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Tribute to the late Professor Lee Poh Ping

The Institute of China Studies, University of Malaya will miss Prof. Lee Poh Ping who passed away on 28 November 2016. Lee was a Senior Research Fellow of the institute from November 2009 and Editorial Board member of the institute's journal, the *International Journal of China Studies* in the same period. The journal, which was accepted into Scopus' data base of peer-reviewed literature in 2013, benefitted greatly from Lee's editorial advice and vast network of scholarly contacts.

Lee was born in Ipoh in April 1942. He studied at the Anglo-Chinese School, Ipoh and taught there for a few years after being at the Brinsford Teacher Training College in the UK. He subsequently joined the University of Malaya where he graduated with a First Class Honours degree in History. Awarded a Ford Foundation fellowship, Lee proceeded to Cornell University to do his PhD under Ben Anderson and David Mozinga. He completed a thesis on Chinese society in 19th century Singapore which was subsequently published by Oxford University Press in Kuala Lumpur.

Lee joined the Department of Public Administration at the Faculty of Economics, University of Malaya which he subsequently headed. He was promoted professor in 1992. On his retirement in 1997, he was made Professor Fellow of the Institute of Malaysian and International Studies, National University of Malaysia.

Following his return from Cornell University, Lee turned his scholarly attention to Japan. This was even before Malaysia under Prime Minister Dr. Mahathir Mohamad adopted the Look East policy. In the late 1990s, Lee added ASEAN and China to his research interest. When the Institute of China Studies was set up he saw a chance to contribute to an area and in an institute he realized were of growing importance. Lee was always alert to the fast changing power relations in the region and of the regional significance of ASEAN in relation to the major powers.

While Lee in his teaching, research and writing took his students and audience to the wider field of international affairs, he was always conscious of his position at home and, as he once wrote... "I never lost my sense of being Chinese, a Chinese loyal to Malaysia". He was especially proud of his Hakka heritage, a community involved in the early development of the tin-mining industry in Perak and Selangor. He spoke often of Hakka personalities who were prominent in history, in Malaysia, China and elsewhere.

Lee belongs to a disappearing generation of scholars in the University of Malaya who lived through momentous political, social and educational happenings. Born at the time of the Japanese invasion, he grew up in the Emergency years of a communist insurrection, the decolonization years, and independence and nation-building. In those transition years, there were fundamental changes in the education system under which he first studied in a Chinese school, then a fully English-language stream, and eventually teaching in Malay at the university.

This background and experience prepared him to interact productively with an earlier generation of scholars who themselves went through even more momentous upheavals of civil wars, revolutions and World War II. Lee acknowledged the influence those scholars on him and he mentioned in particular Wang Gungwu, Ben Anderson, George Kahin, William Skinner and Clifford Geertz. He admired the values that were reflected in their works, of openness to all ideas yet critical and robust in contending with diverse views. Lee mediated the scholarship of the generation that was before him and the one that came after him.

Lee was not one to waste time on projects and programmes that were not related to his research and teaching interest. And so he devoted his energy to the Japan Studies Association of which he was founding president, the Malaysian-American Commission on Educational Exchange, the Malaysian International Affairs Forum and the Malaysian Defence College. He wrote for regional weeklies like *Asiaweek* and local dailies such as the *New Straits Times*, *The Star* and *The Sun*, and appeared on international television. He served with commitment and distinction in the institutions he was associated with, using his positions to help but never to hinder.

Indeed in the days following his passing, many moving tributes were paid to Lee by friends and those whose lives were touched by his kindness and consideration. The tributes pointed to his impressive scholarship and contribution to various academic fields. Friends and colleagues spoke with admiration on the breadth of Lee's intellectual pursuit and the depth of his academic analysis, of how he had helped raised the standard and status of the Institute of China Studies during the time he was there. Through those reflections, we were reminded that Lee was an able administrator and as head of the Department of Public Administration insisted on academic quality while promoting the advancement of his staff. He developed an exceptional network of international scholars that included Donald Horowitz, Anthony Milner, Lowell Dittmer and Kevin Hewison, the latter two being editors of the prestigious *Asian Survey* and *Journal of Contemporary Asia* respectively, and arranged to have them invited to the University of Malaya as visiting professors. He added into this network younger scholars, both local and overseas. He was remembered as a very generous man, generous with his

time to sit with scholars young and old, over meals during which he offered advice and suggestions. He regularly sent messages of encouragement to friends and colleagues.

Above all, Lee was considered by many as a Malaysian, a Malaysian in outlook, appreciating the ethnic makeup and balance in the country, forging deep personal relationships with colleagues of different races and faiths, and striving to explain Malaysia's strategic position in international politics.

Lee was dedicated and devoted to his calling and right to the end while in hospital, his thoughts and concern were on an upcoming conference of the Institute of China Studies.

Lee indeed was to us a towering figure both physically and intellectually.

Editorial Board of the International Journal of China Studies

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Research Articles

The People's Republic of China and European Union Security Cooperation in Africa: Sino-EU Security Cooperation in Mali and the Gulf of Aden

*Niall Duggan**

Department of Government, University College Cork, Cork, Ireland

Abstract

The United States' pivot toward Asia has fuelled a new round of debates about the role of key Asian actors such as the People's Republic of China (China) and traditional actors such as the European Union (EU) in global security. Using role theory, this paper examines EU-China security cooperation. The paper presents two case studies: Sino-EU maritime security cooperation in the Gulf of Aden and Sino-EU peacekeeping cooperation in Mali. These case studies examine the EU's and China's roles as security actors and as normative actors within non-traditional security challenges. The paper illustrates the kind of role the EU could play in the world in terms of security issues, as well as the norms and values that global security responses could create. The paper also gives a greater insight into the role a rising China could play in global security governance.

Keywords: *Normative actor, role theory, Sino-EU relations, UN peacekeeping*

1. Introduction

It has been more than a decade since David Shambaugh (2004) suggested that China and Europe were forming an emerging axis in international relations. As Sino-European economic interdependencies are constantly increasing, the emergence of a Sino-European axis in terms of economic cooperation has occurred (European Commission, 2013). The People's Republic of China (China) and the European Union (EU) cooperate in global economic governance bodies. However, Shambaugh's claim of an emerging axis in the field of global security governance seems highly unlikely and is presented as rhetoric (Biedermann, 2009). The presence of an EU arms embargo on China, conceptual gaps in human rights and sovereignty, and increasing levels of competition for natural resources are all barriers to the development of

this axis (Pan, 2012). However, China's role in global security has changed dramatically, though incrementally, over the past decade, and the nation has attempted to develop the role of a responsible great power (Zhu, 2010). In line with this new role, China has increased its multilateral engagement – most notably, its part in the six-party talks on North Korea (Horowitz and Min, 2006). The EU's role in global security governance has also evolved over the past decade. With the strengthening of the Common Foreign and Security Policy (CFSP), the EU has become more active in international security, developing a common role in security issues. As both China and the EU have become more proactive actors in global security matters, the question of a possible axis between the two actors re-emerges. African security governance has emerged as an area of common interest between China and the EU and as a possible area of cooperation.

This paper argues that China and the EU will increase their cooperation in global security issues, particularly in regard to Africa. The paper argues that both actors have a historical conception of their role as great powers within global security affairs, which pushes them toward cooperation. To accomplish this paper's goals, evidence regarding China's and the EU's identities and behaviours in global security is examined qualitatively. Two case studies of Sino-EU security cooperation in Africa – the Gulf of Aden and Mali – will be examined to demonstrate that their role conceptions result in a repeated pattern of role behaviour.

2. Role Theory Framework

Role theory is a theoretical framework that is committed to the study of behaviour using the notion of "role". This study falls within the constructivist international relations (IR) framework of role theory (Harnisch, 2001; Maull, 1990). This paper employs process-tracing techniques outlined by Krotz and Sperling (2011) and Gottwald and Duggan (2011) to track core elements of role expectations. Taking a single role assumption, this paper will understand a role expectation to be a balance of the domestic expectations (ego expectations) and the implicit or explicit demands of others (alter expectations). In terms of alter expectations, it is important to note that not all "others" carry the same weight (Shih, 2013). This is clearly outlined by Wendt, who stated that "not all others are equally significant ... so power and dependency relations play important roles in the story" (1999: 327). There are tangible and intangible reasons for the selection of significant others: the tangible reasons are an actor's resources, while the intangible reasons are notions of the state's identity and the "needs" that derive from that identity (Wendt, 1999: 328). Therefore, the selection or appearance of significant others in international relations does not happen randomly. The

choice or constitution of a significant other is based on past experiences by the role beholder (Harnisch, 2011: 12). Foreign policy makers create domestic expectations from the perception of the outlook of internal actors such as economic elites or other key state supporters among the general population. The influence of public opinion on foreign policy issues (Cantir and Kaarbo, 2012), as well as a state's historical self (Harnisch, 2015), is key to determining domestic expectations. The current self stabilizes both relevant to a current significant other and to its historical self (McCourt, 2012). Both the historical self and the current self are conceptual through "ontological security" (Zarakol, 2010), which can be defined as the situation in which "an actor has a consistent sense of 'self' by performing actions in order to underwrite his/her notion of 'who they are'" (ibid: 3). A state seeks ontological security because it wants to maintain a consistent self-identity. That "self" is constituted and maintained through a historical narrative that gives life to routinized foreign policy actions (Steele, 2008: 2-3). Maintaining those foreign policy action routines, which maintain a state's historical narrative, allows the state to protect its historical self. Mitzen (2006) argues that a state values those routines as they underwrite the state's sense of self and that a state might privilege routine over other values, even when physical cost is involved. Therefore, roles are created by the combination of an actor's subjective understandings of what its behaviour should be – that is, its role conceptions – and international and domestic society's demands – that is, its role expectations – combined with the particular context in which the role is being acted out (Elgström and Smith, 2006: 5, Holsti, 1970: 239). Roles are neither deterministic nor infinitely elastic (Chafetz, Abramson and Grillot, 1996: 733). They are the categories of behaviour that states, like individuals, rely on to simplify and to help guide them through a complex world. Roles provide individual states with a stable sense of identity (Bloom, 1991). As an approach to the study of international relations, role theory offers a thick description and does not codify abstract regularities (Walker, 1987: 255), and the inclusion of role perception in this paper is the acceptance that roles are institutionalized in social structures (Wendt, 1999: 227). Thus, this paper adopts a particular epistemological and ontological position. Carlsnæs (2002: 241) outlines the epistemological position of role theory as an interpretative perspective – that is, that role theory produces interpretative knowledge that offers a thick description rather than causal explanations (Walker, 1987). For Carlsnæs (2002: 241), the ontological positions of role theory focus on "the reasoning of individual national foreign policy makers". In foreign policy analysis, role theory exemplifies the bottom-up individualist interpretative approach, which is concerned with understanding "decisions from the standpoint of the decision makers by reconstructing their reasons" (Hollis and Smith, 1990: 74). However, this position does not deal with the

intersubjective ideas that come into consideration with the involvement of role perceptions. Therefore, by including role perception, this paper takes a holistic approach.

3. The EU's Role

The EU's role in global security governance is mixed. Seeking to play a more active role in global affairs, the EU has developed a Common Foreign and Security Policy (CFSP) and a Common Security and Defence Policy (CSDP). In many foreign policy security issues – particularly softer security issues – the twenty-eight EU member states have a powerful collective influence. On the other hand, some critics – including significant others, such as the United States, Russia and China – assert that, on the whole, the EU remains an economic power only and that its foreign and security policies have little global impact (Dai and Zhang, 2007). Past institutional arrangements that developed to give the EU a security function have often failed to coordinate the EU's full range of resources, most notably the conflict after the breakup of Yugoslavia. The inherent difficulties of reaching a complete consensus among the member states and the conflicting global security role key members such as France and the United Kingdom play set limits on the EU's external policies (Koenig, 2014).

The EU has conducted thirty operations under its CSDP (EEAS, 2014). To develop a stronger CSDP that would have a greater impact in global security issues, EU member states have been attempting to increase their military capabilities and promote greater defence integration. Outside non-traditional security issues and civilian missions, these efforts have met with limited success thus far. Civilian missions and capabilities, however, are also central components of the CSDP (Tonra, 2003). The majority of CSDP missions have been civilian operations in areas such as police training and rule of law. The EU has been far more active in soft areas of global security (Lasheras, Pohlmann, Katsioulis and Liberti, 2009). It has been a strong actor in areas such as trade, humanitarian aid, development assistance, and food and energy security using soft tools such as enlargement and neighbourhood policy to encourage peace within the region (Orbie, 2009). This fits with the typology of the EU as a “civilian power” during the Cold War (Duchêne, 1972), as a “normative actor” in the 1990s (Tocci, 2008) or, since 2000, as a “Minervian Actor” (Manners, 2013). All these typologies have a common underlying role: as outlined by Karen Smith (2003: 111), “the EU still clearly prefers positive civilian to coercive military measures. The emphasis is on the panoply of civilian instruments that the EU ... has at its disposal, and that puts it in the unique position of being able both to contribute to prevent conflict from erupting and to manage the aftermath of conflict” (Sjursen,

2006: 237). It seems clear that in global security governance, the EU's role is as a normative civilian power focusing on conflict prevention through its use of economic power within the system to prevent conflict from occurring or to reconstruct governance institutions after conflicts have been resolved. However, the EU's historical self has an effect on this role in global security given the particular context of a security event. A number of EU powers have a long history of playing a major power role in global security – most notably France and the UK. These historical roles as great powers still have an influence on the historical self and, therefore, of the construction of the current role of the former great powers. Within the national role conception (NRC) of actors such as France and the UK, the role of a great power is still present in their role construction. Both the UK and France have played a strong role in global security over the past few decades. It is clear that they also plan to continue this role. In the UK's 2010 National Security Strategy, for example, it is clear that the UK still sees itself as having a major role in international security:

This strategy for maintaining British security and influence in the world is characterised by the new National Security Council. We will tie in the efforts of all government departments to address threats to our security and interests and to seek new opportunities for Britain. The National Security Council has reached a clear conclusion that Britain's national interest requires us to reject any notion of the shrinkage of our influence. (H.M. Government, 2010)

The historical self of France and the UK as great powers has a strong influence on the EU's role in global security. The UK promotes its role as a great power within the framework of NATO, while France attempts to develop an independent EU role in security matters under the Petersberg tasks. *Le livre blanc sur la défense et la sécurité nationale* (Défense et Sécurité nationale, 2013: 64) highlights this clearly:

France shares with its European partners most threats and the risks it is confronted with: The most pragmatic approach to this problem is that we are more effective if we are able to face the problem together. That is why, as part of its national defence and security, France considers the development of a common European defence and security a priority. This is driven by the belief that a European response would be greater than the sum of national responses.

These contradictory paths to playing out their roles of great powers within a European framework prevent the EU from playing a role in harder security issues. Instead, the EU often plays a supporting role to NATO. Nicole Koenig (2014) highlighted this conflict of roles during the 2011 Libyan crisis, where different views of the EU's role in the crisis led to an inability of the EU to go beyond that of a civilian power, leaving the hard security role to NATO.

4. China's Role

China's rise and the 2008 global financial crisis have fuelled a new round of debates concerning the sustainability of the norms and institutions that have dominated global governance, including global security governance. China is often seen as a threat to global security. Significant others – including the United States, Japan and the ASEAN nations – have seen China's role as that of an aggressive actor. The key concept to this altercasting has been the China threat theory, which states that China, as a rising power, will come into conflict with the United States, the current hegemonic power. This conflict will result in the US and its allies attempting to prevent China's rise within international relations. China's peaceful rise was a direct response to the China threat theory, which developed from the realist understanding of the balance of power theory. China's peaceful rise was an attempt to display a different view of China's future role within international relations and to present China as a responsible great power that works to maintain a stable global system. China can be said to be playing the roles both of an aggressive actor/revisionist state and of a responsible actor/status quo state, conforming to both China's threat theory and China's peaceful development theory. China's aggressive policy in the South and East China Seas over disputed territories, as well as assertive behaviour in the Indian Ocean (Bersick and Duggan, 2013), is the role behaviour of an aggressive actor. However, China's increased involvement in areas such as UN peacekeeping, antiterrorism and non-traditional security fulfil its responsible actor role. The fact that China plays both roles can be explained by the development of its historical self and by domestic expectations of China's role in the world.

China's historical self has both a modern and an ancient influence. Historically, China held a position at the centre of a regional power structure referred to in the West as the "Tributary System". Song Nianshen highlighted that the system was far more than an interstate system; it was a multilateral and multi-layered system of international relations. According to Song, the state-to-state relationships within the Tributary System were "woven into a complex, multilevel power nexus composed of interconnections among multiple political, economic, ideological, and science and technological cores and peripheries" (Song, 2012: 167). This conception of China's position at the centre of a complex, multilevel power nexus has a profound effect on China's ontological understanding of its role within international relations and on states' management of their interactions. It means that within the development of China's contemporary role, the historical self conceptualizes China as a central power or "civilization-state" (Pye, 1990), pushing China toward creating a role that has a great power or central power foundation (Connolly and Gottwald, 2013). This can be seen in a number of contemporary foreign

policy documents, such as China's Peaceful Development, China-Japan-ROK Cooperation (1999-2012), China's Foreign Aid, and Diaoyu Dao: An Inherent Territory of China (State Council, 2011b; 2012a; 2011a; 2012b), which highlight China's position as a historical major power. This historical self also links previous incarnations of China with the contemporary state in terms of the territories that are understood to comprise China, and it creates a very strict understanding of the limits of those territories (Schneider, 2014). The modern influence on China's historical self is from China's period of semi-colonisation by Western powers (1839-1949), known as the "century of humiliation". This contributed to the fall of the Qing Empire and the rise to power of the Chinese Communist Party (CCP). After the foundation of the People's Republic of China, the country played two roles in international relations: a new type of socialist great power and a developing great power (Men, 2013a). The century of humiliation helped to create an anti-imperialist, prodeveloping-states role for China in the period after World War II. The colonial question, which concerned the peoples of Africa and Asia that convened in Bandung (Indonesia) in 1955, accelerated the PRC's involvement with the developing world. The Bandung Conference laid the ideological and philosophical foundation for South-South Cooperation. Following the Bandung Conference, China began to support wars of national liberation in the developing world, particularly in Africa. This can be seen as an attempt by the PRC to shed its historical victimhood of the semi-colonial period of Chinese history through the promotion of decolonization within Africa. This attempt continued through the 1950s, and by the early 1960s, the PRC had established relations with a number of left-leaning or radical states (Larkin, 1971: 39). A focus on the needs of the developing world is contained in China's contemporary role in global security governance. Chinese pressure within the G20 to increase the forum's focus on developing nations' food security has already created some reforms within global food security governance (Duggan and Naarajarvi, 2015).

