaurs in the region could have been exterminated during the catastrophe while the small-sized dinosaurs survived through the Cretaceous Period and finally exterminated at the K/T Boundary 65 Ma. In the neighboring Kwangtung Province, Heyuan County, about 175 km NNE of Hong Kong, a small-sized dinosaur called "Heyuannia", only 1.5m-2m in length, estimated 20 kg in weight, age dated 89 Ma - 65 Ma of Mid to Late Cretaceous (ref. 8), were discovered. Over 17,000 fragments of fossilized dinosaur eggs were found in Heyuan since the first discovery was made in 1996 dubbed the "Home of Dinosaurs". It shows that life forms continued to thrive after the Hong Kong's High Island Super Volcano catastrophic event; the dinosaurs were probably flourishing together with other diverse life forms thriving the Mesozoic Hong Kong landmass and shallow sea.

The first fossil in Hong Kong discovered in 1924 was an ammonite (*Hongkongites hongkongensis*), which has become the Geological Society of HK official logo, was found embedded in the mudstone on the northern shore of Tolo Channel. Plenty of ancient sea creatures were probably swimming freely and thriving in abundance in the warm shallow sea in Sham Chung, Fung Wong Wat and Tai Tong areas where many Jurassic fossils were found. In 2014, an important discovery of a Late Jurassic fish fossil *Paralycoptera* was made at Lai Chi Chong by HKU student Tse Tse-kei (ref. 9). It is an extinct species of basal *osteoglossoid* from freshwater environments dated about 147 million years old in the Late Jurassic.

We could now visualize from these diverse fossil findings that the ancient Hong Kong landmass and shallow sea were teaming with land plants and marine lives during the Jurassic and Cretaceous Periods probably flourishing together with the ferocious dinosaurs. So far no dinosaur fossil had been found in the Hong Kong areas probably due to scarcity of sedimentary rocks and deep weathering conditions which are less favorable for dinosaur fossils preservation and discovery. It certainly warrants greater efforts, researches and field works to be done in order to find the first dinosaur fossil of Hong Kong. The trophy of its first discovery should be very rewarding and fulfilling for the Hong Kong geosciences community and general public alike.

The Rise of Humanity and Their Epic Journey Out Of Africa

Thanks to the extermination of dinosaurs on earth by the "Acts of God" during the K/T event 65 Ma which had given the room and opportunity for the rise of the mammals, in particular for the Apes, the precursors of humanity. The first apes appeared and evolved 10 Ma during the Miocene which eventually evolved into Homo sapiens ("Wise Man") or modern humans like you and me, about 200,000 years ago (Fig. 3). Interestingly, it also shows the positive biological aspects arising from the Mass Extinctions that each destructive event somehow provides an ecological opportunity for other surviving species to thrive and new species to evolve and crop out.

The Pliocene Epoch lasts from 5.3 Ma to 2.6 Ma. During the Early Pliocene, human species split from apes and evolved on its own. The early human species as represented by the human-like ape Lucy, the earliest humanoid discovered recently in Ethiopia, Africa, appeared about 5 Ma during early Pliocene. Ten years ago, I visited the National Museum of Ethiopia in Addis Ababa, I had a close visual inspection of the skeletal remains of Lucy, a small upright bipedal figure about 4 feet tall which is already in human structural form, and obviously she could walk upright. The discovery of Lucy with the ability to stand upright and walk on feet is the key milestone of human's evolutionary breakthrough which marks the split between apes and humans took place about 5 million years ago, according to the Encyclopedia Britannica.

The Pleistocene Epoch, last from 2.6 Ma to 12,000 years ago, which was overall an "**Ice Age**" with ice cap formed in the north and south polar regions. During this time, the earth had experienced at least 20 cycles of natural global cooling (Glacial) and warming (Inter-Glacial) periods which had acted as catalysts or stimulants in expediting major evolutionary changes of the human species in line with Darwin's principle of "Survival for the fittest". This rapid adaptation evolved the first humans "Homo erectus" to fast changing and challenging environments, and paved the way for their first migrations out of Africa--the "Cradle of humanity". The "Earliest Exit" of Homo erectus from Africa began about 1.3-1.8 Ma followed by the Neanderthal (*Homo neanderthalis*) 0.5–0.6 Ma during Pleistocene Ice Age when sea levels were low. Later the smarter Homo sapiens appeared 200,000 years ago successfully evolved to adapt rapid climatic changes and survival challenges. They migrated out of Africa between 120,000 to 85,000 years ago towards the end of Pleistocene probably to benefit from a warm and damp climate in the Northern Sahara, Mediterranean and the Middle East. From these stepping stones, they migrated westwards into Europe and eastwards into South and Southeast Asia, and eventually conquered the "New World" and the entire planet Earth.

Dating of fossil human teeth from China provides evidence of an early migration of modern humans from Africa to Asia around 80,000 -120,000 years ago (ref. 10), soon after their exit from Africa. Recent new archaeological evidences showed that these early migrants had already reached Sulawesi, Indonesia, about 100,000 years ago (ref. 11). In Peninsula Malaysia, human artefacts buried in volcanic ash of the Paleolithic tradition known as the Kota Tampan Culture (ref. 12) proved humans' had already arrived well before the Mt. Toba Super Volcano erupted, which had been dated accurately to be 74,000 years ago. Geographically, Peninsula Malaysia had always been the natural coastal land bridge for the early migrants from Africa to reach Southeast & Northeast Asia and Australia (Fig. 4). They moved in patches, and the earliest groups must have arrived first at the Peninsula Malaysia as the stepping stone over 100,000 years ago and then on transit to China in Northeast Asia and probably same time eastwards to Sulawesi, Indonesia, before the Toba eruption.

Towards the end of the late Pleistocene Ice Age, 110,000 to 12,000 years ago (ya), the sea levels were at their lowest, about 120m below the present day sea levels. Throughout this time, most of the maritime Southeast Asia formed one major land mass known as the Sunda Landmass (Fig. 4). The survivors from the Toba Super Volcano Eruption, taking advantage of low sea stands, moved southeastwards via the coastal route and land bridges, crossing several narrow sea gap barriers or straits in the Indonesian Archipelago to arrive at the continental land mass of present-day Australia and Papua New

Guinea. They reached Australia 50,000 to 60,000 years ago and became the ancestors of the Australian Aborigines today. This early human arrival date is supported by the earliest human artefacts at least 60,000 years old, and the oldest evidence of settlement in Australia around 40,000 years old which coincide with the killing of Australian megafauna to extinction by humans between 46,000 and 15,000 years ago.

"**40,000 years ago**" seems to be an extraordinary period with early humans embarking on waves of exodus taking advantage of global low sea levels, along the coastal routes and land bridges. During this time, the "modern Europeans" arrival in Europe had led to the extinction and assimilation of the Neanderthals who moved out of Africa half a million years earlier. At the same period in Southeast Asia, the "modern Asians" migrated eastward to the Niah Cave, Sarawak, and other groups branched off northeastwards to reach the Greater Hong Kong Region; and went further northward eventually arrived at Tianyuan Cave, Zhoukoudian area, near Beijing, where the famous Peking Man fossil was discovered (ref. 13). A small group branched off eastward from around the Greater Hong Kong Region to finally reach Japan via Taiwan and Okinawa. By then, these early humans had already mastered the skills of using clothing and fire which enabled their epic journey to continue further northeastwards into colder areas through coaster routes to eastern Siberia. They eventually crossed the Bering Strait, via land bridges connecting the Asian landmass with Alaska, North America, during sea level lows, to reach the "New World" 12,700 years ago in the last ice age. Their arrival has been blamed for causing the mass the extinction of giant beasts like the wooly mammoths in North America around 10,000 years ago.

Back in the Hong Kong area, archaeological evidences suggest the earliest human arrived during the Paleolithic Age with numerous stone artifacts found in the Wong Tei Tung area in Sai Kung Peninsula dating back to 40,000 years ago (ref. 14), about the same age of the Niah Cave Culture in Sarawak, East Malaysia.

The primitive cave-dwelling humans Neanderthal (*Homo neanderthalis*) had arrived in Europe half a million years ago. The Neanderthals went extinct about 40,000 years ago; coincide with the arrival of the smarter modern humans in Europe. These early human Neanderthals were probably wiped out or assimilated by our ancestors. According to anthropologists, these modern late comers were more sophisticated and intelligent. They came out of Africa only in small groups (based on genetic evidences) but evolved very quickly to adapt to the challenging new environments. They spread quickly to colonize and dominate the world to reach the current global multiracial population 7.7 billion of common DNA linkages, and it is still on a rapidly rising trend. Such modern human migrations, propagations and dispersions, all happened within a short duration since their exit from Africa 120,000 years ago. The happening in such a short duration, 0.004% in the Geological Time Scale (Fig. 3), almost like "instantaneous", attests to the great potency, reproductivity and adaptability of the humankinds unmatched by any other living species.

The Implications of The Mt. Toba Super Volcanic Eruption to the future of humanity

The Mt. Toba Super Volcanic Erupted in Sumatra, Indonesia, is considered as the most accurately dated first "near-miss" of global mass extinction ever experienced by modern humankinds (ref. 15). It was one of some 50 super volcanoes to have erupted since man walked the planet, and all of them occurred well before any recorded human history. This eruption occurred 74,000 years ago had created a crater or Lake Toba, 90 km in diameter and exploded unimaginable amount of 2800 km3 volcanic ash and tuff is classified as "Mega-Colossal" size. By comparison, it was twice the size of the ancient Hong Kong's High Island Super Volcano Eruption, classified as "Mid" size, had created an18-km-wide caldera and exploded 1,300 km3 of volcanic ash 140 million years ago (Ma).