The influence of China's historical self has created a role for China that can often be contradictory. While China is playing the role of a great power within Asia and defending its historical territory, it also plays the role of leader/defender of the developing world outside the Asian region, in line with its anti-imperialist, prodeveloping-states role. This may be, in part, due to the geographical context in which China has adopted its roles (Shih and Yin, 2013). For example, China does not cooperate in terms of security governance with Japan within Asia. However, it is willing to cooperate with other power actors. For example, it cooperates with Russia in the Shanghai Cooperation Organization. Yet China is willing to cooperate with Japan outside the Asian region, as in the case of maritime security cooperation in the Gulf of Aden.

Chinese domestic expectations, which are also shaped by China's historical self, contribute to the contradictory role China plays in global security. As Christensen and Li (2013) identified, several domestic phenomena have affected China's international role: growing domestic divisions in the understanding of security in China; demonstrating nationalist, internationalist, realistic or liberal attitudes; and growing importance of various interests stemming from political, economic and social spheres of society. Christensen and Li (2013) thus argue that China's self-perception of its domestic security situation has both a conventional aspect as well as an unconventional aspect. The latter is backed by a 2012 survey on the Chinese public's security perceptions, which identified that the top security concerns for the majority of Chinese are not economic and military threats from the outside but internal energy shortages (Jung, 2012). China's role as an anti-imperialist, prodeveloping-states actor is also present in China's discourse on its role in global security governance (Zhao, 2010; Men, 2013b). As outlined by Noesselt (2013: 17), in creating a role conception, "the Chinese government is ... faced with the difficult task of trying to balance domestic and global expectations, as well as old and new role conceptions". In terms of the creation of China's role conception in the area of global security governance, it is clear that China's role can vary greatly, depending on geographical location, the partners involved in governance and the issue. However, China attempts to play some form of great power role.

5. China-EU Security Cooperation

The EU-China Strategic Partnership, which is based on the 1985 EU-China Trade and Cooperation Agreement, has grown to include security matters. The issues that the EU and China discuss during their regular meetings are organized into three pillars: political dialogue, economic and sectoral dialogue, and people-to-people dialogue. There are annual summits, regular high-level dialogues and more than fifty sectoral dialogues on topics including security cooperation. Despite the presence of security cooperation in the sectoral dialogues of the EU-China Strategic Partnership, it is unclear what each actor's role expectation is of the other.

As highlighted by Stumbaum (2011: 15), for decades the EU considered China "just too far away and too weak to matter to the Europeans in security aspects", while today the EU considers China to be a key player in global security governance. For its part, China sees the EU as a peaceful power (Zhang, 2011: 24) and an important part of the development of a multipolar world. However, there is a clear understanding that, as a security actor, the EU is a secondary significant other compared with the US and Russia in matters of traditional security, and it is expected to support the position of

the US (Xu, 2009). In terms of non-traditional security matters, however, China sees the EU as a significant other. As outlined by Zhu (2007), in China, the EU's concept of security has been seen to gradually shift from an emphasis on political and military security, sovereignty, and development to an emphasis on safety, the safety of human society, and a comprehensive and integrated security. In terms of China's security concept, in order to become a responsible great power, China must move toward more comprehensive, integrated security (Breslin, 2014), and the EU is seen as a key partner in that movement (Wenwen, 2015). As China does not see the EU as having a strong military role in Asia, it is therefore not seen as a threat to China's national cores interests (Zhu, 2007). China's expectation of the EU's role in global security can be clearly seen in the 2014 China's Policy Paper on the EU, which focuses on non-traditional security matters like water and energy security rather than more traditional security issues (Ministry of Foreign Affairs, 2014). The EU's role expectation of China is that it becomes a more responsible global power (Barroso, 2012). In terms of global security governance, it is clear that the EU sees itself as a partner for China. Catherine Ashton, high representative of the EU for Foreign Affairs and Security Policy, has outlined that the EU is willing to strengthen pragmatic cooperation with China in high-level dialogue, antipiracy, peacekeeping, international and regional security (Ministry of National Defense, 2013), and the Guidelines on the EU's Foreign and Security Policy in East Asia also clearly sees China as a partner in global security, as well as regional security in Asia (Council of the European Union, 2012). The EU has also engaged with China in the Iranian nuclear proliferation issue, as well as the conflict in Libya (Godement, 2010) and the ongoing conflict in Syria, but success has been limited. In the area of Sino-EU security cooperation, the EU sees China as a rising power that needs to be engaged and encouraged to become a responsible power, helping to maintain the current system of international relations. Socialising China within that system is part of the EU's role as a normative power (Odgaard and Biscop, 2006). As both China and the EU are major investors and trading partners with Africa, supporting the continent's security is a matter of common interest (Duggan, 2014). Both actors support the development of African security architecture. This is achieved in a number of ways, including supporting the security capacity of African regional and sub-regional bodies, providing support for peacekeeping missions, and helping to deal with many of the underlying issues that led to conflict (Van Hoeymissen, 2010; EEAS, 2015a; Brosig, 2014). Both actors offer Africa different models of peacekeeping (Sicurelli, 2010). However, as China has adopted some Western norms in terms of peacekeeping (Alden and Large, 2015), cooperation in peacekeeping in Africa is still an area of cooperation between the EU and China (Liu, 2011).

It is clear that China is attempting to perform actions in order to underwrite its notion of itself as a responsible great power. The EU is also trying to underwrite its historical self by attempting to act as a normative power, socialising China within the global security governance system. If both actors' roles in global security governance are, in part, an attempt to underwrite their historical selves as great powers, this should be evident in their role behaviour. Africa's security issues offer both actors an opportunity to fulfil these roles, as well as an opportunity for cooperation. This paper examines two cases of China-EU cooperation in African security architecture.

6. Gulf of Aden

Between 2000 and 2009, pirates attacked 538 commercial shipping vessels and vessels carrying humanitarian aid off the coast of Somalia, mainly in the Gulf of Aden (UNODC, 2009: 193). Poverty, lack of economic development, and threats to environmental, energy and food security driven by commercial overfishing and by Somalia's civil war has forced Somalia's fishermen into piracy. The high level of piracy in one of the world's most strategic shipping lanes has led to a number of international security responses. However, rather than a single response, a number of states and bodies have launched their own security missions in order to deal with the issue. More than a dozen nations have sent ships on antipiracy patrols in the Gulf of Aden. A number of these are participating in Combined Task Forces 150 and 151 under the multinational Combined Maritime Forces (CMF) (CMF, 2014). The Europeans launched EU Naval Force Operation Atalanta in 2008. It was the EU's first naval operation under the framework of the Common Security and Defence Policy. Forces participating in Operation Atalanta have been tasked with providing protection for vessels of the World Food Program and the African Union's military mission to Somalia (AMISOM), as well as fishing and merchant vessels in the region (EEAS, 2014). The EU forces are authorised to "employ the necessary means, including the use of force, to deter, prevent and intervene in order to bring to an end to acts of piracy and armed robbery, which may be committed in the areas where they are present" (European Union Council Secretariat, 2009). Although this EU mission is not part of the CMF, it does coordinate with the CMF. A number of other nations – including Russia, China, India and Malaysia – have sent their own national naval forces to the region to protect their vessels and crews from pirates. These naval forces operate independently of the EU mission. China has not joined any coalition, and as outlined by Ma Luping, director of the Navy Bureau of Operations of the People's Liberation Army, the primary goal in the PLA Navy mission (PLA-N) was to "provide security for Chinese vessels passing through the Gulf of Aden" (Xinhua, 2008). The Chinese mission

was depicted in the Chinese media as a sign of China's rise as a responsible global power (Yang, 2008). However, after the PLA-N failed to deal with the hijacking of a Chinese ship, the *De Xin Hai*, on 19th October 2009 by Somali pirates, the need for security cooperation became clear (Christoffersen, 2010: 16). Although China has not joined a coalition, the PLA-N did seek to cooperate with other actors in the region. Ministry of Defence spokesman Col. Geng Yansheng outlined that "the Chinese naval escort vessel actively participated in an international escort cooperation with relevant countries and organizations, including the exchange of intelligence information, joint escorts and joint exercises" (news.163, 2011). The failure of the PLA-N to protect the *De Xin Hai* made China aware of its shortcomings in internal security and of the advantages of cooperation. This became a catalyst for China's attempt to develop an institutional response to the piracy problem in the Gulf of Aden and is a sign of China's responsible power role. On 5th November 2009, the Chinese Foreign Ministry announced that China would host an international conference that would include the EU, NATO, Russia and Japan to better coordinate anti-piracy naval escorts in the Gulf of Aden. At that meeting, the Chinese proposed that China take a more active role in Shared Awareness and Deployment (SHADE) meetings and that, in fact, China should be allowed to lead or co-chair a future SHADE meeting. SHADE coordinates NATO, the EU and CTF-151 naval forces (Christoffersen, 2010: 18). Cooperation would take place on "the basis of a UN resolution" (Xinhua, 2008). The UN takes a comprehensive security approach to Somalian piracy in the Gulf of Aden, and China's official policy on Somalian piracy closely parallels the UN's position and reflects an emphasis on comprehensive security instead of the use of warships, therefore putting a greater focus on non-traditional security issues (Chu, 2004). The EU, as a civilian power, is seen by China as a natural partner for this cooperation, and China targets the EU for this aspect of the response to the piracy problem (Zhou, 2011). The EU's role as a normative power comes into play as it replies to China's attempt to create an institutional response and to develop further global security cooperation to deal with the problem of piracy. Under this role, the EU hopes that Chinese cooperation on antipiracy will spillover into other areas of security cooperation (Christoffersen, 2010: 18). It seems that this spillover effect has taken place. According to the Organization for the Prevention of Chemical Weapons, a Chinese Task Force would enter the Mediterranean to join Russia in escorting chemical weapons out of Syria to a US ship and monitor them to be demolished at sea (Zhou, 2013). However, the EU's role as a civilian power or a non-traditional security actor – rather than a traditional security actor – is cemented here, as the EU is not part of this naval mission, which deals with more traditional security.

7. Chinese Peacekeeping in Mali

The National Movement for the Liberation of Azawad (MNLA) declared the independence of Azawad in April 2012, and took control of much of the north of Mali within a short period of time. Like previous Tuareg rebellions, this group was bound together by ethnic and clan loyalties (Boukhars, 2013). However, unlike previous rebellions in the north of Mali, this revolt also had a hard-line jihadist element (Soares, 2005). The combination of these groups led to a rapid expansion of the areas under their control. The first attempt to deal with the conflict in Mali was a peacekeeping operation by the Economic Community of West African States (ECOWAS). ECOWAS developed a contingency plan for an intervention, which called for an ECOWAS force to deploy into Mali with backup from the international community. The EU's response to the conflict in Mali was to provide training and financial support to the Malian state. The European Union Training Mission (EUTM) in Mali had a mandate to train about 2,500 Malian soldiers to retake Northern Mali with the support of a mainly ECOWAS contingent, but it had a non-combat mission (EEAS, 2015a). However, the speed of the jihadist militant groups' advance took ECOWAS by surprise. ECOWAS forces were unprepared and underequipped to engage the jihadist militant groups. While the United Nations had placed the onus on resolving the crisis on the Malian government, it was clear that neither the UN nor the Malian government were in a position to respond to the crisis (United Nations Security Council, 2012). The French intervention in Mali, named *Opération Serval*, was launched on 11th January 2013. French and African troops quickly pushed the rebels back, recapturing key towns in Northern Mali before the end of the month (Ministère de la Défense, 2013). The French force remained at the forefront of the peace operation, launching *Opération Hydre* in October 2013, which carried out actions between Timbuktu and the northern city of Gao. In August 2014, the French launched *Opération Barkhane*, a partnership between the key countries of the Sahel-Saharan Strip (BSS): Mauritania, Mali, Niger, Chad and Burkina Faso (Ministère de la Défense, 2014). The mandate of *Opération Barkhane* was to support the armed forces of the BSS partner countries in their actions against terrorist armed groups and to help prevent the reconstitution of terrorist sanctuaries in the region. While France took the lead in terms of military intervention, the EU took the lead in terms of peace building. On 18th February 2013, the EU launched a training mission for Malian armed forces, EUTM Mali, with twenty-two member states contributing. The mandate of the mission was to restore democratic order, to help the Malian authorities exercise their sovereignty, and to neutralize organized crime and terrorist threats (EEAS, 2015c). The EU adopted a comprehensive approach to the conflict, offering a number of non-combatant aspects to the mission, including

523 million euros to fund a project targeting the underlying causes of the conflict, such as food insecurity (EEAS, 2015b). On 15th April 2014, the EU also established a civilian mission under CSDP to support the internal security forces in Mali (EEAS, 2015d). As part of this mission, a 15 million euro fund to combat food insecurity in the area was created using the framework of the Programme d'Appui à la Sécurité Alimentaire (EEAS, 2015e). The European involvement in Mali is a reflection of the EU's dual role in the world. The military involvement of France is a reflection of the great power role played by the EU's member states, while the peace building role played by the EU is a reflection of the EU's civilian power role.

A peace agreement was signed in June 2013 (British Broadcasting Corporation, 2013). Following the creation of a peace deal between the MNLA and the central government, in April 2013 under UN Security Council Resolution 2100 (2013) (United Nations Security Council, 2013), the UN authorized the formation of the UN Multidimensional Integrated Stabilization Mission in Mali (United Nations Security Council, 2013). The mission of MINUSMA was the re-establishment of Malian state authority and the protection of civilians and historical sites (United Nations Security Council, 2013). The authorised strength of MINUSMA was 12,680, and by the 30th of June, 15,209 peacekeepers had been committed (United Nations, 2017). These peacekeepers come from fifty-two countries, including China and EU member states. Beijing dispatched troops to Mali in what Foreign Minister Wang Yi described as a "comprehensive security force" (Hille, 2013). China first dispatched a 170-member peacekeeping guard detachment to the Mali mission area in West Africa at the request of the United Nations to guard the UN headquarters in Gao (Ministry for Defence, 2014a). In total, China dispatched 395 officers and soldiers, including 170 members in guard detachment, 155 in engineer detachment and 70 in medical detachment (Ministry for Defence, 2015a). The Chinese troops who were dispatched as peacekeepers had both a guard and support function. The troops understood that this was not just a peacekeeping operation but also a reflection of China's attempt to adopt a responsible great power role. This is clear from a statement of Vice Captain Zhao Guangyu: "We have confidence ... that we will fulfil our mandate in accordance with the relevant requirements of the UN peacekeeping operations, showing China's role as a protector of international peace and a responsible great power" (Hu, 2014). By the end of September 2014, the guards had carried out 600 patrol tasks and more than two hundred escort tasks in the area of responsibility of the MINUSMA (Ministry for Defence, 2014b). The Chinese engineer detachment had successively completed multiple tasks (Ministry for Defence, 2015a), including 100 construction and support tasks, such as constructing roads, erecting bridges and building makeshift housing (ibid). The medical detachment had treated 1,281 people and hospitalized 84

patients (Ministry for Defence, 2015a). The combination of troops and their activities was a reflection of China's attempt to develop a comprehensive security force that would allow China to contribute to peace building.

The Chinese comprehensive security approach also targeted Malian food and water insecurity, which had been the main driving force of the current and previous conflicts in Northern Mali. Under the Food and Agriculture Organization of the United Nations 2013-2017 Country Programming Framework, a South-South Cooperation project was set up to enhance Mali's agricultural production through the provision of Chinese technical assistance (FAO, 2014). It is clear that in Mali, China is taking a wider approach to dealing with many of the non-traditional security threats that are the underlying causes for much of the conflict. This, combined with a contribution of peacekeeping troops, including combat troops, is a reflection of China's attempt to adopt a comprehensive security approach to international peacekeeping. It is also a reflection of China's desire to play a responsible great power role in international relations.

As highlighted by Richard Gowan (2014), an associate fellow at the European Council on Foreign Relations, African security is one of the few bright spots for Sino-European cooperation, and the case of Mali is one of the best examples of Sino-EU cooperation in peacekeeping on the continent. Both China and the EU took a comprehensive security approach to the mission, dealing not only with the military threat but also with the underlying causes of the conflict, such as food insecurity. The UN mission in Mali marked the first occasion when China sent troops on full combat mandates. However, China is also playing a strong role in the mission in more traditional areas, such as diplomacy and development. As China added a military element to its peacekeeping mission, it is interesting to note that Chinese troops in Mali were stationed in a base alongside Dutch troops (Nederlandse Vertegenwoordiging in China, 2015). The Chinese have noted that the Dutch 3D approach – which integrates diplomacy, defence and development – is seen as a very effective approach toward peace building. It is clear that China sees the EU and EU member states as partners for the development of a comprehensive approach to peacekeeping. It is also clear that cooperation with China in these missions offer the EU an opportunity to shape China's norms in terms of peacekeeping.

8. Conclusion

Historically, both China and Europe have played major roles in determining global security and have helped develop the current system of global security governance. Europe has had a major role in global affairs, and particular security issues are clearly part of the EU's self-identity. This can be seen

by the development of the CSDP but also by role behaviour, such as the formation of an EU mission in the Gulf of Aden outside the umbrella of NATO and the EU's role in the UN's mission in Mali. These are the results of the EU meeting its domestic expectations to play a greater role in security affairs. This expectation has developed from the EU's historical self, which is built on Europe's historical role as a major power in global security affairs. However, in terms of security governance, the EU is a normative actor. This is due to the internal role conflict that prevents the EU from moving beyond its function as a civilian power and to the fact that external powers view the EU's role as acting within the realm of non-traditional security issues. Brexit (British exit from the EU) may in fact reinforce this role, as the EU will lose one of its strongest traditional security actors.

In terms of Sino-EU security cooperation, it is clear that China sees the EU as an important actor but considers its role as one of a non-traditional security actor. This is apparent from China's role behaviour. In the Gulf of Aden and in Mali, China has attempted to encourage the EU to adopt a comprehensive approach to non-traditional security issues. However, it did not attempt to cooperate with the EU in traditional security issues of escorting chemical weapons out of Syria to a US ship and monitoring their destruction or the French-led military intervention in Northern Mali. This will be left to the US, Russia, NATO and, to a lesser extent, France, which China perceives as having a traditional security role.

China is attempting to play the role of a responsible great power in global security governance. This can be seen by its increased activity in global security responses. There is a domestic expectation that China should play a greater role in global affairs, and the positive response to the PLA-N mission in the Gulf of Aden and the PLA's mission in Mali is an indication that China is playing this role. There is an external expectation that China should become a responsible great power and assume some of the burden of ensuring global peace and security. We can see from China's actions in the Gulf of Aden and in Mali that it has engaged in and attempted to lead a global response to security issues. It has executed this action to benefit its own interests but also to protect global trade and regional stability. This is the hallmark of a responsible great power. We can see from the case of Sino-EU cooperation in the Gulf of Aden and in Mali that, in many ways, China and the EU have developed complementary roles. The EU is able to play a role as a normative actor. It achieves this by bringing China into the current system of global security governance. Here, China is able to fulfil its role as a responsible great power by engaging in and developing comprehensive security responses to global security issues. China can do this with the support and cooperation of the EU as a key actor in the non-traditional security aspects of the comprehensive security approach. This means that there is room for the EU

to play a role as a normative actor attempting to push China into a responsible great power role in Africa. The EU is doing this by providing institutional space for China to create coordinated responses to regional security issues with actors in the region. However, Chinese actions in the South China Sea in terms of the installation and expansion of military structures in disputed territories is clearly a fresh barrier to China fully adopting the responsible great power role and therefore a barrier to Sino-EU security cooperation.

Note

- * Dr. Niall Duggan is a lecturer in the Department of Government, University College Cork. He has previously worked as a lecturer in Department of East Asian Politics at Ruhr-Universität Bochum and has also been the Chair of Economy and Society of Modern China in the Centre for Modern East Asian Studies, Georg-August Universität, Göttingen. His research includes global governance reform, non-traditional security issues in East and Southeast Asia and interregional studies with a particular focus on Sino-Africa and Sino-EU relations. He can be reached at <n.duggan@ucc.ie>.

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China's Secular Ruler's Pragmatic Re-appropriation of Traditional Chinese Sacred Resources: A Critical Assessment

*Peter T.C. Chang**

Institute of China Studies, University of Malaya

Abstract

This paper is a critique of the Chinese Communist Party's (CCP) pragmatic retrieval of traditional precepts, arguing for a fuller re-embrace of the traditional Chinese mores as a way to resolve the crisis afflicting China today. It begins by addressing Beijing's current sweeping offensive against a corrupt officialdom, contending that in order to restore moral rectitude China needs to transcend the prevailing secular temperament and reabsorb the ancient sacred ethos anchored on *Tien*. The next criticism is Beijing's stoking of ethnic and cultural pride to coalesce a fragmented country. If committed to a harmonious world a unified China ought to be founded on Confucian universalism in lieu of the prevalent ethnocentric nationalism. Finally, for a comprehensive response to a looming ecological disaster, the case is made for China to undertake a fundamental realignment in worldview, from the present anthropocentric to the ancient anthropocosmic view of the world.

Keywords: *China, Confucianism, corruption, nationalism, environmental crisis*

1. Introduction

Once maligned, traditional mores are being re-appropriated to deal with the multifaceted malaises vexing the People's Republic of China (PRC) decades-long "economic miracle". Beijing's rehabilitation of the past is nevertheless driven by pragmatism, with the sacred subsumed under the predominant secular ethos. To begin with this constricts the efficacy of the Chinese philosophical and religious traditions. More critically, as we shall see, the modern exigencies are the consequences of the radical secularization of 20th century China. Given this prognosis, the aim of this paper is to make the prescriptive call for a fundamental realignment in *Weltanschauung*. In order to resolve today's crisis at its source, secular China needs to re-embrace its ancient sacred worldview and become re-encharmed with its sublime past.

This extensive thesis will be developed by examining three specific sets of conundrums affecting the PRC.

The first looks at Xi Jinping's drive to reinvigorate a corrupt officialdom and instil rectitude to a listless milieu. At the outset, to enhance the anti-graft campaign, the CCP-PRC party-state needs comprehensive political and legal reform. That said, equally important is the necessity to reconstitute a conducive cultural habitat that inculcates conscientious citizenry and exemplary moral leadership. The Chinese society today, as will be explained, is effuse with a coercive secularized temperament inimical to the Confucian moral enterprise. Therefore in furtherance of an ethics-centred social environment, modern China may have to reaffirm its ancient benevolent ethos anchored on the sacred reverence of *Tien*.

Faced with a fraying social fabric the Communist Party is likewise turning to antiquity for motifs to galvanize the country. In a number of respects, Beijing's attempts to rally the masses is not without efficacy but this is achieved chiefly through the hyping up of chauvinistic civilizational pride. If committed to advancing harmony at home and abroad, Chinese leaders should repudiate the pragmatic exploit of ethnocentric nationalism with a principled reaffirmation of the Confucian universal ideals.

This essay ends with an analysis of the imminent threats facing the mainland's withering ecology. The crisis afflicting China, I explain, is symptomatic of a broader vexation, namely, secularism lopsided anthropocentric, materialistic notion of progress. To bring about a comprehensive resolution the Chinese milieu has to undergo a paradigmatic shift in worldviews, to recapture their forebear's organic cosmology. And to strive for a holistic existence that reconciles the competing interests of humankind and the wider ecosphere.

2. Heaven and Ethical Governance

The early sages' invocation of the Mandate of Heaven serves to forewarn erstwhile Chinese emperors that failure to rule virtuously would provoke mass uprisings, toppling dynasties like waves upending a rudderless ship. Rulers of modern China are no less cognizant of the potency of a disgruntled populace. Among others, Beijing is acutely mindful that a corrupt officialdom and a broader milieu ensnared by moral decay are admixtures that could potentially erupt and subvert the CCP-PRC party state. To that end, the Xi-Li administration is resolute in their determination to clean up the party ranks and to reinvigorate a demoralized citizenry.

2.1. Institutional Reform

Thus far, and by many accounts, President Xi's unrelenting drive to wipe out corruption roots and branches, sparing no fleas nor tigers, have met with

remarkable early successes. Critiques nevertheless are cautioning that for lack of transparency, Beijing's all-out battle against graft runs the risk of political factional infighting. A concern stems chiefly from the existing one party-state system with weak institutional oversights (deLisle, 2015).

The Communist Party is not indifferent to the need for political reform. In the past decade or so measures such as the setting of term limits, buffing up of the judiciary, to mentioned a few, have been put in place to enhance good governance. These are significant steps but the CCP continues to resist one vital reform, namely, the installation of a multiparty system that would allow for the existence of viable oppositions.

Herein lies the crux of the problem: absence of external overseers with matching power severely weakens institutional accountability. In fact, it also gives the lie to Beijing's claim to the rule of law. Without credible oppositions and legal avenues to challenge its supremacy, the CCP, as the sole dominant authority, critics charge, is able to rewrite the law of the land at will. For this reason, qualms abound whether the Communist Party can be truly be disinterested in enforcing the law, and for that matter, effectively police its rank and file, and the country (Fewsmith, 2013).

It is worth noting that the Chinese rejection of a multiparty system and Western style government in general is not without justification. To start with is the genuine trepidation that a rush toward liberalization could unleash forces that beget more harm than good. The other reason is simply because Beijing does not think liberal democracy is the panacea to China's ills. Concededly, electoral democracy is not without flaws, the constricted capacity for long range planning is one clear example. Complex checks and balances with protracted due processes can further subvert effective governance. Additionally, the universal suffrage system is vulnerable to undue sway of special interest groups, pointing to liberal democracy's own susceptibility to corruption.

Given these counter points, it is apt to place the intractable liberal democracy debate within the broader perspective of primordial Chinese transcendental worldview. Like most theistic traditions the ancient Chinese regards the mundane realm as ephemeral and human enterprise inevitably fallible. The Chinese monarchs, as the Sons of Heaven, are transitory potentate. Even the much touted imperial bureaucracy is not immune from routinization. Thus from the vantage point of *Tien*, it is presumptuous to declare human progress has arrived at the "end of history". The best that we can strive for is a tentative, approximate working model. After all, the Way, as the *Daodejing* laments, is ultimately elusive.

The want of a perfect system however does not absolve China from the necessity for political reform. Liberal democracy may be imperfect but the CCP-PRC one party state is as amiss, if not more. For one, to sustain the current governing system would render the modern Chinese republic no

different from its imperialistic predecessors on one crucial feature, namely, the change of rulership can only be exacted through violent revolts. Since no human person and for that matter human institutions (dynastic family or political party) can attain immortality and the transfer of power inevitable, prudence would counsel the installation of some form of peaceful mechanisms to facilitate such eventuality.

Pertaining to the issue at hand, as said, lack of robust external oversight is positing inherent risks to the Communist Party ongoing crackdown on corruption. It is henceforth critical that some variations of a multiparty system whether in the shades of liberal democracy or alternatives with “Chinese characteristics” be put in place so as to enhance transparency, accountability, and good governance.¹ In this way, the PRC will become more in alignment with the modern era expectation of non-violent contestation and peaceful transition of governmental power.

2.2. Charismatic Leaders

Now, despite the fact that the Way is ultimately impassable, the ancient Chinese believes that harmony under the Heaven, albeit fleetingly, had and may yet be realized. And this is contingent upon the advent of an extraordinary figure, namely, a sage king. As is the case, historically, the golden age of the Sinic civilization transpired during the auspicious reigns of noble sovereigns.

This leads us to Max Weber’s analysis of charisma, of outstanding personages endowed with exceptional virtuous qualities that inspire loyalty and obedience from followers. According to the Weberian thesis, if utopia is to be actualized, it is most likely to materialize via the passionate force of personal leadership than the impassionate efficacy of institutionalized bureaucracy (Gerth and Mills, 2009). The implication of this thesis for good governance is clear. It accentuates the import of ethical personnel. Codes of conducts are legislated, governing bodies established to enforce these decrees but it is through the persuasive power of exemplary individuals that the spirit of these laws become alive and sublime governments become concrete. As Mencius asserts: “When the ruler is benevolent, all are benevolent. When the ruler is righteous, all are righteous. Once the ruler attains rectitude, the state is well governed” (Lau, 1970).

Given the ancient idolization of the sage king, let us turn to President Xi, widely regarded as China’s most powerful helmsman since Deng Xiaoping. Xi has thus far proven to be hugely popular, in large measure for his audacious crackdown on delinquent cadres. But strongman leadership, with power concentrated narrowly, raises the spectre of personality cult and tyrannical despot, a peril all too familiar in Imperial as well as post Imperial China.

Two critical points to draw from the above analysis. Plainly, to deal with the corruption malaise, beyond institutional reform, China needs virtuous personnel to administer the bureaucracy and to preside over the country. The challenge however is to ensure exemplary personalities assume these positions of authority and power. Which leads us to the broader task at hand, namely, how to sustain a cultural habitat that would generate such conscientious individuals? In premodern China, this undertaking was spearheaded by the Confucians, whose moral enterprise is anchored on a theistic worldview, with features distinct to the Chinese.

2.3. The Confucian Moral Enterprise

As one of the Axial Age civilizations, ancient China also espouses the vision of a common humanity. What sets the Sinic civilization apart is the Confucian idealistic approach towards actualizing this universal aspiration.

Confucianism, of the Mencius school in particular, upholds a sanguine theory of human nature: every person is endowed with innate capacity to do good. And through diligent nurturing the germ implanted in us can mature into virtuous self. This optimism shapes the basic ethos of the Confucian polity. In terms of statecraft, the Confucians are convinced that through the humane rule of a sagely king, all of humankind has the potential to co-exist harmoniously under the Heaven.

Such idealism is not universally affirmed, not even among the ancient Chinese. Xunzi for one takes the contrarian view of human nature as essentially flawed thus austere methods are needed to mould the human character. In the case of Han Fei Tze, the legalists consider human society as governable only through the enforcement of harsh penal laws.

Added to this list of realists' school of thought are the Mohists, who argued that in pursuing the good, we can at best strive for the compromised goal of the greatest good or lesser evil. Mo Tzi's utilitarianism is in fact a form of consequentialist ethics whereupon the ends justify the means. That is to say, if the consequences are desirable then the methods deployed, even immoral ones, may be justifiable.

Confucianism rejects Mo Tzi's utilitarianism and consequentialism because in Mencius idealism, the integrity of the attained "good" would have been corrupted by the unscrupulous means used to achieve those goals. In the Confucian deontological ethics, the ends do not justify the means. For the Confucians, what is morally right is at times base on an action itself rather than the effects of those actions. That is to say it is impermissible to act unethically even if the after-effects are "good". This axiom in turn underscores another key Confucian conviction, namely, the existence of moral absolutes. Indeed, the Confucians believe that *Tien* has prescribe sets

of Heavenly Principles that we cannot violate on earth, even when pursuing “good” ends.

This theistic belief system forms the philosophical foundation of Imperial China. At the outset, it underpins the Chinese doctrine of the Mandate of Heaven, forewarning the Emperor to reign in deference to and under the constraints of Heaven. Then, and more broadly, through a rigorous self-cultivation program the Confucians work to instil these deontic values into the Chinese collective consciousness. By nurturing individual hearts and minds, these philosophers strive to transform the Chinese body politic into a virtuous citizenry imbued with integrity, fortitude, and humaneness. It is the result of such a disciplined inculcation, set within an ethic-centred cultural habitat that the history of Imperial China is invigorated by the coming to the scene of the noble scholar-officials and the rarefied wise rulers, to enliven the Sinic civilization with their much touted benevolent kingship.

2.4. The Theistic Conundrum

At this juncture, it is apt to address a tangential yet important conundrum associated with theistic traditions. As is the case, religious adherents do not always manifest ethical restraints, and militant Islam is an apt contemporary illustration. Like the Confucians, the Islamists revere a transcendent authority. But unlike the former, the latter had, in the name of God, condone immoral acts. Now such deviant justification stem from a specific kind of religiosity, namely, dualistic theism.

In traditions such as the Abrahamic religions, reality is demarcated into distinct, asymmetrical spheres: material and spiritual, earthly and heavenly, temporal and eternal. In this bifurcated worldview, the infinite creator is deemed as fundamentally different and superior from the finite creation. As such the eternal transcendent is not restricted by the temporal mundane. Divine miracles, for example, could contravene the law of nature. Edicts from above too may overrule ethical norms below. A case in point is the episode concerning Abraham who was challenged to sacrifice Isaac, his infant son, as a sign of loyalty to Yahweh.

Herein lies the paradox of dualistic theism: the omnipotent deity, in its radicalness, could impute such wrath as to confound human justice. To be sure, these are extremely rare events, occasioned by extraordinary circumstances. But the prospect exists whereupon the divine could intervene in a manner that violates the mundane order. And here is where the inherent risk with dualistic theism resides. Even if anomalous, this radical view does provide theological justification for the suspension of ethical norms on account of a supreme authority who presides over and above natural law.

It is this dualistic belief system that underpins the Islamists extreme behaviour today. Simply put, in the militant Islamists' assessment, the holy order is now so besieged by vile that a fervid counter-response is warranted. The righteous is compelled to wage a ferocious jihad, in an epic battle of good and evil, in order to save the earthly realm from perdition (Feldman, 2010).

When captive to such an apocalyptic vision, dualistic theists become hostage to a deviant form of eschatological morality. The quest for the heavenly can be so all-consuming that it justifies the deployment of any earthly means, including the most abhorrent one. For all intents and purposes, in such a scenario, it is might, albeit a purportedly divine one, that makes right, unencumbered by ethical restraints (Juergensmeyer, 2003).

Confucians repudiate this variant of theism because of the Chinese imminent-transcendence theological worldview. To be sure, through the yin-yang lenses, premodern China similarly perceived the world dualistically. But the Chinese polarity is embedded within a broader organismic cosmology where all things are seen as emanating from and ultimately converging back into one source: the fountain head of *chi* energy. In such a cosmogenesis, there is no radical dichotomy separating the celestial and terrestrial, divinity and humanity. Indeed, some Confucianists depict humankind as co-terminus with the transcendent and as co-creator of the cosmic order (Tu, 1985).