The study, understanding and lessons learnt from this prehistoric super volcanic eruption are very crucial to the survival of the future of humanity. According to the Toba Volcanologists, this super eruption of "Category 8" or "Mega-Colossal" on the Volcanic Explosivity Index (VEI) released energy equivalent to about 1 billion tonnes of TNT, the destructive forces is equivalent to about 70,000 Hiroshima nuclear bombs exploding together at the same time! The aftermath of the Toba eruption to lives on earth are considered as the closest to the magnitude of the previous five Global Mass Extinction Events over 65 million years ago. The catastrophe was the greatest ever faced by modern humans, almost drove the population to the brink of extinction. Only a few on Earth survived the super eruption alongside with gigantic Tsunami waves, unthinkable amount of 2800 km3 of ejected volcanic ash evenly spread throughout our planet's atmosphere. It triggered the immediate onset of "Volcanic Winter" which exacerbated the "chill factor" of the Late Pleistocene Ice Age that had already been underway. The global average temperature dropped to 5°C, so that summer turned to winter and winter became deadly as the living organisms were caught unprepared to adapt to the sudden onset of severe cold. According to the researchers, the catastrophe had reduced the total number of humans to just 5000 to 10,000 survivors, mainly survived in around the tropical areas. Actually today's humans originate from these few thousands of survivors from the eruption of the Super Volcano Toba around 74,000 years ago. It is incredible how scientists found all of that out with the help of thousands of DNA studies of today's humans irrespective of racial origins. Yet from this handful of survivors, our human species had demonstrated the strong resilient and ability to survive, rebound and propagate throughout the Earth to the 7.7 billion population today, and it is still growing rapidly!

In Malaysia, the remains of Paleolithic tradition known as the Kota Tampan Culture in the Lenggong Valley now declared as the UN World Heritage site (ref. 12), stone pebble tools were found embedded in volcanic ash from Toba dated exactly 74,000 years ago. This means that modern humans got to Southeast Asia well before the Toba eruption - more than 74,000 years ago. They would be the oldest precisely dated evidence for modern humans outside Africa. Based on the absence of human remains, the archaeologists tend to believe that the Kota Tampan Culture could be wiped out during the Toba eruption despite there were speculation that they persisted right up until 7,000 or even only 4,000 years ago. Recent new archaeological evidences showed that early migrants had already reached Sulawesi, Indonesia, about 100,000 years ago (ref. 11). Therefore they must have first arrived at Peninsula Malaysia before the Toba catastrophe, over 100,000 years ago, which is located at the southern tip of Asian continent and being the geographical land bridge for the early migrants from Africa to cross over (Fig. 4). This new archaeological finding in Sulawesi has pushed back the date of the first humans in the Peninsula Malaysia for at least 30,000 years before the Mt. Toba eruption (ref.19). Most of them vanished during the Toba calamity while only a small number of survivors continued their epic journey and arrived in Australia 50,000 to 60,000 years ago, the southeastern most continent they could go through land bridges during low sea stands. It looks as though the ancestors of the Australian Aborigines could well have arrived in Peninsula Malaysia first, over 100,000 years ago, survived the great Toba explosion 74,000 years ago; and then continued their epic journey to Australia (Fig. 4).

The Mt. Toba Super Volcanic Eruption, which is considered as a "near-miss" of a global Mass Extinction, has indeed demonstrated that human species have the strong resilient and ability to survive. The event has given us great hope and confidence that the human genomes could stay alive through the coming the 6th Mass Extinction Event, then revive and propagate after the calamity.

The "Anthropocene" Era and Climate Change

Since 12,000 years ago up till present, we entered into the Holocene Epoch, which is also called the "Human" or "Anthropocene" Era, with rapid and unprecedented human technological advancements. Humans from mainly hunters-gatherers life style began to settle down in more productive agriculture activities started 10,000 years ago with centers of food production and ancient civilizations began to develop about 5,000 years ago in major river floodplains (e.g. Yellow, Indus, Nile and Tigris & Euphrates Rivers). Human development and advancement had finally reached the apex and triggered the Agricultural & Industrial Revolutions about 200 years ago. These advancements came with fierce competition for limited earth resources, food and water which had resulted in two great world wars in the last century and numerous global conflicts which are still prevailing. Rapid industrialization with deforestations and desertification, the invention and used of nuclear, chemical and biological weapons of mass destruction, the human beings have begun to threaten the fragile planet Earth environment in unprecedented rates and magnitudes.

It is clear that the human activities already started to have significant global impact on the earth's climatic changes and ecosystems due to industrialization and its associated environmental destruction. Humans themselves are directly responsible for smaller scale mass extinctions which have caused the disappearance of many animal and plant species during prehistoric, historic and modern times. Their unrestrained activities have accelerated the rate of species extinction–perhaps 100 to 1000 times the normal background rate of extinction. In 2010 a study published in Nature found that: marine phytoplanktons (constitute 50% Earth's total photosynthetic biomass) declined substantially in the past century (ref. 16). Just In 1950 alone around 40% decline in response to ocean warming. The decline rates are speeding up in recent years implying that the prevailing human activities are accelerating the global warming.

Since 3.5 billion years ago when single-celled "bacteria" began photosynthesis, solar energy from the sun with carbons on earth were assimilated and preserved as trillion tons of fossil fuels in the form of petroleum (hydrocarbons) and coal reserves buried underground. Most of CO_2 increase is due to the combustion of fossil fuels such as coal, oil, and gas, and land-use changes (e.g. deforestations and desertification). Human Industrialization started only 200 yrs ago heavily dependent on burning of coals and petroleum (today nearly 100 million barrels of oil are burnt daily) for energy which release billion tons of carbon back to the atmosphere in the form of CO_2 in an unprecedented rates and scales.

The Earth's atmospheric composition is 78% nitrogen (N2), 21% oxygen (O2), 0.9% inert gaseous and less than **0.03%** carbon dioxide (CO2) by gas volume. This unique gas composition now in a state of delicate equilibrium is favorable for developing and flourishing the highest life forms on Earth. Any human intervention or natural causes in upsetting such unique atmospheric equilibrium would have serious adverse consequences to the survival of humanity and other living species. One direct geological symptom resulting from human activity is the rising atmospheric CO2 content. It offsets the delicate balance of the Earth's atmospheric composition, and causes the current increase in oceanic acidification as evidenced by the rapid breaching of the Great Barrier Reefs in Australia (ref. 17). Coral reefs are very sensitive to changes in their natural environment will be the first major ecosystem to succumb. This phenomenon is considered as the most serious of all predicted outcomes caused by humans due to environmental devastations and pollutions. From another authoritative journal, the *Scientific American*, reported on 14 March 2017 that "Atmospheric Carbon Dioxide Hits Record Levels": it marks five consecutive years of CO_2 increases an unprecedented rate of growth. This is a clear warning sign to the Earth's climate system: CO_2 rising trend is exponential, real and significant, accelerating much faster than pre-Industrialization. The world's biggest polluter being the USA and in 2015 alone, an estimated total 5.5 billion metric tons of CO_2 had been released into the atmosphere.

The increase of CO_2 would trigger global warming which in turn set off the release of huge quantity of natural gas call methane (CH_4), a greenhouse gas many times worse than CO_2. Vast quantities of Methane are normally locked into the Earth's crust at ocean bottom as methane hydrates, combination of methane and water much like ice. Methane hydrates are unstable, except at cold temperatures and high pressures in deep waters. Global warming could trigger the massive seabed methane hydrates release which in turn would expedite and exacerbate the global warming effects in an exponential and scale. The compounding effects would aggravate and become uncontrollable; the rapid rising in temperature is postulated as a possible cause of mass extinction killing plant and animal species including humans.

Statistics have shown that global warming began steadily from the last Ice Age 12,000 years ago have been expedited by industrialization in the past few centuries through the massive release of green house gas (CO_2) and deforestations. The current human activities have already triggered global warming, advancing the melting of ice caps, desertification, acid rains and catastrophic methane release. These warning signs would eventually lead to the anthropogenic (human) catastrophe or the 6th Global Mass Extinction Event during which majority of the Earth's lives including our human future generations could be wiped out. According to a study by three US universities led by the universities of Stanford, Princeton and Berkeley has concluded the Earth has entered a new period of extinction, and humans could be among the first casualties (ref. 18). The report said that vertebrates - animals with backbones – were disappearing at a rate 114 times faster than normal background rates. Stuart Pimm, a biologist and extinction expert at Duke University in North Carolina, also warned mankind was entering a 6th mass extinction event, and claims that the current rate of extinction was more than 1,000 times faster than in the past, not 114. Since 1900, the report says, more than 400 more vertebrates had already disappeared.

The Paris Climate Accord

Among the key provisions of the Paris Climate Accord, signed by 195 countries in December 2015, aims at halting global warming at 1.5 °C above Earth's average temperature during pre-industrial times — a goal most scientists and policy makers agree will be a challenge to meet. The current rates of global pollution and environmental devastation are exorbitantly high. There is no better solution other than the Human-beings have to exercise our wisdoms, constraints and dedicated efforts together in environmental protection to slow down or arrest the global warming. However to achieve this, we human-beings have to have great will and wisdom to come into terms with each other to achieve universal collaboration in fighting against environmental destruction. World leaders ought to have the global mindsets, political wills and foresights for the best interest of our future generations. This is an ideal or a "motherhood" statement, always easy to say than done; like the biggest economy USA have just decided to pull out of the Paris Climate Accord in June 2017 this year due to the "America First Policy" for the benefit of only a handful of interested groups. It would just become another talkfest without the participation of the world's biggest economy and polluter. President Trump on 21 August 2017 ordered the shutdown of the USA Federal Climate Change Committee in order stop its latest draft report from releasing. The draft highlights the current state of climate change is scientific, real, and it's happening now. If left unchecked, it would have extreme consequences that could take a substantial toll on people across the USA and the world. Disbanding of the USA Federal Climate Change Committee would mean that the scientific findings will not be translated into action in the preferences of powerful interest groups. With such bad influences of USA's pulling out of the Paris Climate Accord, many other big polluters would not be participating wholeheartedly, all in the name of national interest at the expense of humanity. Ironically, just shortly after Trump's announcement to close the Federal Climate Change Committee, major multiple hurricanes and cyclones stroke Texas and Louisiana causing massive devastations and high casualties. These mega-colossal tropical storms were actually among the predicted outcomes of the Federal Climate Change Committee, arising from the complex global warming conditions.