Of course, as noted, the Way is in the end elusive, confounding human comprehension. But unlike dualistic theism, in Chinese holism, the transcendent is never so inscrutable as to contravene the mundane order, and heaven would at no time issue decrees that violate earthly norms. Framed in ethical terms, for the Confucians, there is an all-encompassing convention that regulates the universe, the natural and supernatural, this-worldly and other-worldly. This continuance is captured by the philosopher's counsel against excessive preoccupations with the afterlife that would undercut obligations in the present life. Herein lies the unique feature of the ancient Chinese theism, embedded within an organic cosmology, it sees humanity and divinity, the temporal and the eternal, as bound by a common law. Put colloquially, for the Confucian, no one is above the law, not even God. (It is in this sense, for its lack of a radical transcendent, that Confucianism has been ascribed by some as a humanistic albeit sacred tradition (Tu, 2001)).

2.5. Modern China in Crisis

As was the case, the dawn of the 20th century witnessed a tumultuous China abnegating its sacred past in favour of secularism. To be sure, the modern Chinese are no less ambitious in espousing a universal aspiration of a socialistic utopia. While not without misadventures, the CCP regime did

manage to sustain some semblance of a disciplined order, extolling and or cajoling the masses into self-sacrificing communal existence.

With the onset of the 21st century, Beijing continues to affirm its allegiance to a “socialism with Chinese characteristics”. This pledge however is being undermined by the concurrent inception of capitalism, inducing disjunctures across economical as well as social planes. At the outset, critiques point to a mismatch in official moral codes, post-Mao China no longer sustain the praxis to cultivate the avowed communistic values.² Instead we have a new socio-economic reality where individuals pursue, and are egged on to pursue, their own interests in competition with others in an increasingly capitalistic economic order (Wang, 2002).

By most measures, the PRC has moved past Marxism in all but rhetoric. The problem is that China has yet to reconstitute an ascetic discipline (like the Protestant ethics) to restrain the free market economy. Herein lies a cultural fault-line in contemporary China, namely, no replacement has emerged to fill the gap left by the demise of the old moral order. And in this transitional flux, critics identified the engendering of a new Chinese person: a communist turned nihilist, a nihilist turned hedonist, who responds to the new opportunities presented by the market as if directly to a set of stimuli, with little mediation either of a moral code or a conception of self (Wang, 2002).

Collapse of the socialist order has in reality precipitated a broader moral caving in of the Chinese world. In the absence of a new constellation of values and everyday self-forming practices, post Marxist China has descended into an ever more individualistic, materialistic, and immoderate way of life. Media today are rife with reports of everyday norms – be they moral, legal or regulatory – being breached on an alarming scale, involving every sector of society, and by so many in every walks of life (Ci, 2009).

From the Confucian perspective, the source of today’s moral crisis predates capitalism and even socialism. It stems from secularism and the radical disenchantment of the Chinese world. As alluded to, in refuting the premodern cosmology, modern China turned to science for an explanation of the universe. And among others, Darwin’s evolutionary theory in particular exerted the deepest impression on how 20th century China conceive reality.

Closer to Xunzi than Mengzi, Darwin’s stance is a familiar one: homo sapiens, as with the rest of the animal species, are essentially driven by the banal instinct to survive. And to the extent humankind do co-exist, this is sustained via the confluence of mutually self-preserving impulses, a *modus vivendi*. And in this Darwinian world, it is the law of natural selection that prevails, where the strong lords over the weak, and might is the maker of right. And in this beastly dominion, survival is the ultimate endgame. Therefore, when existence descends into a dog eat dog, kill or be killed savagery, one is compelled to deploy all means necessary, immoral ones

included, to avert extermination. Hence unlike the Confucian deontological morality, Darwin evolutionary ethics has no qualms employing unethical measures to achieve the desired ends.

Herein lies the root of the PRC's predicament, namely, secularism's unbridled realism. Modern China's submission to scientism has contorted the moral orientation of the Chinese world. The Confucian transcendentalism that once commanded the Sinic civilization has been superceded by the afore-discussed Darwinian naturalism. The age-old veneration for the sagely and virtuous, for instance, is eclipsed by the present generation's adulation of power and wealth. And the ancient conviction in the Heavenly Principles that restrained human conduct is usurped by a pervasive evolutionary based relativism where might is acquiesced as the subjective arbiter of right, and ends pursued uninhibited by constraints (He, 2015). Arguable, the endemic corruption afflicting the PRC is an outgrowth of a disenchanting mainland bereft of its traditional ethical inhibition and moral compass.

Therefore, in summing up, in order to deal with the moral exigencies at hand, beyond legal and political reform, the PRC needs a turnaround in worldview, to countermand the prevailing secular naturalistic ethos. It is critical that contemporary China reaffirms its ancient holistic theism and the Confucian conviction that human conducts are subject to constraints, even when pursuing the good. By so doing, a unique theistic and ethics centred Chinese polity can be re-established to check the excesses of radical secularization, and as explained, the converse idiosyncrasies of extreme religiosity. And it is from within such a rejuvenated cultural habitat that virtuous individuals are more likely to emerge to provide the exemplary moral leadership Beijing needs to revive a corrupt officialdom and a listless milieu.

3. Confucian Idealism and a Harmonious World

Apart from moral cynicism, China's embrace of free-market capitalism has also unleashed economic forces that are fracturing the Chinese social landscape. The yawning gap between urban rich and rural poor is one such fissure. Similar to the endemic corruption, Beijing is acutely mindful these fragmentations are potential flash points with importunate political consequences. In response, the Xi administration has concocted the "China Dream" to galvanize the country around a central ideal, namely, common prosperity. And again, Beijing is turning to traditional heritages, like exalting the pre-eminence of the Sinic civilization as motif to rally an increasingly disparate society.

To some extent Beijing's effort to coalesce the republic is not without success. The 2008 Olympic is an apt illustration where the Chinese celebrated the middle kingdom's re-emergence onto the international arena with an

extravagant display of cultural and ethnic pride. In fact, notwithstanding domestic dissonances, there is no deficit in Chinese patriotic fervour, especially when affronting the outside world. But the disconcertment with this united front is its underlying vindictive ethnocentric impulses. In the testy Sino-Japan relationship, for example, the Chinese remonstrations against its presumably unrepentant neighbor bear a markedly xenophobic undertone. Critics noted that to the extent a discordant China does hold together, it is bound through a virulent form of nationalism antithetical to the Confucian universal ideals (Gries, 1999).

3.1. Confucian Civic Nationalism

The Confucian retort against Han chauvinism is the aforementioned Mencius doctrine of one humanity. Humankind is by nature the same, each endowed with innate capacity to live in accord with the Heavenly Principle. This sanguine worldview underpins the Confucian universal vision, to establish a social order whereupon all people could co-exist peaceably. More importantly and pertinently, embedded within this aspiration is the Confucian rejection of any theory of a “chosen race”, who by nature stands above the rest. Hence to elevate one’s ethnicity, Han or otherwise, as naturally superior contradicts the Confucian doctrine of common humanity (Bloom, 1997).

Now, even as all are born equal, Mencius proceeded to explain that humankind subsequently diverge, as people develop varied cultural norms to nurture their natural potential. This gives rise to a plurality of philosophical and religious traditions, in form as well as quality, some more and others less equal than the rest. It is at this stage of human development that qualitative distinctions appear. And it is here that the Confucians set themselves apart as attaining a superior way of life that is in greater conformity with the Heavenly Principle. Indeed, as first among equals, Imperial Confucianism regards itself as an apex civilization, qualified to provide moral leadership, for all under the Heaven. Notwithstanding this sense of eminence, the Confucian order contains distinct inclusive features.

Let us first revisit the issue of race. When censuring a religious tradition, the Confucians draw a critical distinction between culture and race. The Confucian would for example adjudge Tibetan Buddhism as a fallacious tradition but would not deprecate the Tibetan people as naturally inferior. The reason for this qualification is because, as mentioned, according to the Confucian tenets, human nature is innately good. Human starts to err when we fail to nurture our natural potential. The implication is that human weakness is not intrinsic, but extrinsic. That is to say human by nature is not morally flawed. Putting this more broadly, no human person by nature is banal, and by extension no human race by nature is inferior.

Indeed for the Confucian, there are no naturally inferior race, just as there are no naturally superior race. Every human being, regardless of ethnic origin, are inherently good, and none is genetically impaired. On this account it is amiss to demonize any group of people as naturally subnormal. To do so contradicts Confucian sanguine doctrine that all people share the same capacity to attain a judicious existence. This analysis returns us to a hallmark of the Confucian enterprise, namely, its Axial Age vision of a universal edifice that embraces the whole of humanity, regardless of race, as moral equals capable of harmonious co-existence under the Heaven.

Now, while all races are born equal, not all cultures are made equal. The Chinese philosophers do discriminate against lesser traditions. Even so, there are distinctive traits in the Confucian dominance. And the essence of this uniqueness is foremost captured in the Chinese practice of multiple religiosity. It is not uncommon for a Chinese to plead allegiance to Confucianism, Daoism and Buddhism, all at the same time. This phenomenon underscores in general the Chinese and in particular the Confucian acceptance of interreligious collaboration. To be sure in this ecumenical alliance, the Confucians do assert their supremacy as first among equals. Yet unlike the other Axial Age religions such as Christianity, the Confucians do not claim a monopoly of virtue in so far as they acknowledge the moral efficacy of others (Ching, 1993).

In fact the Confucians reject any pretence to an exclusive right to moral leadership. The Sinic civilization has no equivalent doctrine of a “manifest destiny” whereupon the Chinese are deemed as divinely elected to govern. For the Confucian, the privilege to rule is based on meritocracy, it must be earned. Failure to perform forfeits one’s prerogative to hold the reins. The history of modern China may be seen as one such period when the once venerated Confucian tradition, devoured by prolonged internal decay, was ceremoniously banished from the mainland. Like no “chosen race”, the Confucians dismiss the presumption of any “chosen tradition”, predestined to be first among equals. Herein lies another liberal trademark of the Confucian superiority, it is not exclusionary, but open to collaboration with any who prove worthy of leadership.

These inclusive attributes draw attention to the multiracialism and multiculturalism underpinnings of the Sinic civilization. The classical Chinese thinkers’ vision was to bring into existence a unifying kingdom, embodying a multitude of peoples and diversity of belief systems. In modern terminology, Confucian China would advocate a form of civic nationalism, anchored on the liberal principles of freedom, tolerance and equality, and whose core identity transcends ethnicity and creed. A civic nationalist state that champions an overarching international order where all people and various civilizations could co-exist harmoniously (Bell, 2014).

3.2. Ethnocentrism, Universalism and Opportunistic Pragmatism

Concededly, the Chinese world has not always lived up to the Confucian inspired vision of one humanity. As Dikotter's works indicate, the history of Imperial China is tarnished with ethnocentrism, in practice as well as conviction. Indeed, embedded in Chinese intellectual and popular thought are crude mythologies and Han racist theories. And these racialistic tendencies continue to afflict modern China (Dikotter, 1992).

Be that as it may, to depict Beijing as operating wholly on an ethnocentric and nationalistic platform is not an accurate account of the current state of affairs. For a start, the PRC is not without universal aspirations, the communists do advocate a socialist utopia that embraces all humanity. And in the present opening up era, we have seen Beijing turning to classical motifs, rehashing concept such as harmony, to reassure the global community of the PRC's peaceful rise and benevolent intent to sustain an inclusive, pluralistic new world order. Now, admittedly, these liberal endeavours are also accompanied by the aforementioned periodic outbursts of ethnocentric nationalism, raising scepticism over China's commitment to the Confucian ideals.

In any case, in what seems to be Beijing's contradictory oscillations between universalism and parochialism, there is in fact a constancy at play, namely, Chinese pragmatism. As is the conventional perception, rulers of China are pragmatists rather than ideologues, their behaviour dictated by opportunistic utilitarianism rather than dogmatic convictions (Zhao, 2004). A case in point is the CCP's harping of the 'peaceful rise' mantra during the early 2000s, which detractors see as calculated moves to placate the world-at-large in the run up to the PRC's induction into the WTO. Other instances of pragmatic calculus at work include amplification of external threats to divert attention from pressing internal crisis, and stoking up of ethnocentric sentiments to reinvigorate a dispirited constituent, jettisoning Confucian universalism (Zhao, 2004).

Herein lies a central critique of Beijing's current effort to restore social cohesion. To be sure, pragmatic compromises are at times needed to untangle ideological gridlocks. But as elucidated above, for the Confucians, there are limits to the pursuit of practical ends. The deployment of unethical means, even if the immediate yields are "good", will ultimately undermine the integrity of the whole. On the subject at hand, feeding racial passion may have a unifying effect upon the Chinese polity. But in the long run, this ad interim gain base on Han-centrism will erode China's multi-ethnic social cohesion as well as subvert Beijing's broader aspiration for a harmonious world.

Thus, if committed to mending a fraying social fabric, China should, at the outset, anchor this endeavour upon civic rather than ethnocentric

nationalism. To reaffirm the Confucian Axial Age vision of universalism, and to strive for the actualization of a multiracial, multicultural social order that embraces a diversity of people as well as religiosities. To that end, it is equally important that Beijing curbs the urges for pragmatic fixes that pander to chauvinistic sentiments. It is by reasserting a principled commitment of the Confucian ideals that the PRC can begin the process towards achieving a more substantive and enduring harmony at home and abroad.

4. Organic Cosmology and a Sustainable Ecology

As with counterparts in the US, the Chinese are yearning for an existence beyond subsistence. But by its sheer size, the prospect of China emulating the American Dream is raising environmental alarms. The burgeoning Chinese middle class growing penchant for luxury comfort is exacting untold woes upon the mainland ecology. Akin to the endemic corruption and social schism, the toxication of mother earth could trigger dire political repercussions. And we are seeing Beijing ramping up conservation efforts, i.e., enacting stringent laws to procure a more sustainable developmental model. Non governmental organizations including grassroots religious movements are mobilized to foster a greener way of living. These are vital measures but to stem the looming catastrophe at its source, the Chinese milieu needs a fundamental turnaround in attitude towards nature. And this calls for a corresponding metamorphose in worldviews, from the prevailing secular dualistic towards the traditional sacred holistic view of reality.

4.1. Holism versus Dualism

As explained, the Chinese in antiquity regards all things, terrestrial and celestial, as emanating from and converging back to the singular source of energy, *chi*. Embedded within a circular cosmology, this cosmo-genesis frames the primordial Chinese idealization of a holistic existence, holding in creative tension the dialectic between reason and sense, the mundane and the transcendent. It sets the Chinese on a perennial pursuit of a flourishing civilization, one that exudes both outer material vibrancy as well as inner spiritual exuberance (Chan, 1963).

And as noted earlier, in dualistic traditions such as Christianity, reality is demarcated into distinct, asymmetrical realms, where the material, mundane is deemed as fundamentally different and inferior to the spiritual, transcendent. Encapsulated within a linear timeline, the earthly is deemed as ephemeral, to be superceded by the interminable heavenly. This teleological vision defines the Christian ultimate telos, namely, spiritual salvation in the afterworld. Certainly, life in this world remains sacred yet due to an innate

bias, impudence towards the temporal persists. In extreme cases, this lead to repudiation of the present existence. The afore-discussed idiosyncrasies of religious fundamentalism is an apt illustration of how the inordinate fixation with the hereafter could result in the abnegation of the here and now.

In secular dualism, the converse is true, the earthly takes precedence over the heavenly. In point of fact, with reason as the supreme guide the secularists' ambition is entirely rationalistic and this-worldly, dispensing the non-rational and other-worldly desideratum. Surely, the modern world is not divested of the sacrosanct. But a general disinclination towards the spiritual realms remains and this contempt can lend to extreme disenchantment, as was the case with 20th century China.

Swept up by the enlightenment euphoria, modern China chose to abjure its presumably primitive premodern *Weltanschauung*. And the Chinese revolt against the "unenlightened past" was so thorough the mainland withered into a cultural desert divested of sacred oasis. Turning to science as the new beacon of hope, the PRC sets out to actualize a socialist utopia. At one level, the communist earthly quest has been "miraculous". Decades of unrelenting industrialization reconfigured China's hinterland into engineering marvels, adorning its coastal mega-cities with stupendous architectural monuments. Yet today's ostentatious display of material prosperity belie a hollow shell bereft of spiritual vitality. As afore-explained, dissolution of the socialist ethos and modernity irreverence towards *Tien* in particular has engulfed the Chinese world in a moral crisis.

Indeed, dismissal of the transcendent has denuded the Sinic civilization into an utterly mundane world. Divested of metaphysical aspirations, the Chinese personhood is correspondingly pared down into a mere homo economicus, whereupon self-fulfilment is focalized on this earthly existence, achieved chiefly through the acquisition of material abundance. Cut off from its traditional spiritual moorings, the Chinese today are left adrift, battered by the vicissitude of nihilism and hedonistic cravings. The Communist Party's unquestioning faith in economic rationality has turned the PRC into a behemoth economic beast with a ravenous hunger for natural resources; and derogated the Chinese masses into a population of hyper-consumers with an insatiable appetite, exhausting the planet's finite reserves. Therein lies the cultural backdrop and root cause of today's worsening ecological tragedy, namely, secular dualism truncated worldview and modernity lopsided notion of material progress (Tu, 1979).

Now compounding this materialistic exploit is another dualism proclivity, namely, anthropocentrism, where the human species are set over and against the rest of creation, justifying the unrestrained domination of the natural world. This is a disposition present in secularism as well as in religious traditions such as Christianity.

4.2. *Humanity versus Mother Earth*

According to the Biblical genesis story, Adam, created in the image of God, was set apart from and has dominion over the rest of creation. This, together with the divine injunction commanding “man to be fruitful and multiply and fill the earth, and subdue it” (Genesis 1: 27-28) critiques argue, fostered the establishment of an exploitative way of life in the Christian West that is largely responsible for the destruction of the environment (White, 1967).