Universal Nuclear Disarmament

We human beings are often our own source of destruction. The greatest threat to humanity is actually coming from humans' own self make destruction through the acts of war, judging from the current global political situations and conflicts. The present global population of 7.7 billion is still growing rapidly, vicious competition for limited essential earth resources, food and water is inevitable, the threat of going into major destructive wars is looming. Humans could easily trigger the potential 6th Global Mass Extinction Event almost instantly if the current Nuclear Stockpiles were to be unleashed in global nuclear wars. The chance of it occurring within this 21st century is much higher than any other causes of mass extinction. This requires only one irrational act of pushing the nuclear button would immediately trigger the "Nuclear Winter" or "Nuclear Ice Age". This is a real threat to humanity which has become imminent as seen from the current North Korea nuclear and missile crisis.

The sudden outbreak of such nuclear calamities could possibly trigger the onset of the next or the 6th Global Mass Extinction event instantly. This direct threat to the survival of humanity must be tackled immediately and jointly by the global communities. We are left with no further option but to achieve the final political will of total annihilation of nuclear weapons of mass destruction in the spirit of joint humanity. The solution lies within the faith in all humans to accomplish the desired goal of universal nuclear disarmament, a daunting task which would require global mindset and wisdom of total enlightenment in shared humanity.

Pledges of Humanity

Let us ponder for a moment: what would happen to the Earth's in the unlikely event that our human species are hit by the next global calamities and wiped out completely? Lessons learnt from the five Global Mass Extinctions show that each event provides an ecological opportunity for the survived species to thrive and other new species to boom. It goes without saying that our planet Earth would do perfectly well and totally undeterred physically by any mega-colossal calamities, with or without humans' survival. On the other hand, it goes without saying that for sure we humans would not survive if the mother Earth's environment were destroyed.

For the continuing survival and propagation of our future genomes, I would like to make the following "*Pledges of Humanity*":-

1. We humankinds are descendants from common ancestors who moved out of Africa and spread all over the world to build the civilizations we cherish today. We share common genomes and destiny irrespective of races, beliefs and international boundaries, and therefore we have the obligation in the true spirit of shared humanity to ensure continuing survival and propagation of our universal genomes to the distant future.

2. We humankinds are the most resourceful and adaptable species on the planet Earth. We do not want to be our own source of destruction due to our intelligence. The key to our very own survival lies within the faith and wisdom in all humans living together in the only Earth with global mindset and tolerance. On the top of our priority, we must act together to achieve the ultimate goal of universal annihilation of nuclear weapons of mass destruction in the true spirit of shared humanity.

3. We humankinds, through the lessons learnt from the past calamities, have gained the wisdom and capability of intervening the Earth's natural processes, in a constructive manner, to differ the arrival of the coming of the 6th Mass Extinction Event. In so doing, it would allow our future humans sufficient time to integrate our "Human Intelligence" with the "Artificial Intelligence" together for achieving a soft landing in the next calamity, and to avoid repeating the tragic path of the dinosaurs heading towards sudden and total extermination 65 Ma.

4. We humankinds trust that, through the joint efforts in the intergalactic space exploration programs for humanity, we could realize our high order dream of propagating our genomes to other living planets in the future. This intergalactic travel dream might become a reality one day, may be hundreds or thousands of years from now, in spreading our genomes outside the solar system to other living planets we could call home.

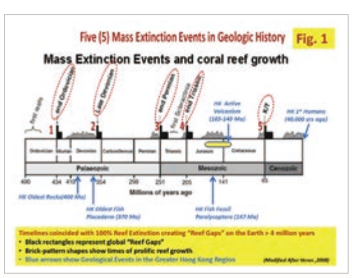
Concluding Remarks

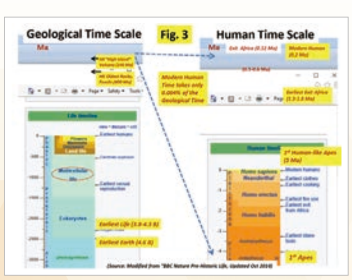
The Earth had experienced five major Mass Extinction Events of global scales which had also left their imprints in the Hong Kong area and the world over in the geological past occurred long before the advent of humanity. In the Greater Hong Kong Region, the "High Island Super Volcano" erupted 140 Ma was the closest to these mass extinction events in terms of destructive forces had probably destroyed most living species flourishing at that time, including some dinosaur species.

Modern humans migrated out of Africa, the "cradle of humanity", around 120,000 years ago. They survived the mega-colossal Mt. Toba Super Volcanic Eruptions 74,000 year ago, rebounded from near extinction and even thrive better than before. The rapid population growth and industrialization for the past 200 years have brought in unprecedented wealth, and at the same time, caused alarming environmental destruction of global scale. In the process of rapid progression and overdevelopment, many living species on Earth had already been wiped out and many more would be terminated soon, if left unchecked. In particular, the cold war styled massive nuclear armaments and buildups could trigger man-made self destruction instantly, simply by distrusts and misjudgments. The immediate and top priority for humanity should be working towards total global nuclear disarmament and eradication. In the absence of any ideal solution acceptable by all parties with different agendas and vested interests, the common goal for all to adopt should be to ensure the human genomes could continue staying alive through the next few centuries or so, jointly and responsibly, in the true spirit of shared humanity, keeping our planet earth safe, clean and inhabitable for the next few millenniums to come.

The Planet Earth has come a long way, from before the start of humanity to what we have become today. It would do perfectly well in the future with or without humanity, but for sure, we cannot survive without her. The environmentalists' slogan of "Safe Our Planet", as a matter of fact, is overstated and irrelevant. The mother Earth does not need humans to secure, instead we ought to safe ourselves by not destroying its fragile environments we live in. We have the ability to slow down, arrest or even reverse the current rates of global warming within our life time according to the Paris Climate Accords if they are embraced diligently and implemented in the true spirit of shared humanity.

We are the descendants from common ancestors originated from Africa and share the common genomes and destiny. We have the obligation to ensure continuing survival and propagation of our universal genomes to the distant future.The key to the future survival of humanity lies in our own hands; we have to put aside prejudice, individuality, race, religion and





boundary barriers to mitigate calamities caused by accelerated environmental destruction and terminal nuclear wars. The wisdom and kindness demonstrate in all the great religions of the world have already provided simple and practical survival doctrines and answers to eternity for the humanity.

Finally, I wish to end this topic by a simple plead: "**BE KIND TO OURSELVES**"; keep our mother Earth clean, safe and liveable for ourselves in the true spirit of "**Shared Humanity**".

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This paper is also dedicated to the great people of Malaysia, my beloved country, in commemoration of her 60th Year's Anniversary of Independence on the 31st August, 2017. God bless Malaysia and her wonderful people.

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The International Institute of Management ("IIM" or "the Institute") now invites on a limited and highly selected basis leading organizations in different sectors to join hands with the Institute as its "**Corporate Partners (CP**s)" in pursuit of its objectives of promoting the practice of professional management and enhancing the competence of leaders at all levels within organizations of all sorts. Through collaborating with the Institute, their achievements and successes of different kinds can be shared with and admired by the business community, setting examples of best practice and serving as role models for managers, administrators and entrepreneurs in Hong Kong, the Mainland, Asia and internationally.

Qualification & Duties:

This honorable partnership category is strictly by invitation only. It is open to selected corporations and institutions with

1) proven records of success in various fields of operation; or
2) established & time-honored historical record of accomplishment in their specific fields; and
3) noticeable achievements as outstanding market leaders; as well as
4) an interest plus aspiration in & inclination towards being societal leaders to help promote the development of management values, philosophy, theory & competencies, particularly among students & young managers.

To jointly realize the above goals, "**Corporate Partners (CP**s)" are required to pay an annual subscription, initially set at HK$20,000, PLUS optional contribution or sponsorship in kind or cash in support of the cause and functions of the Institute throughout the year.

Rights & Privileges

Accredited IIM "**Corporate Partners (CP**s)", whose validity is constantly under the stern scrutiny of the Council, enjoy rights & privileges appended below:

a) Priority access to IIM for information, advice, counseling, coaching, training, consulting and related services, including helping to link up with local universities for arranging career/recruitment talks in campus, selecting summer interns, lining up part-time projects (e.g. marketing research assignments), screening trainees and young recruits, etc.;
b) One free VIP admission ticket to attend IIM's Annual Dinner, PLUS table booking at special concession rate;
c) One full page of free advertisement in the form of article or genuine advertisement in IIM's Annual Dinner souvenir program brochure;

d) One free page of corporate write-up/article introducing the organization (IIM to provide the interviewer and professional copy writer) on the Institute's annual journal (additional pages at concession rate);

e) Free to contribute articles to IIM's publications: newsletters, journals and monographs/occasional papers of specific management topics;

f) Exclusive use of the title "IIM Corporate Partner (CP)" in all organizational communication and publicity materials;

g) Internal and external recognition with wide media exposure;

h) Excellent networking opportunities with other outstanding business leaders;

i) Improved ability to attract and retain top talent for your organization; and

j) Other privileges being considered that will be announced from time to time.

國際專業管理學會企業夥伴計劃

國際專業管理學會（簡稱"IIM"或"學會"）在有高度數量規限和經嚴謹的甄選下，邀請不同行業的領導機構攜手作為其「**企業夥伴**」("**CP**s")，共同促進專業管理的實踐，和提高各類組織內不同管理層級領導的能力。通過與學會的合作，**企業夥伴**機構多年來的成功果實和對客户及市場多方面的貢獻，可以更廣泛地為業界、工商界和社會所認同和推崇，樹立最佳實踐範例，作為在香港、內地、亞洲及國際的管理、行政人員和企業家的榜樣和典範。

資格與義務：

企業夥伴這個榮譽和資格只能透過 IIM 經謹慎審定下邀請而獲致。學會會嚴格挑選在社會上具備下列條件的企業和機構加入成為其長遠的合作夥伴：

1. 在不同營運領域上保持成功的紀錄證明；或

2. 在其特定的業務領域內有悠久的歷史和經証實的成就；及

3. 屬市場內成就顯著的領導者；兼且

4. 有濃厚積極興趣和使命感，作為社會領袖，共同悉力促進發展管理價值、理念和理論，與及提升尤其是學生和年輕經理級別的管理能力。

為達致上述目標，**企業夥伴** (**CP**s) 需要每位支付贊助年費，初步設定為港幣 20,000 元，另加選擇性以實物或現金捐助形式支持學會衡常或個別籌劃的活動。

企業夥伴的權利：

IIM 評議會將對各**企業夥伴** (**CP**s) 持續嚴謹審視，確保實至名歸。**企業夥伴**在保有這榮譽和資格期間，可享有下列權利：

a) 優先獲得 IIM 的信息、意見提供、輔導、教練、培訓、諮詢及相關服務，包括幫助聯繫本地的大學，在校園安排職業 / 招聘講座、挑選暑期實習生、組織大學生兼職承擔企業項目（例如市場營銷研究）、篩選見習生和招募年輕職員等等；

b) IIM 的年度晚餐會貴賓席券一位，另可再以優惠價預訂晚餐會全席；

c) 在 IIM 週年晚宴紀念冊內免費刊登一頁廣告或介紹文章；

d) 在 IIM 學術年刊內免費刊登一頁企業介紹文章（IIM 負責提供訪問員及專業撰稿，額外篇幅另以優惠價收費）；

e) 投稿到 IIM 的出版物：通訊、期刊和專集 / 非定期出版的管理課題論文集；

f) 專享在所有機構傳訊材料中使用「**國際專業管理學會企業夥伴**」榮銜；

g) 通過媒體廣泛報導，獲得機構內部及外間社會的認同稱許；

h) 提供一個極佳的拓展連繫機會，與其他卓越優秀企業的領導人交流共叙；

i) 提升機構吸引和留住頂尖人才的能力；與及

j) 其他正在研究中之夥伴權利及優惠，一旦確定即會宣佈。

LIST OF CORPORATE PARTNERS

Cheung Kong Infrastructure Holdings Ltd.

China Merchants Holdings (H.K.) Ltd.

Mitsui & Co. (Hong Kong) Ltd.

Nanyang Commercial Bank Ltd.

Shui On Group

Galaxy Entertainment Group Ltd.

Mission Hills Group

Emperor Group

Goldlion Holdings Ltd.

Kowloon Development Co. Ltd.

PuraPharm Group of Companies

AusCode Worldwide Limited

Bonds Group of Companies

CT Environmental Group Ltd.

Cancare Group (H.K.) Ltd.

Chinese Strategic Holdings Ltd.

3D – GOLD Jewellery

Daikin Airconditioning (Hong Kong) Ltd.

FT Corporate Strategy Ltd.

Huashang College Guangdong University of Finance & Economics

Hong Kong Youth Exchange Promotion United Association

Junefield Department Store Group Ltd.

KONE Elevator (HK) Ltd.

Koon Wing Motors Ltd.

LEDGE Lighting Ltd.

Life Encouraging Fund

Maxyee Group Ltd.

Millennium and Copthorne Hotels

Mr. Eddie Wang

Royale Furniture Holdings Ltd.

Saigon Commercial Bank Ltd.

Tai Kong Group (Holdings) Co. Ltd.

The H.K. Building & Loan Agency Ltd.

Van Shung Chong Holdings Ltd.

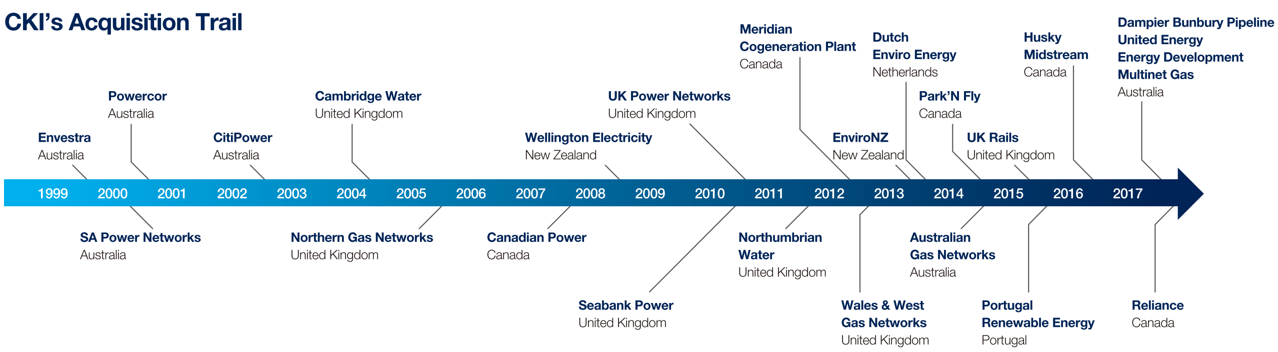
CK Infrastructure Holdings Limited

CK Infrastructure Holdings Limited ("CKI") is a global infrastructure company that has diversified investments in Energy Infrastructure, Transportation Infrastructure, Water Infrastructure, Waste Management, Waste-to-energy and Infrastructure Related Businesses. Its investments and operations span Hong Kong, Mainland China, the United Kingdom, the Netherlands, Portugal, Australia, New Zealand, the United States and Canada.

Acquisition Trail

Upon its listing in 1996, CKI primarily focused on its materials business in Hong Kong, as well as power plants and toll roads in Mainland China. In the following year, the Group acquired a controlling stake in Hongkong Electric Holdings Limited (now known as Power Assets Holdings Limited).

In 1999, CKI made its first overseas foray outside of Hong Kong and Mainland China, through the acquisition of a strategic stake in Envestra (now known as Australian Gas Networks) in Australia. From 2000 onwards, CKI has embarked on a course of globalisation and diversification, leading to it becoming a major global infrastructure player.



Global Portfolio

- CKI holds a 38.87% interest in **Power Assets Holdings Limited** ("Power Assets"), a global investor in power and utility-related businesses with investments in electricity generation; transmission and distribution; renewable energy; energy-from-waste; gas distribution and oil transmission. In Hong Kong, Power Assets through HK Electric Investments and HK Electric Investments Limited holds a 33.37% interest in **The Hongkong Electric Company Limited**, the electricity supplier for more than 570,000 customers on Hong Kong Island and Lamma Island.

The Hongkong Electric Company Limited provides electricity to more than 570,000 homes and businesses on Hong Kong Island and Lamma Island.

- In the United Kingdom, CKI has a comprehensive portfolio of investments in gas and electricity distribution; water and waste water services; electricity generation as well as rail transportation. They include **UK Power Networks**, one of the United Kingdom's largest power distributors supplying electricity to London, South East England and the East of England; **Northern Gas Networks**, a gas distribution business that serves the North of England; **Wales & West Gas Networks**, a gas distribution business that serves Wales and the South West of England; **Seabank Power**, an electricity generation plant located near Bristol; **Northumbrian Water**, a water supply, sewerage and waste water company which serves the North East of England and South East of England; and **UK Rails**, one of the three major rolling stock companies in Great Britain.

UK Power Networks supplies electricity to London.

- In Australia, CKI has investments in electricity and gas distribution as well as renewable energy. It owns **SA Power Networks**, a primary electricity distributor in the state of South Australia; **Victoria Power Networks** which holds Powercor and Citipower: **Powercor** is the largest electricity distributor in the state of Victoria, and **Citipower** is an electricity distribution network that serves the central business district and inner suburban areas of Melbourne; **United Energy**, an electricity distribution business in Victoria serving around 25% of Victoria's population; **Australian Energy Operations**, a renewable energy power distribution business in Victoria; **Australian Gas Networks**, one of the largest natural gas distributors in Australia; **Multinet Gas**, a gas distribution business located in Victoria covering the eastern and south-eastern suburbs of Melbourne, the Yarra Ranges and South Gippsland; **Dampier Bunbury Pipeline**, Western Australia's principal gas transmission pipeline; and **Energy Developments**, the largest producer of clean energy from landfill gas in Australia, and one of the top three landfill gas to energy operators in North America.

Victoria Power Networks is the holding company of electricity distribution networks, Powercor and CitiPower.

Wellington Electricity distributes electricity to New Zealand's capital city and the surrounding area.

- In New Zealand, CKI has shareholding in **Wellington Electricity**, which owns and operates the electricity distribution network in the capital city of Wellington, as well as Upper Hutt Valley, Lower Hutt Valley and Porirua. CKI also owns **EnviroNZ**, a leading waste management company with national coverage in the country.

Dutch Enviro Energy owns AVR, which operates five waste treatment plants in Duiven near the German border, and Rozenburg in the Port of Rotterdam area.

- In the Netherlands, CKI has interests in **Dutch Enviro Energy**, which owns **AVR**, the country's largest energy-from-waste company. AVR operates five waste treatment plants in Duiven near the German border, and Rozenburg in the Port of Rotterdam area.

- In Portugal, CKI has interests in **Portugal Renewable Energy** of which the operator, **Iberwind**, is the second largest wind energy developer in Portugal.

Iberwind is the second largest wind energy developer in Portugal.

- In Canada, CKI owns **Canadian Power**, which has interests in six power plants that are located in the provinces of Ontario, Alberta and Saskatchewan; and **Park'N Fly**, which is the largest off-airport car park provider in Canada. CKI also has interests in **Husky Midstream Limited Partnership**, which holds a portfolio of oil pipeline assets in Canada; as well as **Reliance LP**, which is principally engaged in the building equipment services sector providing water heaters, HVAC (heating, ventilation and air conditioning) equipment, comfort protection plans and other services to homeowners in Ontario, Saskatchewan, Alberta in Canada, as well as Georgia in the United States.

Husky Midstream holds a portfolio of oil pipeline assets in Canada.

Reliance is engaged in the building equipment services sector providing water heaters, HVAC (heating, ventilation and air conditioning) equipment, comfort protection plans and other services to homeowners in Canada and the United States.

In Mainland China, CKI has a portfolio of investments in toll roads and bridges.

- In Mainland China, CKI has a portfolio of investments in toll roads and bridges that span approximately 260 kilometres in the provinces of Guangdong, Hebei and Hunan.

CKI has a leading market position in Hong Kong's infrastructure materials market.