Rejecting the creationist mythology, modernists turn to the evolutionary theory for a scientific interpretation of reality. And as elaborated, it advances a harsh depiction of the state of nature whereupon only the fittest prevails. And this is as much an intra as it is an inter-species struggle for survival, a battle between fellowman as well as between humankind and the untamed wilderness. While imputed divinity predestined Adam’s primacy, in Darwinism, the animistic instinct to survive compels the homo sapiens to assert mastery over the natural world. It is this brutish interpretation of nature, in conjunction with secularism’s lopsided development, that inform modern China’s scientific economic conquest of mother earth as a realm of natural resource to be tamed and exploited for the propagation of the human race. An execution so successful that the explosive proliferation of the anthropoid population is now endangering the planet, and with it, ironically, fate of the species itself.

The Sinic civilization possess no equivalent Christian myth of a divine Adamic race nor the Darwinian brutish naturalism that pitches humankind against the natural world. Instead, according to Chinese anthropo-cosmology, humans have evolved out of the same wellspring of life, *chi*, that begets stones, plants and animals, as such are an integral part of the cosmic order (Tu, 2001). In this seamless “field of material force”, the universe is perceived as unified, interconnected and interpenetrating. All life forms, including the homo sapiens genus, are fused into an organic symbiosis, the vitality of each is dependent on the creative dynamism of everything else. This cosmogony shapes pre-modern China’s attitude towards the sublunary world, whereupon humanity is perceived as essentially co-terminus with the wider cosmic reality. Imbued with a profound sense of reverence in being one species among many, the ancient Chinese strives for a harmonious co-existence, free of domination or exploitation, with all things, including mother earth.

Now notwithstanding a wealth of eco-sensitive spiritual resources, critiques point out that the history of Imperial China is also tarnished with environmental mishaps, not unlike the modern era (Tuan, 1967). This is concededly true but there are crucial distinctions. With the former, to the extent nature is defiled, the idealistic Chinese stand accused of a dereliction

of avowed credo. The same cannot be said of the latter. The prevailing secular ideology, as argued, justifies the diminution of nature as means for human-centric ends. As such, modern China's maltreatments are not practical lapses but consistent outgrowth of an anti-ecological *Weltanschauung*. Moreover in comparison to past devastations which are accidental anomalies, reports are warning that the degradation today is far more systematic in scope and historically unprecedented in scale, with potentially irreversible damage to the planetary whole (Economy, 2010).

4.3. A Fundamental Reconfiguration in Worldviews

To recap, in light of the looming ecological catastrophe, Beijing's priorities ought to be, among others, enact tougher environmental laws, increase investment in greener non-invasive technologies and create more sustainable growth models. But over and above these countermeasures is the necessity for a deeper transformation in terms of values and worldviews. Granted that espousing a specific vision does not accordingly lend to full realization of the ideals. It remains vital nonetheless to affirm an appropriate creed for the reason that worldviews define the aspirations of a civilization, formulate the ethical norms of a society; and as argued, has qualitative impact on practical outcomes even if the extolled values are not consistently acted upon.

On this account and with regard to the crisis at hand, the imperative for China today, at the outset, is to regain their forebears' sacred reverence of mother earth. And to recultivate the age-old symbiotic mutually-dependent interaction with nature, as a correction against secularism anthropocentric subordination of the natural world. Additionally and more importantly, modern Chinese should re-embrace sacred holism in lieu of secular dualism. At base, this means recapturing the ancient's creative synthesis of the dialectic between reason and sense, natural and supernatural, without collapsing one over the other. And, among others, to rehabilitate the modern man from a homo economicus into a holistic selfhood, who personifies outer physical eminence as well as inner spiritual refinement, whereupon self-fulfilment is attained through the acquisition of material as well as nonmaterial enrichment. In broader national terms, this calls for transforming the PRC from an emerging hard (economic, geo-political, military) superpower into a flourishing civilization imbued with the softer currency of cultural sophistication, social-moral vivacity, and metaphysical acumen. By taking on these rudimentary renewals, the Chinese world can then be reorientated towards a less materialistic "China Dream", a more balanced way of life, and a sustainable model of growth that will exact a lesser toll upon mother nature.

5. Conclusion

Assailed by a multifaceted crisis, the secular rulers of modern China are hearkening to antiquity for recourse. But as argued above, the root of today's many-sided exigencies can be narrowed down to one overarching misstep, namely, the radical disenchantment of 20th century China. As such, to prescribe a comprehensive remedial response, secularized China must undertake a foundational shift in worldview, namely, to become reacquainted with its sacred past.

One germane example is the ongoing campaign against endemic corruption. Beyond political and legal reform, China also requires a cultural renaissance, to rescind the pervasive brutish naturalism with a reconstitution of the Confucian benevolent ethos anchored on the sacred veneration of *Tien*. Similarly, to strengthen the social cohesion at home without subverting harmony abroad, it is vital that Beijing resists the unscrupulous exploitation of ethnocentric nationalism with a principled reaffirmation of Confucian universalism. And finally to save a decaying ecology, the Chinese world has got to rise above the prevailing anthropocentrism to re-embrace the ancient anthropocosmic vision.

To conclude, contemporary China needs a realignment in *Weltanschauung*, a changeover from the present radical disenchantment towards a rekindling of its ancient enchanted ethos. It is through these fundamental turnaround in beliefs and convictions that the Chinese sacred traditions can be effectively reappropriated to revitalize an ailing modern China. And in so doing, we are more likely able to ascribe the "miraculous" in terms of ethical-religious vivacity to the momentous events unfolding before us, which many has lauded as China's "economic miracle".

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Notes

- * Dr Peter T.C. Chang 张添财 is a Senior Lecturer at the Institute of China Studies, University of Malaya, Malaysia. His expertise is in the field of comparative philosophy and religious studies, more specifically contrasting the Confucian East and Christian West civilizations. At present Dr. Chang is working on a research project exploring the potential impact of a revived Confucianism on modern China. This research covers a range of subjects and disciplines from political science, environmental ethics, bioethics, to historical and textual analysis of philosophical and religious ideas. Some of these works have been published with

journals such as the *Asian Studies Review*, *China Information*, *Asian Bioethics Review*, *Religion, State and Society*, and *Worldviews: Global Religion, Culture and Ecology*. Dr. Chang can be contacted at <peterchang@um.edu.my>.

1. From within China are ongoing efforts to steer political reform towards a “post liberal democracy” trajectory, imbued with unique “Chinese characteristics”. In Jiang Qing’s wide-ranging proposal for example is the setting up of a tricameral parliament that consists of the House of Exemplary Persons, the People’s House, and the House of Cultural Continuity (see Jiang, 2012).
2. In Mao’s time the moral injunction to “serve the people” used to go together with elaborate practices of self-improvement ranging from concrete displays of self-denial in matters of dress and diet to almost daily rituals of avowals of faith in communism embodied in devotion to collective work (Wang, 2002).

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The Role of Trust in China-ASEAN Relations – Towards a Multi-level Trust Building for China and ASEAN

*Huang Haitao**

Nankai University, Tianjin, China

Abstract

Trust/distrust is a key concept in explaining the chaotic essence of international relations. In recent years, many observers have expressed their deep concerns on the deterioration of mutual trust between China and some ASEAN countries. In fear of the rising threat from China, ASEAN countries have adopted a typical *hedging* strategy by relying on deeper involvement of the US, especially, on security issues. From China's point of view, it is very disappointing that robust economic ties cannot earn true friendship. The fundamental drive for the distrust poses a *security dilemma* in the Asian-Pacific region. A possible way-out is to build up mutual trust through multi-level endeavours, which would provide incentives to relieve deep anxiety and uncertainty brought by international anarchy. China's "Belt and Road Initiative" is one of those efforts to pacify and reward the neighbouring countries.

Keywords: *China-ASEAN relations, South China Sea dispute, trust deficit, the Belt and Road Initiative*

"It's a vice to trust all, and equally a vice to trust none."

— Seneca's Letters to Lucilius

1. Introduction

In recent years, China-ASEAN relations were getting more or less complicated and hard to comprehend. On one hand, China and ASEAN countries have established strong political and economic ties. In 2003, China and ASEAN declared the formation of a bilateral strategic partnership. Then, the ASEAN-China Free Trade Area (ACFTA) came into being in 2010, which was the first free trade area between China and foreign countries with the

largest population in the world. And with the rapid economic growth, China and its Southeast Asian neighbours have benefited a lot from the increasing volume of trade and investment. From 1991 to 2015, the bilateral trade volume between China and ASEAN has increased from 6,300 million to 472,000 million US dollars. China is now the No. 1 trade partner of ASEAN. Everything seems to be thriving and promising. On the other hand, observers of both sides realize that the “*Rise of China*” is a double-edge sword with ambivalent meaning – not only chances for further growth and development, but also “challenges” to be managed.

In the eyes of ASEAN member states, walking with a growing giant would never be easy. “China is already a strong competitor (to ASEAN states) in trade and attracting foreign investment” (Tongzong, 2005). Furthermore, China’s firm will and steadfast actions to safeguard its rights on the South China Sea had been interpreted as signals to become increasingly “assertive” on territory and security issues (Thayer, 2011; Yahuda, 2013). Meanwhile, China is still promoting its “Good Neighbour” strategy with deep concerns about the impacts of the *rebalancing* strategy of the US and smaller countries taking advantage of the big power rivalry. Wang Yi, Minister of Foreign Affairs of China, said: “it is wrong for a small country to play a big one like that” when he was asked about the Philippines’ request for arbitration in early 2016.¹ Thus, both China and other ASEAN countries are unsatisfied with each other’s certain behaviours.

Despite being a critical flashpoint, the South China Sea dispute is essentially a controversy occurring between China and some ASEAN claimants. Conflicts and confrontations have never been the mainstream nor the defining feature of China-ASEAN relations. However, the South China Sea dispute can be treated as a prism, through which we might witness a set of dispositional expressions from both sides. Moreover, this paper would like to argue that the hardcore of those expressions rests on a permanent inquiry area in International Relations, i.e. *distrust*. A series of key questions would be raised: Why is distrust playing the central role in undermining China-ASEAN relations? How do we understand the seemingly paradox between China’s Good Neighbour policy and the South China Sea assertiveness in the light of *trust deficit*? What are the implications of China’s *Belt and Road Initiative* to ASEAN in terms of *trust-building*?

This paper aims to answer those questions by first presenting a brief summary of the evolution of China-ASEAN relations in the past decades, focusing on the status of mutual trust between the counterparts. The next section focuses on analyzing trust deficit in international relations, especially *vis-à-vis* the rise of China as the general background. This paper will explore the rationale for trust-building and assess the efforts made by China in the last section.

2. China-ASEAN Relations and the Evolution of Mutual Trust

Following the establishment of the People's Republic of China, we have witnessed a dramatic transformation of bilateral relations between China and its neighbouring Southeast Asian countries. Trust has played a very important role in the course of interaction, which could shed light on our understanding of recent events.

2.1. Cold War Distrust and Suspicions

In the Cold War era, the bipolar structure shaped the choice of the weak state in the region of Southeast Asia. The establishment of the Association of Southeast Asia (ASA) in 1961 was one of the choices. ASA was the first integrating effort of Southeast Asian statesmen who was inspired by European regionalism. Up till now, the concept of regionalism is still playing a central role in the recent development of ASEAN Community. In August 1967, those founding fathers of ASEAN, who came from Indonesia, Singapore, Thailand, Philippines and Malaysia, gathered at Bangkok and declared another great leap of Southeast Asian regionalism. The efforts of integration and regionalism have been highly appraised for decades. However, none of us should deny that what made those relative weaker and smaller countries united together was mainly because of their fundamental security concerns.

In the heyday of the Cold War, nearly all the major experiments and practices of regional integration around the world had derived from the physical and psychological concerns of security under the pressure of bipolar competition. Regional integration provides an option for those weaker and smaller countries to get stronger by pushing them to have closer and tighter relations. Being regarded as the military and ideological adversary to the West, China was also considered as the principal source of threat towards Southeast Asian countries in the Cold War era. China loomed as a malign force to the north, where communist cadres plotted to export ideology and revolution to the rest of Asia. Therefore, the tension between the two blocs was maintained at such a high level. In the 1960s, to a large extent, the ASA and ASEAN countries were playing an overlapping role of the SEATO members, which had been an alliance partner of the US in this region. From China's point of view, "it was difficult or pointless to distinguish ASA activities with SEATO activities" (Pollard, 1970: 245). The starting point of interaction between China and ASA, the forerunner of ASEAN, rested on deep security concerns and mutual strategic distrust.

Since US president Nixon's ice-breaking visit to Beijing in 1972, the relationship between China and ASEAN countries had also been reshaped by the *Rapprochement*. But even in the era of the Sino-US "honeymoon"

through the early 1970s to late 1980s, ASEAN or especially some of the ASEAN countries were still very cautious about developing bilateral relations with China. On one hand, Malaysia, the Philippines and Thailand established diplomatic relations with China in succession in the mid-1970s. China, US and ASEAN members had actually established an “alliance in convenience” to counter the threats from the Soviets and another regional power, Vietnam. On the other hand, the Southeast Asian countries were keeping an eye on China’s involvement in the affairs of Cambodia. The Kuantan Principle, issued in 1980, reflected the deep concerns of ASEAN members toward China (Ngeow, 2016).

2.2. Post-Cold War Engagement and Cooperation

To put it shortly, the Cold War distrust towards China is a mixture of strategic conflicts and ideological rivalries. Only after the collapse of the Soviet Union and following the end of the Cold War, and especially after Deng Xiaoping’s push for further reform and open policy in the early 1990s, the low-trust stalemate was broken up by the stimulus of rapid economic growth in China. With the normalization of bilateral relations between China and ASEAN in the early 1990s, economic ties were booming and political relations also advanced rapidly. From the 1990s onward, China has established profound connections with ASEAN countries. China had participated more and more in regional institutions, including the ARF (ASEAN Regional Forum), ASEAN+1, and ASEAN+3, to show and prove its sincerity and goodwill to its neighbours. In 1996, after years of efforts, China was granted full dialogue partnership status with ASEAN. Meanwhile, with the successful enlargement of ASEAN, some traditional partners of China joined this regional community, which created a peaceful and harmonious atmosphere in the region.

Actually, China took the initiative to improve its relations with its neighbours. The Asian Financial Crisis in 1997 was another key turning point for bilateral relations. In the wake of the crisis, China adopted a proactive fiscal policy and pledged not to devalue the RMB. This decision put China under huge pressure. However, the pressure and hurt to China also won applause and confidence from its vulnerable and vacillating neighbours. China’s risk-taking decision successfully built up a positive image. It was a major event that does help trust-building between China and ASEAN countries, which showed that China would like to shoulder burdens, to provide public goods, and to be a responsible partner to the region. At this time, China was no longer considered the malign force to export revolution, but the benign partner to export public goods.

Following the cooperation during the financial crisis, China and ASEAN shared a Golden era in the first decade of the new millennium. In fact, China

and ASEAN entered a brand new phase in their history. The development of bilateral relations was actually not only resting in economic spheres but also reaching political and security domains. A series of critical achievements had been made. For example, both sides managed to control the emerging crisis in the South China Sea. In 2002, Chinese Premier Zhu Rongji and his ASEAN counterparts jointly signed the *Declaration on the Conduct of Parties in the South China Sea*. And in the next year, China joined the *Treaty of Amity and Cooperation in Southeast Asia* (TAC), which was regarded as a major step to build mutual trust with institutional approach (Cao, 2003). During this decade, with China expressing goodwill and participating in regional institutions, the status of mutual trust was improved to a significant extent.

2.3. Distrust and Re-emerging Tensions

Following the onset of the global financial crisis in 2008, the rise of China was no longer a vision but has become a reality. Compared to the decline of the US and European countries, China's economic growth had been maintained at a relative high rate. In 2010, China's GDP surpassed Japan's, which means China overtook Japan as the second largest economy in the world. Frankly speaking, this event was a boost to the confidence of China. The Chinese government and public tend to reevaluate their own role in the international system. Therefore, there was an academic debate on whether it was the time to change the long-term adherent foreign policy of "keeping low profile and biding their time" (韬光养晦). The thought that China should no longer be the follower but to "play positive roles" in international politics was also widely spreading in the political circle.

China has also been speeding up the process of its military modernization, especially the modernization of the People's Liberation Army (PLA) Air Force and blue-water Navy. In March of every year, the Chinese government would release its military budget for the year to the world. Though considered not fully transparent, the military expenditure growth of the PLA was around 10%–12% per year for the last five years. Following the US, China has the second largest military spending in the world now. With its strong engineering competence, China's plan for expanding islands in the South China Sea advanced rather smoothly, which was another big signal to demonstrate China's strong will to defend its territory and sovereignty in disputed waters. However, the great leap of military capability and new strategy in dealing with territorial controversies in the South China Sea became the newly revealed evidence to verify "China's threat" in the region.

The South China Sea issue had been a hot spot throughout 2013-2016. The conflicts at Huangyan Island (Scarborough Reef) and the arbitration of the International Tribunal for the Law of the Sea even worsened the situation for

a while. The increasing tensions made this region one of the most dangerous places in the world then. Fortunately, there is a dramatic downgrading of the tension after Rodrigo Duterte was elected as president of the Philippines in late 2016. With this about-face of the new Filipino government, the South China Sea dispute was frozen. But everybody knows that it is not a happy ending. This paper intends to point out that there is still a sort of “trust crisis” between China and certain ASEAN members.

3. The Rise of China and the Rise of Distrust: Theoretical Perspectives

Generally speaking, the impact of rising power to the world/regional security is a key area of inquiry in International Relations (IR) studies. Put more specifically, why is a rising power usually perceived as a threat and the target of distrust? There are divergent explanations towards this intractable question. In this section, this paper tries to figure out the problem and illustrate the correlation between the rise of a new power and the rise of distrust from its neighbours in Southeast Asia.