- CKI has a leading market position in Hong Kong's infrastructure materials market with operations in cement, concrete and aggregates. The Group also owns cement production facilities in Mainland China as well as a limestone quarry in the Philippines.

招商局集团简介

招商局集团 (简称“招商局”) 是中央直接管理的国有重要骨干企业，经营总部设于香港，亦被列为香港四大中资企业之一。截至 2016 年底，招商局集团总资产 6.81 万亿元。集团盈利在 2015 年的基础上继续稳定增长，创造历史新高，全年实现营业收入 4954 亿元，同比增长 78%；实现利润总额 1112 亿元，同比增长 34%，在中央企业中排名第二。2004-2016 年招商局连续十三年被国务院国资委评为 A 级中央企业和连续四个任期“业绩优秀企业”。

招商局是中国民族工商业的先驱，创立于 1872 年晚清洋务运动时期，今年将迎来 145 周年。145 年来，招商局曾组建了中国近代第一支商船队，开办了中国第一家银行、第一家保险公司等，开创了中国近代民族航运业和其他许多近代经济领域，在中国近现代经济史和社会发展史上具有重要地位。1978 年，招商局即投身改革开放，并于 1979 年开始独资开发了在海内外产生广泛影响的中国第一个对外开放的工业区——蛇口工业区，并相继创办了中国第一家商业股份制银行——招商银行，中国第一家企业股份制保险公司——平安保险公司等，为中国改革开放事业探索提供了有益的经验。

招商局是一家业务多元的综合企业。目前，招商局业务主要集中于交通 (港口、公路、航运、物流、海洋工业、贸易)、金融 (银行、证券、基金、保险)、地产（园区开发与房地产）三大核心产业，并正实现由三大主业向实业经营、金融服务、投资与资本运营三大平台转变。

招商局是国家“一带一路”战略的重要参与者和推动者。集团加快国际化发展步伐，在全球 19 个国家和地区拥有 50 个港口，已初步形成较为完善的海外港口、物流、金融和园区网络，大都位于“一带一路”沿线国家和地区的重要点位。2016 年，集团吉布提“丝路驿站”试点项目取得突破性进展，“蛇口模式”第一次在海外落地；中白工业园首发区内基础设施和中白商贸物流园一期工程建设已基本建成；与多哥全面合作务实推进，是集成“中国经验”开发海外市场的重要创举。海外重点项目有序推进，海外布局不断优化；“一带一路”再树合作标杆，多次获得党和国家领导人的高度评价。

招商局是内地和香港交通基建产业的重要投资者和经营者，已基本形成全国性的集装箱枢纽港口战略布局，旗下港口分布于珠三角的香港、深圳，长三角的上海、宁波，渤海湾的青岛、天津，大连、厦门湾的厦门及西南沿海的湛江。2016 年，招商局旗下港口集装箱吞吐量为 9577 万 TEU，同比增长 14.5%。其中，中国内地项目完成 7,193 万 TEU，增长 17.0%，是中国最大、世界领先的港口开发、投资和营运商。

招商局投资经营的公路、桥梁、隧道等收费公路项目主要分布于全国公路主干线上，覆盖北京、上海、广东、浙江、广西等 18 个省、自治区和直辖市，总里程达到 8203 公里。建有国家级、省部级等各类研究开发平台 18 个，目前已形成从勘察、设计、特色施工到投资、运营、养护、服务等公路全产业链业务形态。

航运业是招商局的传统产业。截至 2016 年底，集团航运业务船队总运力达 3479 万载重吨，排名世界第三。集团投入运营的 VLCC 有 39 艘，手持 VLCC 订单 14 艘，拥有世界一流、全球领先的超级油轮船队；并拥有和管理世界规模领先的超大型矿砂船队 VLOC（8 艘，手持订单 20 艘）和 LNG 船队；VLCC 和 VLOC 的规模均排世界第一。2016 年 3 月，招商局拥有的 40 万吨超大型矿砂船“明成”轮（Pacific Winner）成为香港船舶注册突破一亿总吨的标志性船舶，开创香港航运的新里程碑，是香港航运界具有代表性的重要力量。

招商局综合物流业务积极开拓全球服务网络。2015 年 12 月，经国务院批准，中外运长航整体并入招商局集团。中外运长航是中国最大的综合物流运营商，第三方物流和货运代理服务分别位居全球第八名和第五名。2016 年 4 月，招商局集团成立综合物流事业部，与中外运长航“两块牌子、一套人员”。截至 2016 年底，在全国设立了物流运作网点 2443 个，全球 38 个国家和地区拥有自营网点 96 个，业务范围覆盖全球主要贸易国家和地区。集团物流业务资源优势明显，在全国拥有和控制仓储堆场面积合计 1023 万平方米。

招商局的金融业务包括银行、证券、基金及基金管理、保险及保险经纪等领域。招商局发起、目前又是作为最大股东的招商银行，是中国领先的零售银行。截至 2016 年底，招商银行在国内 130 多个城市设有分支行、3495 家自助银行，在 28 个核心城市设立了超过 40 家私人银行中心；在香港设有香港分行、私人银行中心、海外全球托管中心，并拥有永隆银行和招银国际等子公司；在美国设有纽约分行、私人银行中心和代表处；在新加坡设有新加坡分行；在

英国设有伦敦分行和代表处，在台北设有代表处；在卢森堡设有卢森堡分行。招商证券经过 25 年的创业发展，已成为中国领先的上市证券公司之一，于 2009 年 11 月在上海证券交易所上市，并于 2016 年 10 月在香港联交所上市。截至 2016 年底，招商证券在国内 114 个城市设有 226 家证券营业部和 12 家分公司，已构建起国内国际一体化的综合证券服务平台，是 2008 年迄今连续九年获得 A 类 AA 评级的两家券商之一。2012 年招商局成立招商局资本，推进集团内部基金整合，建立直投基金管理的统一平台；截至 2016 年底，其管理总资产近 1700 亿元。招商局旗下还有招商基金、博时基金，基金管理总规模均超过 1 万亿元。2016 年，招商局仁和人寿保险股份有限公司获批筹建，中国第一家民族保险公司“仁和保险”成功复牌。进一步完善了招商局金融领域“4+N”布局，实现了打造全功能、全牌照综合金融服务平台的战略构想。

招商局高度重视创新驱动发展。聚焦“三产一科创”(产融结合、产城联动、产网融合和科技创新)，加速布局“互联网+”，设立了“互联网 +”基金，建立互联网孵化器，加强资本与科技资源的合作。加快实施“产业 + 互联网”行动方案，明确打造综合港口生态圈、智能交通生态圈、特色金融生态圈、智慧社区(园区)生态圈、供应链物流生态圈、航运及航运服务生态圈。创新工作成绩突出，多个重点领域实现突破。年内，集团成为国家企业“双创”示范基地，获得国有资本投资公司试点。

招商局通过招商蛇口、漳州开发区等主体提供城市及园区综合开发和运营服务。2015 年，招商局实施地产旗舰板块的重大无先例重组，实现了集团在前海蛇口自贸区资产的整体上市，打造了国企改革的典范和中国资本市场创新标杆。2016 年，重组上市后的招商蛇口以“产、网、融、城一体化”为业务抓手，确立了“前港 - 中区 - 后城”发展新模式，园区、社区与邮轮三大业务协同发展，致力于成为中国领先的城市及园区综合开发和运营服务商。一年来，招商蛇口转型发展呈现新格局，在前海蛇口自贸区、太子湾邮轮母港、深圳国际会展中心一期等重大项目和产融互动、产网结合等关键领域纷纷取得重大突破，经营业绩实现了跨越式增长。在持续推动全国近 40 个城市升级的同时，招商蛇口跟随招商局“走出去”，在“一带一路”沿线国家和地区开发复制推广“蛇口模式”，实现自贸区发展与“一带一路”战略的有效迭加。漳州开发区行政辖区面积 56.17 平方公里，2010 年升级为国家级经济技术开发区。全球首个城市级无人驾驶汽车社会实验室落户漳州开发区。全国首个离岸式生态型人工岛——双鱼岛以及招商局· 芯云谷等项目的建设，正使漳州开发区朝著“花园式、智慧化、产业兴、人气旺”宜居宜业的现代滨海新市镇的目标不断迈进。

招商局在工业、贸易、科技产业投资等领域也都有著雄厚的实力。招商局拥有香港最大规模的修船厂；2008 年投资的世界一流的大型修船基地在深圳孖洲岛建成投产；2013 年，完成收购江苏南通海新重工船厂资产，进一步壮大了海工建造实力。招商局创办并为其第一大股东的中集集团是世界最大的集装箱及机场设备制造商。招商局海通贸易有限公司在中国交通海事贸易领域有著成熟的市场网络和丰富的经验，并以此为基础积极转型升级，已成为集海事、食品、船贸及大宗贸易为一体的综合性贸易集团。招商海通业务网络覆盖广泛，在中国内地 7 个城市及境外 6 个国家设有分支机构。

招商局以其悠久的历史和雄厚的实力，在海内外工商界有著广泛的影响。进入新时期，招商局集团将紧紧抓住中华民族伟大复兴的难得历史机遇，以商业成功推动时代进步为使命，努力建设成为具有国际竞争力的世界一流企业。

360° business innovation.

2017

MITSUI & CO.