3.1. The Trust Deficit in International Relations

Theoretically, the short supply of trust between China and ASEAN countries is not a surprising phenomenon in international relations. On the contrary, trust deficit is a fairly common issue. Or, we have to say, it is quite ordinary in an anarchic international arena.

Trust deficit refers to international actors, in the course of interactions, who are always suspicious of each other's real intentions. The realist literature assumes that the defining feature of the international system is *anarchy*, which means there is no central authority to enforce laws on the international stage (Waltz, 1979). Therefore, without the mechanism of monitoring and punishment, it would be dangerous to trust other countries. As Machiavelli (2009: 39) argued in his masterpiece *The Prince*, “a wise lord cannot, nor ought he to, keep faith when such observance may be turned against him”. Hans Morgenthau, a prominent realist, also pointed out that cheating is a quite normal phenomenon in international politics, since what states cherish most is pursuing national interests defined in terms of power. The neorealism theory went even further on this. Waltz argues that states feel uncertain of other states' intention and behaviour, which is boosted by the status of international anarchy. Mearsheimer suggested that it is impossible to ascertain the real intention of other states in an anarchical world. He made it quite clear that to offend and expand is the logical consequence of great powers in pursuing security. Since the enduring pursuing of power constitutes the dominant incentive of states, deception is just one of the instruments in the toolkit for

gaining power. Furthermore, to be cheated may bring serious consequences in the anarchical international system, such as the Munich Conspiracy. Therefore, following the realist understanding, trust is very hard or even impossible to be achieved under the condition of anarchy in international relations.

Trust deficit is the precondition for a security dilemma, which is a logical inference to explain the behaviours of states. Since states tend to be suspicious of each other's intention and purpose, the increase of power on one part will automatically arouse the fear of the other. "Many of the means by which a state tries to increase its security decrease the security of others" (Jervis, 1978: 169). Therefore, the relevant players will resort to certain measures to *balance* the impact of the power. Those measures usually include strengthening its own capability, which usually results in an arms race, or asking for help from other powers, which means to form an alliance. In the realists' mind, there is no room left for trust in international politics. What the ASEAN countries have done perfectly illustrates this model. "The small and medium-sized Southeast Asia states have all pursued a mixed and opposite strategy towards re-emerging China", which is known as strategy of *hedging*.

3.2. Rising Power and the Rise of Distrust

Having acknowledged the trust deficit as a background in international relations, the following question is why the increase in strength of China should raise the degree of distrust. There are mainly three types of answers to this question, i.e., the outgrowth of power politics, China's "aggressive" intentions, and the psychological imbalance of ASEAN states.

The first answer emphasizes that the rising distrust is the outgrowth of power politics. According to realists' prescription, a rising power is always dangerous for other actors in the system. The reason is that a rising power has not only temptation but also need to expand. "Power hates vacuum." As Martin Wight (1978: 144) puts it, "it is the nature of power to expand." Therefore, "realists view economic prosperity as a preliminary to expansion and war" (Schweller, 1999). The implication here is that no matter what kind of strategy the rising power adopts, benign or malign, the capability itself matters. "The strong do what they can, and the weak suffer what they must." Thucydides' logic, to a large extent, still applies at the present time. Therefore, as indicated by Walt (1990), the weaker state tends to keep an eye on the stronger one at all time and respond with suspicions, especially towards the rising power within geographic proximity. Regardless how benevolent the rising power shows to the rest of the world, rising distrust is always the by-product as states grow wealthier and more powerful.

Contrary to the abovementioned thoughts, the second school argues that it is the "aggressiveness" or "assertiveness" that obliges the smaller

and weaker states in Southeast Asia to doubt that whether China's Good Neighbour policy is a way of propaganda or just a camouflage. The scholars resorted to domestic factors, such as heightened nationalism and the central decision maker's preference and demands, to explore the essential dynamics for China's "tough" foreign behaviour (Yahuda, 2013). However, frankly speaking, to maintain a peaceful and stable environment is still the highest priority of China's foreign policy. China's approaches to the territorial and maritime disputes are conditioned by and contingent on several factors, such as the national goal of rejuvenating the Chinese nation, the US pivot to Asia and the interaction between China and other claimants (Zhou, 2016). Therefore, it's not so clear yet to identify which one is the cause and which one is the result.

The last answer resorts to the psychological imbalance of ASEAN states *vis-à-vis* the rapid growth of China and the changing structure of power in the region. The key element here is the perception. Power structure is the main source of the change in perception towards China. "ASEAN's traditional goal has been to prevent any outside power from acquiring too much influence over any country in the region or the region as a whole." (Acharya, 2003: 153) This strategy is called the "counter-dominance" of ASEAN. But with the increasing power of China, ASEAN countries perceive the threat and disorder despite there being no such dominance or attempt to dominate yet (Ji, 2012). It is quite interesting that the realist perspectives emphasise how the changing distribution of capability/power reshapes the perception of the international actors too. In other words, this is also a dispositional change at the psychological level. For the rise of China, ASEAN not only seeks economic support perceived to be crucial for the development of the region, but also worries about China's growing power and the possibility of Chinese domination over the region (Shekhar, 2012: 253). Hedging, therefore, has become the mainstream strategy through ASEAN. The most important feature of hedging is to keep the balance between the rising power, China, and the *status quo* power of the Asia-Pacific region, the US. Compared to China, the US has long been the dominant power in the region. From the perception of ASEAN countries, the US's preference and ambition are relatively clearer and predictable than a rising China.

All in all, power growth is likely the necessary prerequisite for distrust, but not a sufficient one. More and more scholars realize that the mechanism between rising power and rising distrust rests on the role of *uncertainty*. The policy implication for the ASEAN states is that "the relative limited resources and capabilities mean that they possess fewer options than the big powers to cope with threats and uncertainties under anarchy" (Kuik, 2016: 503). ASEAN's distrust towards China mainly derives from the uncertainty on where China will go. This model could better explain what happened during

the last decade. For the Southeast Asian countries, the prevailing strategy is *hedging*, which means to maintain robust economic ties with China and share the profit of rapid growth, while in the mean time standing closely with the US on security issues to make sure that they will avoid being undermined by the growing influence of China. This is a result of rational choice, but I have to point out that this is also a resource for the potential conflicts between China and the ASEAN countries.

4. Rationale for Multi-level Trust-building

This paper argues that distrust is an outgrowth of power politics. It is impossible to eliminate but can be managed. There is still a rationale for trust building. This section addresses an effort of a multi-level strategy to promote mutual trust between China and ASEAN.

4.1 Generating Necessity of Trust

With the realist perspective, it seems that there is no chance to escape from the trust deficit. We have to admit that distrust is a common phenomenon in international relations, but we can still find clues from other social scientific studies, which focus on how to ameliorate the condition and relieve the obstacles.

For Liberal Institutionalism, international institutions would relieve the negative effects of international anarchy. In the literature of Sociology and Economics, trust is regarded as an invisible institution, which is a very important constituent in fostering cooperation and facilitating interaction in the domestic community. The function of trust in society is to reduce transaction costs and increase expected gains. With the modification of the standard Prisoner’s Dilemma (PD), we get the Trust Game (TG) (illustrated in Figure 1). TG is similar to a PD in that individually rational choices by two players lead them to a Pareto deficient outcome. It explains how to build trust between two rational actors. In the PD game defection is always superior to cooperation, no matter what one’s partner does. Therefore, defection is the

Figure 1 Trust Game

		Player 2	
		C	D
Player 1	C	1, 1	-1, e_2
	D	e_1 , -1	0, 0

dominant behaviour for each player in the PD game. In the TG game, the payoff of Defection is marked as e . The optimal solution of the Trust Game is a result of the comparison of the payoff of 1, -1 and e . It means that the choice of Cooperation (C) or Defection (D) depends on the comparison of the payoff it yields. When e is close to 1, or even greater than 1, defection would be the choice of players. On the contrary, when e is less than 1, or even less than the cost to be deceived (-1), cooperation is more likely.

The necessity of trust is closely related to this payoff. In reality, for the states in international relations, what the statesmen should do is to measure the payoff of two options: one is that of distrust (D), another is to trust (C). To distrust may mitigate risk of deception, but the negative gain would be increasing tension, even leading to conflicts or wars. To trust may create a positive and harmonious atmosphere for cooperation, but there is a risk of future subordination to its counterpart. That the state decides to trust (risk-taking) is when the risk of subordination is far less than the risk of confrontation or be taken advantage of.

Actually, the necessity of trust is very strong for both China and its ASEAN counterparts. On one hand, from the perspective of China, the *hedging* strategy is actually a thorn which hinders the establishment of more harmonious relations with its neighbours. On the other hand, China is unsatisfied with an emerging strong security and military alliance/partnership in front of its south gate. What China needs most is a stable and peaceful environment for further development. This is the central task of China's foreign policy for now. To increase trust will be a critical method to achieve this aim. China was suspicious of some neighbouring countries' intentions of inviting the US to interfere in the South China Sea disputes and other relevant issues. Not surprisingly, the involvement of the power outside the region would play the role of triggering the nationalism of China, which could explain why China behaved so "assertively" in the South China Sea Dispute. This is to safeguard China's security parameter and to partially meet the demands of its domestic nationalism. From the perspective of ASEAN countries, it is dangerous and unwise to have a big giant as an adversary. Furthermore, increasing military and security dependency on the US would increase the abovementioned dangers. The traditional wisdom is to keep a balance between the regional powers. The Philippines' South China Sea strategy under the Aquino III administration was a salient counter example to this wisdom.

Therefore, to generate and clarify the necessity of trust is not as impossible as some scholars argued. What we should do is to switch positions and consider the demands of the other, then the situation would be clearer. The thing left is how to deal with the uncertainties in the process of initiating mutual trust.

4.2 Multi-level Trust Building

This paper would like to propose a strategy of multi-level trust building. After clarifying the necessity of trust for both sides, the main obstacle is the uncertainty in the development of bilateral relations. As the smaller and weaker one in the relationship, ASEAN countries actually have more to be concerned about, from military disadvantage to losing economic autonomy. As the stronger one in the relationship, China is concerned about these neighbouring countries leaning too much on the power outside of the region, which would impede its own rising process. Honestly speaking, China has a bigger incentive to build trust with these smaller partners.

Since Xi Jinping came to power in 2012, China has gradually changed the priority of its foreign strategy. In October 2013, President Xi held a conference on diplomatic work. He said that China would strive for a sound neighbouring environment for its own development and seek common development with neighbouring countries. This is not a propaganda but what China is really concerned about. According to Xi, “the neighbouring region has major strategic significance.” The strategic goal of China’s diplomacy with neighbouring countries is to serve the cause of national rejuvenation, for which China must consolidate its friendly relations with neighbouring countries and make the best use of the strategic opportunities China now has (*Xinhua*, 2013). It is quite clear that to build trust with the neighbouring countries fits the national interest of China.

The multi-level trust building involves several interrelated dimensions. The assumption of trust building is that trust is a psychological phenomenon, which reflects the judgment of the preference of the rational actors in the interaction. Put more specifically, trust building can be treated as a process of decision making. The rational actors will not only assess the payoffs between trust and distrust, but also be influenced by the social interaction, which involves dispositional and perceptual considerations. In extant literatures, trust is a continuum, with functional cooperation as one end and interpersonal bonding as another end (Booth and Wheeler, 2008: 229). Therefore, trust building requires at least two parts, one is the functional level building, and the other is the emotional level building.

The role of functional level building is to demonstrate the necessity of trust and to reduce uncertainty of interaction. “One strategy for reducing social uncertainty in exchange situations is to form committed relations with particular partners.” (Cook et al., 2005: 124). In previous studies, there are many approaches to form such relations. For example, the increase of interdependence will raise the cost of defection for both sides, which can be seen as an effective form of committed relations. Meanwhile, the emotional level building involves ways to increase mutual understanding and positive

feelings between the trustors and trustees. For example, intensive people to people exchanges, to some extent, will help build up foundations to understand each other's real interests and intentions. The multi-level trust building process will help China and ASEAN countries to have a stable and healthy relations in the future, and China's Belt and Road Initiative can partially fulfil this aim.

4.3 Implications to the Belt and Road Initiative

With the perspective of multi-level trust building, the Belt and Road Initiative will find its most effective way to work. Generally speaking, China's "Belt and Road Initiative" is now becoming a pressing national strategy. The top leaders of China are strongly pushing for the initiative to be accepted by the relevant countries. Actually, there so many interpretations of the meaning of this immense project. Two different versions are often bandied about. On one hand, the relevant countries, especially those cash-strapped developing countries are expecting the possible investment and the technology transfer from China. On the other hand, many people also expressed their anxieties towards this thematic ambiguous proposal of China. Some think that China wants to build a sphere of influence, or to pursue a Chinese version Monroe Doctrine through this project. Moreover, others also considered this project as a signal that China is eager to output its own overcapacity and readjust industrial structure, and the industrial investment would aggravate competition among the regional members. Apparently, beneath the enormous economic benefits and opportunities in infrastructure construction, the distrust is still there to hinder further cooperation.

It is very clear that the Belt and Road Initiative should take trust building as its central task in advancing cooperation between China and ASEAN countries. To achieve this goal, China should not only consider the benefit of the initiative but also how to increase the interdependence rather than unilateral dependence in China-ASEAN relations. To bind both sides in the process for the long run would generate necessity of trust and raise the price of deception. The rational foundation is the hard core of trust relations. Besides economic interdependence, there should also be an indigent of military/security confidence-building mechanism included, which means that security cooperation should be considered in the blueprint for the Belt and Road Initiative. Recent news show that China and ASEAN are working on a draft of a Code of Conduct (COC) in the South China Sea. The COC can be considered as one of such mechanisms to ensure it is self-binding for each side in the dispute. To some extent, a successful COC would enhance mutual trust among all parties. In the dispositional part of trust building, the people-to-people exchanges have been raised as one of the most important constituents in the Belt and Road Initiative. However, this is the most difficult

part in trust building. The fact is that exchanges can only be the necessary condition for fostering understandings of people (民心相通). Under certain conditions, the more interaction, the more distrust. Though the Belt and Road Initiative can provide more chances for communication and interaction, the ultimate goal of exchanges should be to set up a kind of regional identity, which would yield continuous dynamics for mutual trust. All in all, to build trust, the Belt and Road Initiative does and will focus on how to reward and pacify the neighbouring countries.

5. Conclusion

At this moment, South China Sea dispute is the only dispute between China and ASEAN countries. The mainstream of bilateral relations is quite healthy. But the potential threats are always there. The South China Sea dispute reflects the conflicting interest and, more importantly, the distrust derived from the rise of China. And distrust plays a very critical role in shaping China-ASEAN relations. In the realist literature, distrust is inevitable in an anarchic international system. But realists are partially right. The fallacy of realism is not the way of its reasoning but the self-fulfilling prophecy. If we do not want to believe others, the result would be even worse. And if we adopted a laissez-faire attitude towards the trust deficit, it could become a serious problem. Therefore, treating trust as a result of decision making under the condition of incomplete information might be achieved by the rational actors with dispositional preference.

The Belt and Road Initiative encompasses the strategic thinking of China. The central idea of the project is to foster cooperation in various areas, namely five connectivity: policy communication, road connectivity, unimpeded trade, monetary circulation and understanding between peoples. But in reality, the cooperation-oriented initiative encounters a variety of challenges. Distrust is the main drive of those challenges. For ASEAN countries, people would like to interpret the meaning of certain behaviours of China by some perditions based on the traditional strategic mind. But a defensive reaction of ASEAN countries might be considered as an expression of aggressive intentions, and vice versa, the same story happening to China. And only by taking trust-building as one of the main approach can this initiative be really accepted by the relevant countries and contribute to the good image of China as well as the prosperous and peaceful future of the region.

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- * Huang Haitao 黄海涛 is associate professor with the Department of Internal Relations, Nankai University, Tianjin, China. He received his PhD in Political Science in 2009. His research interests include IR theory, China’s foreign policy and China-US relations. He can be reached at <huanght@nankai.edu.cn>.

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Behind the Invisible Wall: What Determine Wage Differentials between Urban and Migrant Workers in China

*Yih-chyi Chuang** and *Eric Yan***

Dept. of Economics, National Chengchi University, Taipei, Taiwan, ROC

Institute of Economics, Academia Sinica, Taipei, Taiwan, ROC

Abstract

Using a wider scope of cities data from 2008 survey of Rural-Urban Migration in China, this study employs a comprehensive aspect of explanatory variables to empirically estimate wage determination and decomposes the wage differentials between urban and migrant workers in the Chinese labour market. We find that differences in endowments, such as personal traits, geography, cohort, firm characteristics and industry type explain 85-89% of the wage differentials; however, it drops significantly to 42-60% if group membership, a likely proxy for the Hukou system, is considered. Among those explanatory factors, human capital proxies of personal traits are the crucial factors for wage differentials; moreover, compared to the urban workers the education resource-poor migrants have higher rates of return on human capital variables of work experience, height and health. The significant age cohort effect reflects better job opportunity and labour quality of new generations of migrants. Policy implications for institutional change to close the wage gap are also discussed.

Keywords: *Wage differentials, migrant workers, Hukou system, rural-urban income gap, decomposition method, human capital*

1. Introduction

After 1978 economic reform, China experienced three decades of fast economic growth with an average annual growth rate of 9.7%. In this period, both the agriculture and industry sectors underwent rapid transformation. In 1958, in order to manage labour under the collective farm community arrangement, the implementation of a household registration system (Hukou) officially identifies a person as a resident of a city to control the movement

of people between urban and rural areas. This Hukou system is considered as the major institutional arrangement that controls and discriminates migrants from urban workers in China, see for example, Wang (2005) and Chan and Buckingham (2008).