MITSUI & CO. (HONG KONG) LTD. 三井物產(香港)有限公司

Address: 25/F & 26/F, Far East Finance Centre, 16 Harcourt Road, Hong Kong
Tel: (852) 2823 8777/ 2823 8888

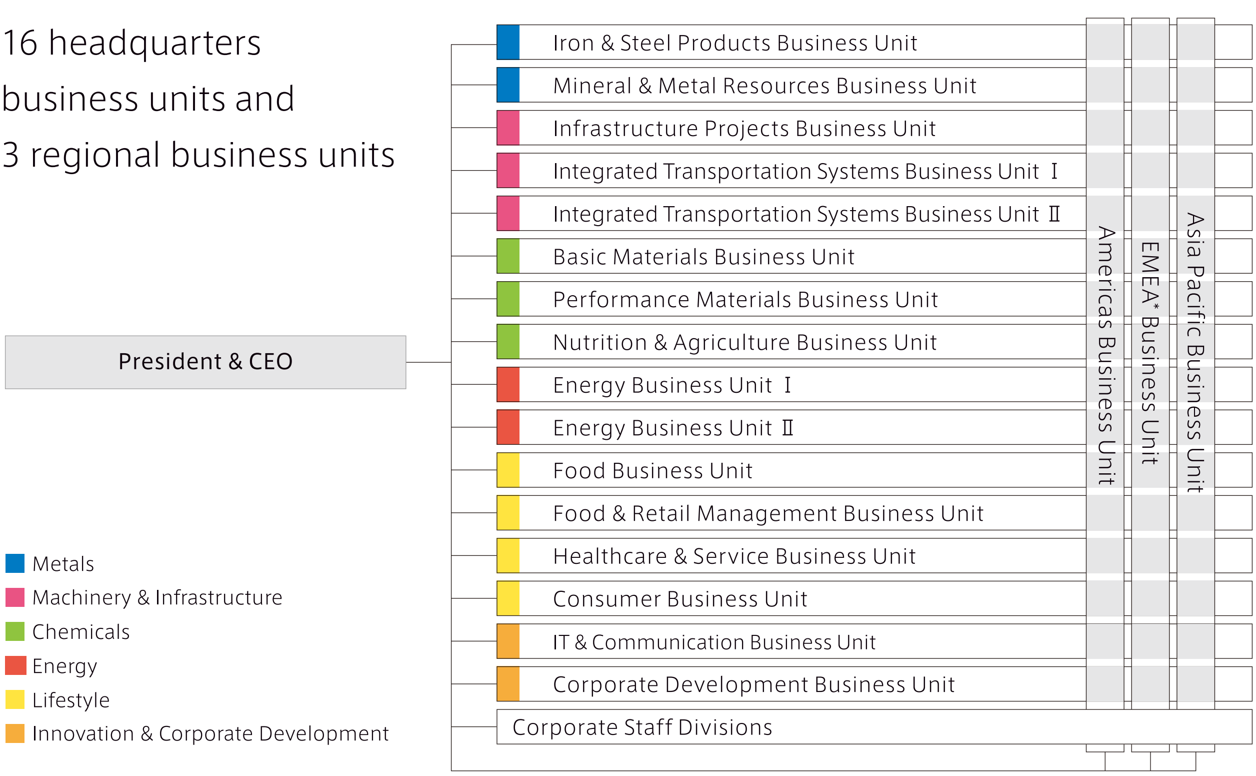
Mother Company: MITSUI & CO., LTD. 三井物產株式会社

Company Name	MITSUI & CO., LTD.
Date of Establishment	July 25, 1947
Common Stock	¥341,481,648,946
Number of Employees	5,971 (42,316 on consolidated basis)
Number of Offices and Overseas Trading Affiliates	138 offices in 65 countries/regions Japan: 12 offices Overseas: 126 offices in 64 countries/regions
Head Office	1-3, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8631, Japan (registered head office location) Nippon Life Marunouchi Garden Tower 3-1, Ohtemachi 1-chome, Chiyoda-ku, Tokyo 100-8631, Japan JA Building TEL: 81(3)3285-1111 FAX: 81(3)3285-9819 URL: http://www.mitsui.com
Number of Affiliated Companies for Consolidation	Subsidiaries: Japan 62 Overseas 206 Equity Accounted Investees*: Japan 38 Overseas 163 Total: 469
Stock Information	Stock Exchange Listings: Tokyo, Nagoya, Sapporo, Fukuoka Number of Shares Authorized: 2,500,000,000 shares Number of Shares Issued: 1,796,514,127 shares Number of Shareholders: 329,308 shareholders

(As of March 31, 2017)

*Associated companies and joint ventures

16 headquarters business units and 3 regional business units



*EMEA: Europe, the Middle East and Africa

(As of April 1, 2017)

Note: China, Taiwan, South Korea, and the CIS region report directly to the Head Office

Value Creation

Solutions and services for partners and customers in every country and region.

Marketing

While maintaining sensitivity to the changing times, we are making use of our powerful information gathering and analysis expertise to create new markets, drawing on sales capabilities developed in extensive experience aligned with various business practices and legal systems worldwide.

Business development

We are continuing to cultivate new business models and projects through the pursuit of new opportunities, effective project management, and utilization of our comprehensive capabilities and global network.

Project management

We are working to cultivate and develop projects by utilizing management resources such as personnel, funds, information and networks. The sharing of management resources and capabilities across every company in our group is continuing to lead to the creation of highly competitive businesses.

Logistics

We are continuing to offer SCM, DCM and other logistics solutions to meet a wide range of needs for both transportation and cost efficiency.

Finance

We offer and advise on various financial functions necessary for the expansion, cultivation, and promotion of business, from fund procurement and financial structuring to trade finance.

Risk management

By utilizing know-how accumulated over many years, we propose risk reduction and control methods such as hedging measures and various insurance systems.

Digital transformation

We are working to create a new era of business by utilizing AI and IoT to optimize processes and revolutionize company models.

Business Areas

Providing new value across a wide range of industries, leveraging our business engineering capabilities and diverse experience.

Metals	Through business development, investment and trading of steel products, mineral and metal resources, we work to develop integrated value chains which deliver a stable supply of resources, materials and products essential to industrial society. We also take part in resource recycling, developing industrial solutions that address environmental issues.
Machinery & Infrastructure	We contribute to the development of countries and the creation of better lives through the long-term, reliable supply of indispensable social infrastructure such as power, gas, water, railways and logistics infrastructure. We provide sales, financing, lease, transportation and logistics, and investment in various areas, including large-scale plants, marine resource development facilities, ships, aerospace, railways, motor vehicles, and mining/construction/industrial machinery.
Chemicals	Our chemicals business encompasses trade and investment in a range of industries, from upstream and midstream chemicals such as basic chemicals and fertilizer and inorganic resources, to downstream chemicals which meet diverse market needs, including functional materials, electronics materials, fertilizers, agrochemicals, feed additives, flavorings, and specialty chemicals. We are also pursuing new initiatives in food science, tank terminals and carbon fiber.
Energy	Through upstream development, logistics and trading of energy resources such as oil, natural gas/LNG, coal and uranium, we contribute to the stable supply of energy vital to both industry and society. In addition, as part of efforts to achieve a low-carbon society, we are actively involved in environmental and renewable energy businesses.
Lifestyle	Adapting to changes in consumption and lifestyles while meeting consumers' diverse needs, we provide value-added products and services, develop businesses and make investments in business fields such as food resources and food products, retail services, healthcare, outsourcing, fashion and textiles, forestry plantation resources, and real estate-related business.
Innovation & Corporate Development	Through our IT, Finance and Logistics business, we work on a diverse range of projects aimed at developing innovative business and expanding our business field. We aim to strengthen our company-wide earnings base by pursuing new business, capturing changes in technology such as IoT and AI, promoting digital transformation, and providing advanced capabilities across multiple fields.

Kowloon Development Company Limited

Corporate Background

Kowloon Development Company Limited ("KDC") (stock code: 34), a member of the Polytec Group, was established on 24 January 1961 and was listed on the main board of The Stock Exchange of Hong Kong Limited on 4 July 1995. Since its establishment, KDC has chiefly engaged in property investment and investment holding with the operation of its business mainly in Hong Kong in the early years. KDC has substantially broadened the areas of activity since the Polytec Group gained control of it and management reshuffled in 2002.

In 2006, KDC attained strong presence in two other property markets, Macau and Mainland China, through a number of strategic acquisitions. This also set a strong base for the Group's future development in these three property markets. The Group has been pursuing a three-tier development strategy with exposure in the three major property markets in the Greater China region, Hong Kong, Macau and Mainland China since then. KDC focuses on its activities in Hong Kong and Mainland China and as a holding company, through its 73.4% owned listed subsidiary, Polytec Asset Holdings Limited ("**PAH**") (stock code: 208), for its interests in Macau. This strategy enables KDC to maintain strategic focus and set a platform for KDC to readily access the best investment opportunities in three property markets, providing greater investment flexibility. Indeed, it has built a sizeable and quality development landbank across these three markets over the past decade and its major focus to date has been residential development.

In Hong Kong, the Group currently owns a number of residential/residential and commercial/residential and retail development projects, with total gross floor area of approximately 3.3 million square feet as at 30 June 2017. In Mainland China, the Group started to acquire development land/projects in 2005 and over past 10 years its development projects, both wholly-owned or joint-venture, cover in Shenyang, Tianjin, Wuxi, Foshan, Huizhou and Zhongshan, with total gross floor area of exceeding 50.7 million square feet as at 30 June 2017. In Macau, KDC has largely been capitalised on extensive experience and a strong brand of its ultimate holding group, Polytec Group, which started its property development in Macau in the early 1980s and has been one of the leading property developers in Macau. KDC currently holds through PAH 80% interest of two mega residential and commercial/retail development projects in the Orient Pearl District of Macau.

Group's latest property development projects

Hong Kong

Cadogan
(Kennedy Town)

MacPherson Place
(Mongkok)

Upper West
(Tai Kok Tsui)

South Coast
(Aberdeen)

Mainland China

Le Cove City (Shenyang)

The Gardenia (Shenyang)

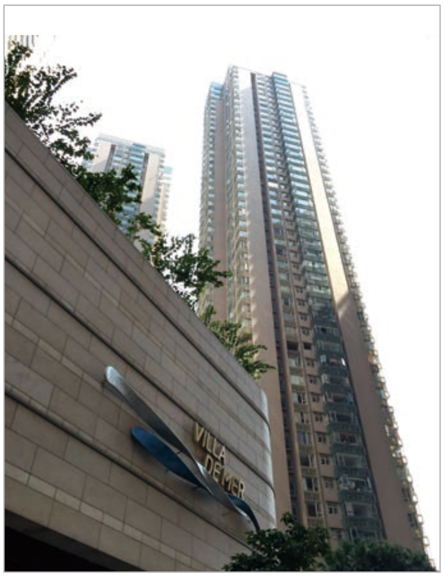
Le Cove Garden (Huizhou)

The Lake (Foshan)

Le Cove City (Wuxi)

City Plaza (Tianjin)

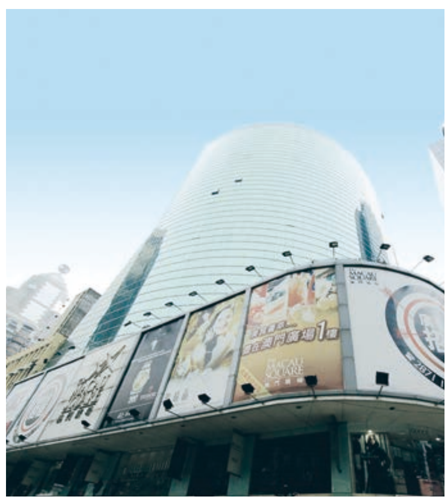
Macau



Villa De Mer (Macau)

Group's major investment properties

Pioneer Centre (Hong Kong)



Macau Square (Macau)

Group's Major Businesses

KDC is essentially a property developer. However, its businesses are extended to property investment, property management and some other non-core fields.

Property Development and Sales

The whole process of property development is sophisticated including development feasibility study, land acquisition, land lease/land use planning, building design, plans submission procedures, tendering and construction and it involves extensive inputs from different areas of expertise and professionals including architects, engineers, surveyors and builders. Therefore, when various issues arise from this complicated development process, in-house professionals from lands and business development team, project development team, design team, legal team, cost control team, procurement, engineer and mechanics team and quality assurance team, together with our appointed professional consultants, use their collective wisdom and respective field knowledge to resolve those issues. Therefore, undoubtedly, people are the greatest asset of the Group.

The Group is committed to producing quality products and services. With this mandate in mind, the project management team is required to genuinely understand every aspect of the project under management, to pay attention to all details and to closely monitor the progress in order to better resolve problems arising from the development process while the on-site team is required to ensure that construction is always on schedule and on budget without scarifying quality. The designers and architects are required to always make their best efforts in design and planning, making our products user-friendly and people-oriented, with the Group's product design always being long lasting, elegant and modern. The marketing and sales team is required to always has a good understanding and sense of prevailing conditions of the local property markets and other macroeconomic elements which enable it to form better marketing and sales strategies and hence to achieve successful sales.

Indeed, as property development is such a complex and high risk business due to various uncertainties in costs, government policies etc., good risk management is especially important. While cost control and risk mitigation measures are always in place, the judgement on the timing of the land purchase and the sale of completed projects also essentially determines the profitability of a development project.

Property Investment

In addition to the residential development portfolio, the Group's landbank contains significant retail developments in Hong Kong, Macau and certain cities in Mainland China, which is intended to retain for long term investment purposes in order to grow and broaden the Group's portfolio of recurrent income producing properties to complement the present principal investment assets in Hong Kong and Macau.

Property Management

The Group also offers a full range of high quality property management services to home buyers of the Group's development properties and residents of other properties.

Vision and Mission

In addition to aiming to generate best returns for its shareholders for many years to come, KDC is focusing on building a strong brand as a thoughtful property developer producing quality products and we realise this requires a united team working together with passion and a drive for excellence in the products and services which the Group produces. By realising the inherent value of the landbank, we believe this will enable a great enterprise to be built and to last.

MILLENNIUM
HOTELS AND RESORTS
More than Meets the Eye

Millennium and Copthorne Hotels' CSR Efforts

As a leading hotel chain, Millennium and Copthorne Hotels (M&C) remains committed in our efforts to operate business in an economically, socially and environmentally responsible manner. Our aim is to develop new and better ways to build and run our hotels that create sustainable value for our brands, business and stakeholders as well as addressing our social and environmental responsibilities.

The M&C Board supports a number of policies (referred to as 'Responsible Hospitality') which are designed to recognise and manage the Group's wider impact on the communities in which we operate.

Caring for our colleagues

Talent Development

We recognise the need to attract, develop and retain employees with the potential, skills and experience necessary for the continued development of our business. This is achieved by providing a healthy, safe, fair and happy working environment.

Diversity

Our employment policies comply with all relevant legislation and ensure that our business embrace diversity and create a workplace that fosters fairness and equal opportunities – regardless of race, gender, age, disability, marital status, sexual orientation or religious belief. We also help young people from disadvantaged backgrounds by providing them with training and vocational opportunities for various work placements at our hotels. For example, our US hotels introduced paid internships for young people in Alaska and also has a training programme called Training Today which helps supervisors to encourage and support diversity in their work environment.

Learning and Development

Our staff are encouraged to gain relevant industry qualifications where appropriate, both to strengthen the business through a well-trained and engaged workforce and to support personal career development. Staff engagement is also key to a healthy and balanced workplace through staff outings and shared work experiences which help to promote team building and create a better understanding of the Company.

Our global employee development training programme 'Outstanding Service Excellence" empowers each employee to engage both colleagues and guests on a personal level and create true 'fans' of the Millennium & Copthorne brand.

A safe workplace

Providing a safe and secure environment for M&C guests, employees and subcontractors is essential. To ensure their protection and well-being, our health and safety functions ensure that comprehensive processes and procedures are in place at all properties and comply with relevant legislation. Such measures support our hotels to identify hazards, assess risks and implement appropriate controls to reduce occupational injuries, accidents and fatalities.

Health and safety is a principal risk and as part of our risk management effective training, supervision and regular communication on health and safety matters is regularly provided to our employees. To support this, a comprehensive schedule of audits, inspections and drills is carried out internally and by independent bodies to check awareness, compliance and readiness to deal with emergencies. Our UK region, for example, has published and launched health and safety management policies and procedures certified to OHSAS 18001 (externally audited by the British Standards Institution). This system is designed to ensure robust and comprehensive risk assessment and recognition across the business, and continues to be rolled out across M&C's UK hotels.

Caring for the environment

M&C understands that sustainability impacts nearly all aspects of its hotel operations, so we embrace it as a means to preserve our environment, to provide increased guest comfort and to engage and inspire our colleagues. We encourage our hotel managers to seek new ways to reduce and manage emissions and energy use across our Group by adopting environmental best practices and optimising efficiency.

For instance as a result of the UK Energy Savings Opportunity Scheme (ESOS) undertaken in 2015, several recommendations were implemented across our UK hotels such as the ongoing LED replacement programme, upgrade of boiler equipment at Copthorne Gatwick and Copthorne Effingham Park, the replacement of 35 chillers and installation of more energy-efficient motors and pumps at various sites.

The Group's carbon emissions decreased by 3% despite the opening of several new hotels. Emissions per unit floor area decreased by 25% since the 2010 base year and emissions per room have decreased by 8% since 2010.

Our hotels reduced the volume of waste sent to landfill by 10% since 2015 on an absolute basis and by 12% on a per room basis.

Risk assessments regarding water issues is an ongoing procedure at our hotels. To further minimise consumption through inadvertent water use, we seek customer engagement by encouraging the reuse of towels. We also have measures in place that quickly identify leaks and potential problems, in addition to providing wat

To reduce pollution, colleagues are encouraged to contribute their time and effort to voluntarily participate in both international and local clean-up activities, such as collecting and removing rubbish from local parks, local beaches, rivers and streets, promoting recycling and awareness on climate change issues.

Supporting local communities

We fully embrace the communities in which we operate and are committed to conducting our business in ways that have a positive impact on society. We encourage every hotel to get involved in its community in ways that make the most of their skills and for causes about which they are passionate. Our colleagues are encouraged to participate directly, whether through volunteering, fundraising or coordinating events for local charitable causes.

Several community initiatives from our hotel colleagues worldwide have contributed to help make a brighter future in their communities. Here are some examples:

Millennium Cincinnati, USA helped to raise awareness of bullying in schools by hosting a luncheon for a group of students from two local public schools. Games and activities were played to help foster positive interaction and promote harmony and tolerance among the children. The hotel also provided books for them to choose for their summer reading.

In another community outreach activity, **JW Marriott Hong Kong** took part in the annual Youth Outreach Flag Day to raise funds to support the Youth Employment Start-up Programme which provides young people with basic working skills and the Crisis Residential Centre which offers counselling sessions for

those who encounter personal crisis or domestic violence. The hotel also supports the All-night Outreaching Team operation, an organisation which aims to search for youths who are unwilling to go home and stay out late by arranging regular midnight duty-tours.

The Heritage Hotel Manila, Philippines arranged for 30 runners to participate in the Million Volunteer Run held on 6 February 2016. The run is organised by the Philippine Red Cross to raise funds to purchase ambulances, earthquake rescue trucks, food trucks, shelters and other lifesaving vehicles and equipment.

Millennium Durham, USA spent a day volunteering with Habitat for Humanity to build two homes in Durham. This initiative is one of many community service initiatives the hotel has planned for this year. Habitat for Humanity is a global non-profit Christian housing organisation with a mission to eliminate poverty housing worldwide by building simple, decent houses with the help of the homeowner families themselves and volunteers.

The McCormick Scottsdale, USA banded together as a team to help support and give back to the community. Their recent undertaking was a clothing drive for the Salvation Army. The team was able to donate 453.6kg of clothing to the worthy organisation. Other community projects undertaken by the

hotel include sponsoring a Red Cross Blood Drive and assisting a therapy dogs organisation to renovate their office and puppy facility.

Millennium Sirih Jakarta, Indonesia, via the Jakarta Rotary Club, donated towels, blankets, bath mats and clothes to flash flood victims in Garut, a town in the west province of Indonesia.

The Group's operations in London donated gifts for sick children and older patients for the Bart's Charity "Send a Smile with Santa" campaign.

Copthorne King's Hotel, Singapore held a post Chinese New Year (CNY) Hi-Tea session for about 110 elderly residents at a home for the aged in March 2016. The elderly residents were given CNY Red Packets and entertained with a singing session by the hotel. Kitchen staff also prepared a sumptuous buffet spread for the event.

Millennium Residences Beijing organised an "Annual Autumn Outing" for all staff in September of which a total of 150 staff participated.