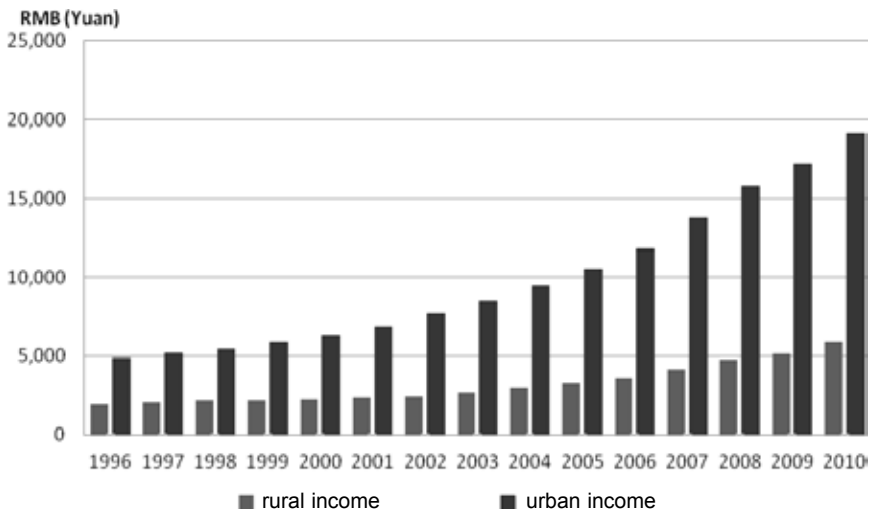
The economic reform in 1978 relaxed restrictions and regulations for rural and urban migration by allowing the transfer of surplus labour in agriculture sector to industry sector especially those located in the coastal area of China for speeding up the process of industrialization. According to statistics from the National Bureau of Statistics of China, in 1978 per capita output in primary industry was only RMB363 – about 14.44% of that in secondary industry. However, in 1990 it had increased to RMB1,301 – about 23.36% of secondary industry, while in 2010 it further jumped to RMB14,512 – a more than ten-fold increase in twenty years but its ratio with secondary industry dropped to 16.90%. Moreover, between 1980 and 2010, the share of non-agriculture employment in the agriculture sector amplified from 9.32% to 48.29%, implying more and more rural labour leave the low-productivity agriculture sector to high-productivity non-farm activities. This agriculture-industry transformation was also revealed in the employment share by sector, in 1978 the employment share of primary industry was 70.53% which then declined to 60.10% in 1990 after the opening up of special economic zones in Shenzhen, Zhuhai, Shantou and Xiamen along the southern coastal area since 1980. As a result, the employment share of secondary and tertiary sectors climbed to 21.40% and 18.50% in 1990, respectively. By 2010, the employment share of primary, secondary and tertiary industries reached 36.70%, 28.70%, and 34.60%, respectively. This shows that even GDP share of the primary sector had decreased from 28.19% in 1978 to 10.10% in 2010 under rapid industrialization, but the agriculture sector still maintained a high proportion of the labour force and population. Apparently, urbanization had not kept up with the process of industrialization because of different institutional and political arrangements between rural and urban areas in China (Chapter 5 in Naughton 2007).

More importantly, the Hukou system still remains for workers' identification to keep wages of rural migrants in the city from rising so that a large cheap army of floating population can be used in the urban industry sector.¹ The population and labour policy reform in 1978 focused on three aspects: first, change from collective farm community to household responsibility system in agriculture production;² second, loosening labour mobility control to allow rural migrants to work in urban cities or manufacturing while maintaining the Hukou system; third, promote one-child policy in the urban area.³ These labour policies have profound effects on the process of industrialization and demographic structure change in China. During the period 2001-2011, the rate of urbanization increased from 37.66% to 51.27%,

while employment share in secondary and tertiary industries rose to over 60%, higher than the rate of urbanization. This decoupling effect between industrialization and urbanization was mainly due to the Hukou system that restricted labour mobility between rural and urban sectors. In 2012, China has a population of 1.37 billion people, and half of them lived in urban areas with a share of only 20% of permanent residents. With a large group of migrant workers living in cities, what happen to their wages relative to that of urban workers? What are the advantages and disadvantages determining migrant workers' wage compensation? Have migrants been discriminated while working in cities? These are important research questions for labour policy on further structural transformation in the Chinese economy as they affect the living standard and income of migrants and income disparity between rural and urban sectors.⁴

Over the past decades, there has been a problem of widening income gap in many economies in the world. In most literature, the cause of rising wage inequality may be related to trade that helps to spread technology, workers' level of human capital, workers' proficiency in applying technology for production, and discrimination towards workers with different background.⁵ Undergoing three decades of fast growth since 1978, China has also encountered the problem of widening income gap, which can be observed from the diverging gap of per capita income between urban and rural residents in China. As shown in Figure 1, the income ratio of rural residents with respect to urban residents dropped significantly from 40% in 1996 to 31% in

Figure 1 Real Urban and Rural Per Capita Income, 1996-2010

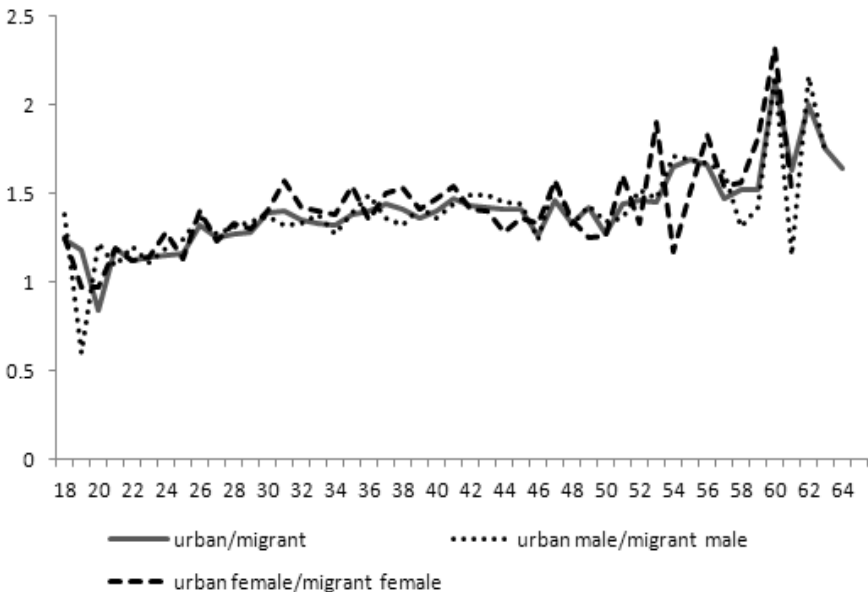


Source: National Bureau of Statistics of China (2011).

2010, implying that even with an increasing trend of rural residents' income the rural-urban income gap kept widening over time.

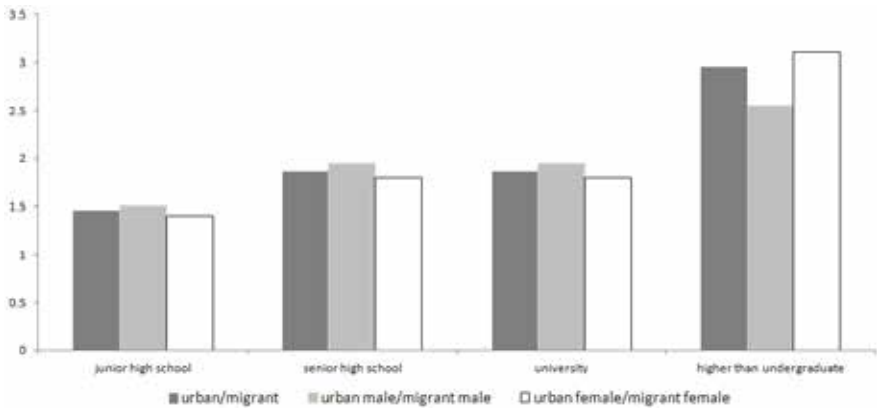
Among the aforementioned causes of income gap, discrimination has always been a rising focus to people who are concerned with the Chinese labour market. Some recent empirical studies on the Chinese labour market have found that women are paid lower than other groups (e.g. Rozelle *et al.*, 2002; Liu *et al.*, 2000), while others suggest that there is significant discrimination towards migrants in identity, occupation and industry segregation (e.g. Meng and Zhang, 2001; Lee, 2012). Using the 2005 China Urban Labor Survey data from five cities, Shanghai, Wuhan, Shenyang, Fuzhou, and Xi'an, Lee (2012) found 34% and 22% of wage and non-wage differences were unexplained for male and female migrants respectively. Zhang *et al.* (2016) used the China Household Income Project (CHIP) 2007 data and found that migrants only earned 49% of urban workers' income and 17% of the wage gap cannot be explained by observed factors. In detail, differences in educational attainment, work experience and distribution across industry, occupation and ownership of enterprises account for most of the explained wage gap. A coarse observation on wage differential between urban and migrant workers is shown in Figures 2 and 3. Accordingly, hourly

Figure 2 Ratio of Urban Log Hourly Wage to Migrant Log Hourly Wage, by Age



Source: National Survey Research Center at Renmin University of China (2008).

Figure 3 Ratio of Urban Log Hourly Wage to Migrant Log Hourly Wage, by Education Level



Source: National Survey Research Center at Renmin University of China (2008).

wage ratios of urban to migrant workers in China are in general greater than 1 in 2008, whether male or female; and the ratios are quite close to a constant except for the widening dispersion of wage differential in the younger and elder groups and the group with education level higher than university.

Existing literature on research of wage differentials between migrants and urban workers finds that migrant workers work more hours and receive less pay than urban natives, see, for example, Meng and Zhang (2001), Knight and Song (2003), Demurger *et al.* (2009), Deng and Li (2010), Magnani and Zhu (2012) and Meng (2012). They indicated that wage gaps can only be partially explained by differences in the work-related characteristics and mostly be attributed to the divergent returns to endowments and institutional factors in China. These studies on rural-urban wage differentials covered samples from small groups of cities and were restricted to a small set of explained variables in wage determination. Moreover, only recent works by Lee (2012) and Zhang *et al.* (2016) adjusted for sample selection, which may arise due to employment and occupational choice of migrant and urban workers. However, Lee’s (2012) estimated correction term was insignificant.

The aim of this study is to investigate the discrimination towards migrants in China with a wider scope of coverage of cities by using the data from the 2008 Rural-Urban Migration in China (RUMiC) Survey that includes more variables such as personal traits like gender, education, work experience, health, cohort, geography, firm characteristics and industry type. Our major contributions are that wage determination regression takes into account of a wider scope of cities and a comprehensive aspect of explanatory

variables, and decomposition of wage differentials between migrants and urban workers confirms that differences in personal traits attributed to human capital variables account for a large proportion of explained part for the wage differentials. However, aside from their lack of education resources migrants incline to have higher return on work experience and health than the urban workers. The consideration of group membership, a proxy for the Hukou system, significantly reduces the explained part of wage differentials. Finally, we offer policy implications for future reform to improve wage inequality between migrants and urban workers.

2. Empirical Model

Our empirical estimation model consists of two parts. The first part uses Heckman two-stage regression model to estimate wage determination for migrants and urban workers, respectively. The second part uses the estimated coefficients obtained from wage regressions to decompose the wage differential between urban and migrant employees through a modified decomposition method of Oaxaca (1973) and Blinder (1973) approaches.

2.1. Wage Determination

Heckman's (1979, 1998) two-stage regression model is used for estimating the wage rate. The following briefly introduces the methodology of Heckman test.

Heckman test consists of two stages. The first stage model estimates the probability of an urban native or migrant being employed, whereby it gives the inverse Mills ratios ($\hat{\lambda}_i$) to correct the selection bias of sampling an employed urban (or migrant) in the second stage wage equation. Thus, the first stage Probit model for being employed or not can be expressed as:

$$P(z_i = 1) = P(z_i^* > 0) = X_i' \beta + v_i, i = u, m, \quad (1)$$

where i represents individual, u for the urban native and m for the migrant, z_i^* is the latent variable and z_i is the indicator satisfying $z_i = 1$ if $z_i^* > 0$ and $z_i = 0$ if $z_i^* \leq 0$, X_i represents the vector of explanatory variables for being employed, and v_i is the error term. The set of explanatory variables includes age, health, self-confidence, years of education, child rearing, gender, geography and age cohort.

We calculate the inverse Mills ratios ($\hat{\lambda}_i$) from equation (1) and then introduce it into the second stage wage regression denoted as:

$$\ln INC_i = Z_i' \alpha + \hat{\lambda}_i \gamma + \eta_i, i = u, m, \quad (2)$$

where $\ln INC_i$ is the hourly wage in the logarithmic form and Z_i is a vector of explanatory variables for wage determination. The explanatory variables

include personal traits, gender, family background, *age cohort*, geography, firm characteristics and industry type.

It should be noted that inclusion restriction is required for solving the identification problem of equations (1) and (2). That is, equation (1) should contain at least one variable that is not in equation (2). We include extra individual's variables of age and self-confidence in equation (1) for inclusion restriction.

2.2. Wage Differential Decomposition

The mean value of log hourly wage for the urban and migrant workers is denoted as $\ln \overline{INC}_u$ and $\ln \overline{INC}_m$ respectively, and \overline{Z}_m and \overline{Z}_u are the vectors of respective explanatory variables that would influence wage level.

The decomposition approach for wage differential depends on the choice of reference group. Conventionally, when the migrant is used as a reference group, the wage gap can be expressed as:

$$\ln \overline{INC}_u - \ln \overline{INC}_m = \overline{X}_u'(\hat{\beta}_u - \hat{\beta}_m) + (\overline{X}_u' - \overline{X}_m')\hat{\beta}_m, \quad (3)$$

in which $(\overline{X}_u' - \overline{X}_m')\hat{\beta}_m$ is the explained part attributed to the difference of endowments between migrants and the urban using migrants' coefficients and $\overline{X}_u'(\hat{\beta}_u - \hat{\beta}_m)$ is the unexplained part due to difference in the coefficients of the two groups using urban workers' endowments as the reference. Unexplained ratio in this case is defined as

$$U = [\overline{X}_u'(\hat{\beta}_u - \hat{\beta}_m)] / [\overline{X}_u'(\hat{\beta}_u - \hat{\beta}_m) + (\overline{X}_u' - \overline{X}_m')\hat{\beta}_m]. \quad (4)$$

When the urban worker is used as a reference group, the wage gap can be decomposed as:

$$\ln \overline{INC}_u - \ln \overline{INC}_m = \overline{X}_m'(\hat{\beta}_u - \hat{\beta}_m) + (\overline{X}_u' - \overline{X}_m')\hat{\beta}_u, \quad (5)$$

in which $(\overline{X}_u' - \overline{X}_m')\hat{\beta}_u$ is the explained part attributed to the difference of endowments between migrants and the urban using urban workers' coefficients and $\overline{X}_m'(\hat{\beta}_u - \hat{\beta}_m)$ is the unexplained part due to difference in the coefficients of the two groups using migrants' endowments as the reference. Unexplained ratio in this case is defined as:

$$U = [\overline{X}_m'(\hat{\beta}_u - \hat{\beta}_m)] / [\overline{X}_m'(\hat{\beta}_u - \hat{\beta}_m) + (\overline{X}_u' - \overline{X}_m')\hat{\beta}_u]. \quad (6)$$

These two approaches of decomposition provide a range for us to determine the explained and unexplained parts of wage differential.⁶

In many cases, the traditional decomposition method will generate an extraordinarily large unexplained ratio. This, however, does not necessarily

mean the wage gap is largely unexplainable. Instead, it might be simply because the denominator of U is too close to zero. To solve the problem, we take the exponential values of $\ln \overline{INC}_u$ and $\ln \overline{INC}_m$ and obtain:⁷

$$\overline{INC}_u - \overline{INC}_m \propto e^{\bar{x}_u'(\hat{\beta}_u - \hat{\beta}_m)} + e^{(\bar{x}_u' - \bar{x}_m')\hat{\beta}_m}, \quad (7)$$

where $e^{\bar{x}_u'(\hat{\beta}_u - \hat{\beta}_m)}$ is the monotonic transformation of the unexplained part of the original decomposition mentioned above, while $e^{(\bar{x}_u' - \bar{x}_m')\hat{\beta}_m}$ is the monotonic transformation of the explained part of the original decomposition mentioned above. Unexplained ratio of $\overline{INC}_u - \overline{INC}_m$ under such a prerequisite is thus defined as:

$$U = e^{\bar{x}_u'(\hat{\beta}_u - \hat{\beta}_m)} / [e^{\bar{x}_u'(\hat{\beta}_u - \hat{\beta}_m)} + e^{(\bar{x}_u' - \bar{x}_m')\hat{\beta}_m}]. \quad (8)$$

Likewise, when the urban is used as a reference group,

$$\overline{INC}_u - \overline{INC}_m \propto e^{\bar{x}_m'(\hat{\beta}_u - \hat{\beta}_m)} + e^{(\bar{x}_u' - \bar{x}_m')\hat{\beta}_u}, \quad (9)$$

and its unexplained ratio is defined as

$$U = e^{\bar{x}_m'(\hat{\beta}_u - \hat{\beta}_m)} / [e^{\bar{x}_m'(\hat{\beta}_u - \hat{\beta}_m)} + e^{(\bar{x}_u' - \bar{x}_m')\hat{\beta}_u}]. \quad (10)$$

Apart from the problem of extraordinary large unexplained ratio discussed above, another issue of the decomposition method is whether or not we should consider the “group membership” that differentiates income at the same bundle of productivity (Jones and Kelley, 1984). As has been observed previously, in the labour market of China, the classification of group membership is pronounced between urban and migrant workers due to the Hukou system. If it is considered in the decomposition, it might outweigh the effect of other explanatory variables being the cause of discrimination towards migrants leading the decomposition to drop its explanatory power. To manifest the influence of group membership on explained ratios, the empirics in the later part will simultaneously consider the cases with and without this group membership factor. That is, both the cases where constant terms of regression results are included or excluded in the decomposition of wage differentials are analyzed.