The General Manager of our Millennium Corniche hotel, Abu Dhabi, Mr Nemo Acimovic, encourages increased engagement amongst management and his employees. He recently held a breakfast session where all management and staff shared a cooking experience. This commitment to staff wellbeing leads to positive attitudes and motivation between management and staff which in turn reflects positively on guests through exceptional service, making them want to return to the hotel again.

Millennium Mayfair, London Executive Chef, Paul Danabie, an active member of the Royal Academy of Culinary Arts, raised £5,000 in donations from the generosity of guests for the Academy's "Adopt a School" programme.

Although we have made healthy strides within our responsible hospitality programme, we recognise that we still have much to improve. We are working to set targets and action plans for a cleaner and greener future. Our colleagues continue to make us proud and we look forward to continuing this journey in creating a more socially and responsible business together.

英皇證券集團有限公司（「英皇證券集團」；股份代號：717）於1993年成立，乃以香港為基地之著名金融機構，提供廣泛的金融服務，包括商業及個人貸款以及孖展及首次公開招股（「首次公開招股」）融資；經紀、財富管理及資產管理；為上市發行人提供配售與包銷服務；及企業融資顧問服務。本公司於2007年4月於香港聯合交易所有限公司（「聯交所」）主板上市。

為加強競爭力，英皇證券集團不斷革新，發展及優化各種金融服務，包括24小時網上交易平台，助客戶掌握投資良機、獲取理想回報。展望未來，英皇證券集團將致力開拓新市場，使發展更上一層樓。

本集團穩健的表現深獲資本市場認可，並自2015年12月1日起已成為摩根士丹利資本國際(MSCI)香港小型股指數成份股之一。亦連續多年榮獲國際及香港專業機構之認可，包括《亞洲貨幣》、《資本雜誌》、《盛世》及《東周刊》等評為本地服務卓越證券商，優質產品及服務獲得業界認同。

香港青年交流促進聯會
Hong Kong Youth Exchange Promotion United Association

為學生築舞台
我們的品牌活動

info@youthexchange.org.hk www.youthexchange.org.hk

本會致力於學生發展工作，以活動帶動組織，推動兩岸四地學生交流，希望學生通過籌組活動提升領導才能。當中最大特色是所有活動均由學生主導，活動從籌組策劃以至組織安排全交由學生參與，學生不再是參加者而是策劃者，從而培養他們的責任感及歸屬感，成為明日領袖。

本會將繼續秉承「為學生・築夢台」理念，舉辦不同類型及富有特色的活動。重點活動如下：

「創路學堂」香港青年學生公益事業發展考察計劃

計劃安排青年人到韶關進行考察，當中將透過探訪當地的學校、兒童福利院、老人中心等，讓香港青年人深入探討內地弱勢社群的處境，從而了解自身的責任及義務。同時亦讓香港青年人透過與受惠者、前線服務人員、志願者，三個不同角色的交流，多角度探討現時內地公益事業之狀況，深入了解內地公益事業的發展、所需條件，及所面對的挑戰和困難。

「高校科學營」優秀高中生獎勵計劃

高校科學營計劃是一項由國家教育部及中國科學技術協會主辦，中國科學院支持的大型計劃。計劃目的是激發青少年對科學的興趣，並鼓勵青少年崇尚科學，立志從事科研事業，以培養他們的科學精神。本港高中學生可透過7天的考察行程中，親身參與科技實踐活動，與名師交流科技與創新的實踐心得，從而提升兩地青年學生的創新意識與實踐能力。

「愛我中華」兩岸四地青年大匯聚火車團

自2001年起，火車團活動已舉行了十七年。每年由多個兩岸四地青年團體聯合舉辦，組織香港、澳門、台灣、內地兩岸四地數百青少年一起赴不同省市交流。多年來，走訪過井岡山、北京、寧夏、秦皇島、上海、南京、張家界、西安、青島、內蒙古、武漢、湖南、海南、山西、雲南、廣西、南昌、湖北及四川等地。

漫遊天地　細味台灣
台灣社會民生深度考察交流團

港台各有特殊的文化背景，因而陶冶出截然不同的兩岸青年。本會每年均以不同主題帶領香港青年到訪寶島台灣，親身感受當地生活文化，更會入住台灣接待家庭，近距離接觸熱情好客的台灣朋友，兩地青年進行深入交流，建立友誼。

「一帶一路」 香港青年絲路文化考察團

香港青年除了立足香港、認識祖國外，同時需要放眼世界，提升國際視野，認識個人與社會的關係及責任，裝備自己，充實成長中的生活，成為全面發展的明日之材。本會除舉辦內地及台灣交流團外，亦會舉辦國際交流團。在２０１７年１０月，本會將率領青年學生前往布拉格與當地青年文流，擴闊香港青年的國際視野。

生命勵進基金會

關於我們

生命勵進基金會成立於 2014 年，是一個慈善團體，由一眾關懷社會，樂於

奉獻的有心人士發起及組成。我們致力於促進年青一代愛惜生命、追求夢想、邁向美好人生、鼓勵扶助弱勢及守望相助的各類教育及社會工作。

使命

推動生命教育　灌輸人生價值
扶助弱勢社群　鼓勵互愛互勉

願景

希望籍著我們的熱情和理想，鼓勵更多的志同道合的有心人，合力推動生命教育，扶持社會基層發揮潛能，維繫香港的核心價值。

本會活動項目

生命教育農莊

位於元朗八鄉馬鞍崗村，生命教育農莊是一個集環保、生命、自然教育於一身的教育展示農莊，我們希望以教育為主題，透過農莊提供實質的教育課程和活動，宣傳愛護和理解自然的概念，傳遞人和大自然生物和諧共處的理念。

香港是一個典型的都市社會，在物質生活方面高度發達，日常我們被五光十色的事物所吸引，但是卻不知不覺間淡忘了更多的生命價值，我們希望能籍著推廣自然生活，喚醒大家對生命的反思，拓展大家對人生價值的視野，面對各種的困難和挑戰，享受真正的人生樂趣，步上有意義的人生旅途。

在這裡，有數百種植物，包括各類果樹和中草藥；亦有數十種動物例如豬，山羊，兔子，孔雀，錦雞和各類大小夜行動物，可供大家近距離觀賞接觸，讓大家可以體會生命的多樣性，學會如何和他們和諧相處。更有多項學習活動如自摘香草茶工作坊、木製品工作坊、柴火砵仔糕工作坊、盆栽 / 田園種植、環保紙製作等等，讓參加者透過工藝製作更享受大自然樂趣。

生命教育農莊
Life Education Farm
生命潤澤 活得精彩






設立獎助學金

現今社會中，對不少人來說，追求理想已經成為了奢侈品，由於時代的變遷和社會急速發展，我們在匆匆的人生中，往往做出很多妥協，年輕人在 ‘主流價值’ 的洪流中，常常被規限因而錯失了機會去認清自己的人生方向，不經不覺間放棄了很多追求理想的機會，甚至埋沒了自身的潛能。

生命勵進基金會早在 2011 年，已經在荃灣官立中學設立獎，助學金，目的正是要鼓勵學生認識自己，追求夢想 ! 在 2013 年，我們更設立了『郭鄭敏玲獎，助學金』，供更多的中學生申請。我們希望通過這種方式，鼓勵學生去了解自己真實的喜好，忠於自己的理想，並通過務實的過程將理想變為現實。

生命勵進基金會與中華廚藝學院合作，於 2015 年起設立『生命勵進助學金』及『活健全人發展獎學金』，為一眾學員實現夢想和實踐全人發展提供動力。






萌動雜誌

萌動雜誌是以文學創作為主題的雙月刊，免費派發至本地超過 130 間中學和大專院校。

萌動雜誌是一個學生的文學創作的園地，讓大家有一個發表作品和交流心得的平台，同時每期亦有主題封面人物，採訪本地創作的代表性人物，包括作家倪匡，知名小說家深雪，本地繪本作家文地貓和大泥，舞台創作導演黃智龍，武俠作家喬靖夫，蒙面創作歌手龍小菌等等，令讀者可以通過這些創作經歷中得到啟發和鼓勵，將自己的才能發掘及展現出來。

萌動雜誌同時也是生命勵進基金會和學校溝通的橋樑，設有專欄介紹院校的文化活動，本土文化和生命教育等題材。

人生百味 @ 戲曲

粵曲源遠流長，更被聯合國教科文組織列作非物質文化遺產，有鑑於此，本會舉辦「人生百味 @ 戲曲」，透過此活動，以全新演繹方法，把戲曲中所蘊含的人生價值觀，及處世之道的精粹，傳遞給學生和大眾。

粵曲藝術包含了嶺南地區多年的文化沉積，亦吸收和發揚了中華各地傳統戲曲的精髓，成為中華文化的珣麗一葉。其曲目題材出處皆為精心挑選的故事或情節，曲詞的字裡行間不乏文學佳句，同時反映了我們中華文化不同歷史時期的人文風俗、社會價值和道德取向，是體會人生、思考得失的良師益友。

以生命教育為主題，我們會精心選擇一些有代表性的曲目，期望大家可以體驗粵曲藝術細膩婉轉的韻味，更能從中感悟到的人生的喜怒哀樂，反思我們的人生價值。

藝術及知識比賽

本會每年會舉辦多項比賽項目，包括生命教育繪畫比賽、中華狀元問答比賽、大專生投資比賽及深港普通話朗誦精英賽等，透過各項比賽發展學生的潛能及從中取得人生的體驗及歷練。


雞隻共享送暖活動

為扶助弱勢及推動互愛互勉的精神。每年在中國傳統的節日舉辦「雞隻共享」的嘉美雞送贈活動。我們透過和不同的學校及福利機構合作，把雞隻贈予低收入家庭、長者及單親家庭等不同的社會階層，鼓勵青年人關心有需要人士、學習互勵互勉的精神。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中滔環保

CT Environmental Group Limited
中滔環保集團有限公司

Room 804, 8/F., Empire Centre, 68 Mody Road,
Tsim Sha Tsui, Kowloon, Hong Kong.
TEL: 2527 9777 FAX: 2527 2587
Website: http://www.chongto.com/