3. Data

Data used in this paper were compiled from the 2008 Urban-Rural Migration in China (RUMiC) Survey, a longitudinal survey consisting of three parts: the Urban Household Survey, the Rural Household Survey and the Migrant Household Survey. It was initiated by a group of scholars and researchers at the Australian National University, the University of Queensland and the

Beijing Normal University and was supported by the Institute for the Study of Labor (IZA). For urban data, the sample size is 14,683. Among them, 5,790 entries are valid for our empirical study. The sample size for migrant data is 8,446. Among them, 3,257 entries are used for the empirical study.

For labour market participation decision, a set of explanatory variables that would determine if an urban native or migrant is employed. These variables are age, self-evaluation of confidence, health condition, years of education, child rearing, gender, geography and cohort. The rationale to include two additional individual variables, age and self-evaluation of confidence, is for exclusion restrictions required in the Heckman selection equation. The older generation due to aging effect or being influenced by the prolonging socialist education movement could have a quite different value judgment and philosophy of life from those who received modern education system gradually adopted in China since the end of Mao Era in the early 1970s. Hence, age variable replicates not only differences in physical status but also in mental and work attitude. People with diverse degree of self-confidence may not only think but also behave differently in making their career decision. Thus, these two additional variables may properly explain people's employment decision in certain ways.

Data chosen for wage regression are workers who are identified as those with monthly income no less than RMB500 and weekly working hours of more than 30 hours.⁸ We also restrict the sample with age below 60 for male and below 55 for female, according to the official retirement age in China. Explanatory variables that would influence hourly income are characterized in five categories: personal traits, geography, age cohort, firm characteristics and industry types. Personal traits include height, years of education, years of work, health condition, child rearing and gender. We additionally include individual's height in wage equation as employer usually pay a height wage premium, see, e.g., Persico, Postlewaite, and Silverman (2004) and Hübler (2016). The reasons may be that tall people tend to have higher productivity as the average height of the population is an indicator of the biological prosperity and standard of living (Komlos and Baur, 2003) or just because short people are discriminated in the labour market due to cultural and social stigma (Galbraith (1985). Geography includes the East, Central, and Southwest of China. Age cohort includes four generations aged below 30, between 30 and 44, between 45 and 60, and above 60. Firm characteristics include size of firm classified by small enterprises (with employees less than 50 persons), medium-sized (with employees above 50 persons but less than 500 persons) or large company (with employees above 500 persons) and type of ownership by foreign-owned, private-owned and state-owned enterprises.

Table 1 lists the abbreviations and definitions of all variables. Table 2 provides the descriptive statistics of the variables. The tables illustrates the

Table 1 Abbreviations and Descriptions of Variables

<i>Variable Group</i>	<i>Variable Name</i>	<i>Explanation</i>	<i>Reference Group</i>
Personal traits	Lhrincome Employed	log of hour wage being hired as a permanent worker, long term contract worker (one year and above) or a short term contract worker (less than one year)	
	Yrofwork	years of work experience in present occupation	
	Yrofworksq	the square of years of work	
	Eduyear	years of education	
	Age	years of age	
	Male	gender dummy (male=1 and female=0)	
	Health	dummy of good health (the value of dummy is 1 if the score of self-evaluation on health is between 1 and 3 otherwise its value is 0)	
	Noconfid	dummy of “lacking self-confidence”	
	Childum	dummy of children (1 if children number is greater than 0 and 0 otherwise)	
	Geography	Central	dummy of central China
East		dummy of eastern China	
Southwest		dummy of southwestern China	
Cohort	Oldgen	dummy of old generation (aged above 60)	Oldgen
	Midgen2	dummy of second mid-generation (aged between 45 and 60)	
	Midgen1	dummy of first mid-generation (aged between 30 and 45)	
	Youngen	dummy of young generation (aged below 30)	
Firm characteristics	Smallcom	firm size dummy for small companies (employees less than 50 persons)	Smallcom
	Midcom	firm size dummy for medium-sized enterprises (employees between 50 and 500 persons)	
	Bigcom	firm size dummy for big company (employees more than 500 persons)	
	Foreigrown	ownership dummy for foreign-owned	

Table 1 (continued)

<i>Variable Group</i>	<i>Variable Name</i>	<i>Explanation</i>	<i>Reference Group</i>
Industry type	Privateown Stateown Indprim Indmin Indmanu Indlewatgas Indconst Indtransp Indict	ownership dummy for private-owned ownership dummy for state-owned industry dummy for Agriculture, Forestry, Animal husbandry, Fishery industry dummy for Mining industry dummy for Manufacturing industry dummy for Production and Supply of Electricity, Gas and Water industry dummy for Construction Enterprise industry dummy for Transport, Storage and Post Industry industry dummy for Information Transmission, Computer Services and Software Industry	Indsalntra
	Indsalntra Indhotel Indfinanc Indestate Indleasing Indscience Indenvtmanage	industry dummy for Wholesale and Retail Trade industry dummy for Hotel and Catering Services industry dummy for Financial Intermediation industry dummy for Real Estate Industry industry dummy for Leasing and Business Services industry dummy for Scientific Research, Technical Service and Geologic Prospecting industry dummy for Management of Water Conservancy, Environment and Public Facilities	
	Indservice Indedu Indwelfare Indculture Inddomesorg Indintlorg	industry dummy for Services to Households and Other Services industry dummy for Education industry dummy for Health, Social Security and Social Welfare industry dummy for Culture, Sport and Entertainment industry dummy for Public Management and Social Organization industry dummy for International Organizations	

Table 2 Descriptive Statistics

	<i>Urban Workers</i>			<i>Migrants</i>		
	<i>Obs</i>	<i>Mean</i>	<i>Std.Dev.</i>	<i>Obs</i>	<i>Mean</i>	<i>Std.Dev.</i>
lhrincome	5643	2.39	0.67	3198	1.78	0.49
central	5790	0.34	0.47	3257	0.38	0.48
east	5790	0.46	0.50	3257	0.46	0.50
southwest	5790	0.20	0.40	3257	0.16	0.37
height	5776	167.05	7.47	3256	166.85	6.98
yrofwork	5775	14.70	10.58	3251	4.94	4.33
yrofworksq	5775	327.84	400.85	3251	43.17	88.47
age	5770	40.89	9.77	3251	30.91	9.62
highedu	5790	0.17	0.37	3257	0.02	0.14
midedu	5790	0.76	0.43	3257	0.77	0.42
eduyear	5724	12.44	3.08	3223	9.62	2.33
lowedu	5790	0.08	0.27	3257	0.21	0.41
oldgen	5790	0.02	0.14	3257	0.01	0.11
midgen2	5790	0.37	0.48	3257	0.08	0.27
midgen1	5790	0.46	0.50	3257	0.34	0.47
youngen	5790	0.15	0.36	3257	0.57	0.50
male	5790	0.57	0.49	3257	0.62	0.49
health	5790	0.98	0.13	3257	0.99	0.08
noconfid	3423	1.44	0.53	2890	1.46	0.57
childum	5790	0.80	0.40	3257	0.50	0.50
smallcom	5790	0.31	0.46	3257	0.43	0.49
midcom	5790	0.44	0.50	3257	0.14	0.35
bigcom	5790	0.25	0.43	3257	0.43	0.50
indprim	5790	0.01	0.11	3257	0.00	0.00
indmin	5790	0.01	0.11	3257	0.00	0.02
indmanu	5790	0.20	0.40	3257	0.31	0.46
indelewatgas	5790	0.04	0.20	3257	0.00	0.04
indconst	5790	0.03	0.18	3257	0.10	0.30
indtransp	5790	0.10	0.29	3257	0.03	0.18
indict	5790	0.04	0.20	3257	0.01	0.09
indsalntra	5790	0.09	0.28	3257	0.14	0.35
indhotel	5790	0.03	0.16	3257	0.16	0.37
indfinanc	5790	0.04	0.20	3257	0.00	0.06
indestate	5790	0.02	0.14	3257	0.05	0.21
indleasing	5790	0.03	0.17	3257	0.01	0.11

Table 2 (continued)

	<i>Urban Workers</i>			<i>Migrants</i>		
	<i>Obs</i>	<i>Mean</i>	<i>Std.Dev.</i>	<i>Obs</i>	<i>Mean</i>	<i>Std.Dev.</i>
indscience	5790	0.03	0.17	3257	0.02	0.15
indenvtmange	5790	0.01	0.12	3257	0.01	0.08
indservice	5790	0.09	0.29	3257	0.10	0.30
indedu	5790	0.06	0.24	3257	0.01	0.09
indwelfare	5790	0.04	0.21	3257	0.02	0.15
indculture	5790	0.02	0.14	3257	0.01	0.12
inddomesorg	5790	0.09	0.29	3257	0.00	0.05
indintlorg	5790	0.00	0.02	3257	0.00	0.00
foreignown	5790	0.05	0.22	3257	0.10	0.30
privateown	5790	0.18	0.38	3257	0.52	0.50
stateown	5790	0.59	0.49	3257	0.12	0.32
othercomtp	5790	0.19	0.39	3257	0.26	0.44

basic differences between urban and migrant workers. On average, urban workers received an hourly wage of RMB10.91 with average age of 40.89 years old, 12.44 years of education, and 14.7 years of work experience; while migrants received an hourly wage of RMB5.93 with average age of 30.91 years, 9.62 years of education, and 4.94 years of work experience. Among them, 15% of urban workers are below 30 years while 57% of migrants are below 30 years; 31% of migrant workers work in the manufacturing sector while only 20% of urban workers have jobs in manufacturing. Most urban workers (59%) are employed in state-owned enterprises, while most migrants (52%) are employed in private-owned firms.

In sum, the data show a general tendency that in contrast to migrant workers, urban workers on average are older, more educated, more experienced and are higher wage earners. Urban workers worked more in state-own enterprises, while migrant workers are employed mostly in private enterprises.

4. Estimation Results

Tables 3 and 4 respectively provide the results of Heckit test for both urban and migrant workers. Column (1) of the wage determination in the two tables is the base model, which regresses log hourly income on personal traits of the employed. Columns (2) to (5) of the two tables additionally adds the factor of geography, age cohort, firm characteristics, and industry type, separately to the base model. Column (6) jointly adds all the factors to the base model.

Table 3 Wage Regression for Urban Workers

Dep var = lhrincome

	(1) Personal traits	(2) Personal traits + Geography	(3) Personal traits + Cohort	(4) Personal traits + Firm characteristics	(5) Personal traits + Industry	(6) Personal traits + Geography + Cohort + Firm characteristics + Industry
Height	0.005** (0.002)	0.000 (0.002)	0.005** (0.002)	0.003 (0.002)	0.004* (0.002)	-0.001 (0.002)
YrOfWork	0.030*** (0.004)	0.031*** (0.004)	0.030*** (0.004)	0.027*** (0.004)	0.027*** (0.004)	0.026*** (0.004)
YrOfWorksq	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
Eduyear	0.063*** (0.005)	0.065*** (0.005)	0.060*** (0.006)	0.060*** (0.005)	0.055*** (0.005)	0.051*** (0.007)
Health	0.169** (0.084)	0.162* (0.084)	0.161* (0.088)	0.186** (0.083)	0.146* (0.083)	0.134 (0.086)
Childum	-0.007 (0.034)	-0.020 (0.033)	0.007 (0.041)	0.010 (0.033)	0.008 (0.034)	-0.006 (0.039)
Male	0.066* (0.034)	0.123*** (0.035)	0.061 (0.039)	0.080** (0.034)	0.092*** (0.034)	0.140*** (0.040)
East		0.251*** (0.030)				0.238*** (0.029)
Central		0.284*** (0.031)				0.283*** (0.030)
Midgen2			-0.146 (0.115)			-0.146 (0.118)
Midgen1			-0.100 (0.127)			-0.143 (0.131)
Youngen			-0.089 (0.126)			-0.163 (0.129)
Midcom				0.151*** (0.025)		0.143*** (0.025)
Bigcom				0.102*** (0.030)		0.133*** (0.031)
Foregnown				0.411*** (0.055)		0.401*** (0.054)
Privateown				0.076** (0.035)		0.080** (0.034)
Stateown				0.164*** (0.028)		0.127*** (0.028)
Indimin					-0.098 (0.110)	-0.083 (0.107)

Table 3 (continued)

Dep var = lhrincome

	(1) Personal traits	(2) Personal traits + Geography	(3) Personal traits + Cohort	(4) Personal traits + Firm characteristics	(5) Personal traits + Industry	(6) Personal traits + Geography + Cohort + Firm characteristics + Industry
Indmanu					-0.060 (0.041)	-0.112*** (0.041)
Indelewatgas					0.135** (0.064)	0.113* (0.063)
Indconst					0.037 (0.068)	0.018 (0.067)
Indtransp					-0.003 (0.048)	-0.046 (0.048)
Indict					0.258*** (0.061)	0.197*** (0.060)
Indhotel					0.001 (0.075)	0.013 (0.073)
Indfinanc					0.298*** (0.061)	0.289*** (0.060)
Indestate					0.240*** (0.086)	0.285*** (0.083)
Indleasing					0.094 (0.073)	0.111 (0.071)
Indscience					0.154** (0.071)	0.163** (0.070)
Indenvtmange					0.046 (0.094)	-0.009 (0.092)
Indservice					-0.171*** (0.046)	-0.121*** (0.045)
Indedu					0.155*** (0.053)	0.131** (0.053)
Indwelfare					0.187*** (0.059)	0.145** (0.059)
Indculture					0.116 (0.079)	0.109 (0.077)
Inddomesorg					0.151*** (0.046)	0.155*** (0.048)
Lambda	-0.165*** (0.057)	-0.153*** (0.059)	-0.194** (0.084)	-0.125** (0.057)	-0.134** (0.057)	-0.158* (0.092)
cons	0.444 (0.385)	0.939** (0.383)	0.611 (0.452)	0.464 (0.379)	0.592 (0.379)	1.343*** (0.449)

Table 3 (continued)

Dep. Var = Employed

	(1) Personal traits	(2) Personal traits + Geography	(3) Personal traits + Cohort	(4) Personal traits + Firm characteristics	(5) Personal traits + Industry	(6) Personal traits + Geography + Cohort + Firm characteristics + Industry
Age	-0.047*** (0.005)	-0.047*** (0.005)	-0.047*** (0.005)	-0.047*** (0.005)	-0.047*** (0.005)	-0.047*** (0.005)
Health	0.571*** (0.097)	0.571*** (0.097)	0.571*** (0.097)	0.571*** (0.097)	0.571*** (0.097)	0.571*** (0.097)
Noconfid	-0.135*** (0.032)	-0.135*** (0.032)	-0.135*** (0.032)	-0.135*** (0.032)	-0.135*** (0.032)	-0.135*** (0.032)
Eduyear	0.116*** (0.006)	0.116*** (0.006)	0.116*** (0.006)	0.116*** (0.006)	0.116*** (0.006)	0.116*** (0.006)
Childum	0.169** (0.077)	0.169** (0.077)	0.169** (0.077)	0.169** (0.077)	0.169** (0.077)	0.169** (0.077)
Male	0.586*** (0.037)	0.586*** (0.037)	0.586*** (0.037)	0.586*** (0.037)	0.586*** (0.037)	0.586*** (0.037)
East	0.152*** (0.048)	0.152*** (0.048)	0.152*** (0.048)	0.152*** (0.048)	0.152*** (0.048)	0.152*** (0.048)
Central	-0.107** (0.050)	-0.107** (0.050)	-0.107** (0.050)	-0.107** (0.050)	-0.107** (0.050)	-0.107** (0.050)
Midgen2	0.955*** (0.094)	0.955*** (0.094)	0.955*** (0.094)	0.955*** (0.094)	0.955*** (0.094)	0.955*** (0.094)
Midgen1	0.764*** (0.136)	0.764*** (0.136)	0.764*** (0.136)	0.764*** (0.136)	0.764*** (0.136)	0.764*** (0.136)
Youngen	0.076 (0.187)	0.076 (0.187)	0.076 (0.187)	0.076 (0.187)	0.076 (0.187)	0.076 (0.187)
Cons	-0.601* (0.331)	-0.601* (0.331)	-0.601* (0.331)	-0.601* (0.331)	-0.601* (0.331)	-0.601* (0.331)
obs.			6257	6257	6257	6257
censored_obs.			2957	2957	2957	2957
uncensored_obs.			3300	3300	3300	3300
Wald_chi ²			355.58	488.99	515.41	768.61

Note: Significance level: 1% = ***, 5% = **, and 10% = *. For explanations of abbreviations, see Table 1.

Table 4 Wage Regression for Migrant Workers

Dep var = lhrincome

	(1) Personal traits	(2) Personal traits + Geography	(3) Personal traits + Cohort	(4) Personal traits + Firm characteristics	(5) Personal traits + Industry	(6) Personal traits + Geography + Cohort + Firm characteristics + Industry
Height	0.010*** (0.002)	0.006*** (0.002)	0.010*** (0.002)	0.009*** (0.002)	0.010*** (0.002)	0.006*** (0.002)
Yrofwork	0.058*** (0.005)	0.051*** (0.005)	0.053*** (0.005)	0.051*** (0.005)	0.055*** (0.005)	0.042*** (0.005)
Yrofworksq	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.001*** (0.000)
Eduyear	0.055*** (0.004)	0.058*** (0.003)	0.055*** (0.004)	0.051*** (0.004)	0.053*** (0.004)	0.053*** (0.003)
Health	0.191* (0.101)	0.185* (0.097)	0.208** (0.101)	0.186* (0.098)	0.154 (0.099)	0.163* (0.094)
Childum	0.003 (0.018)	0.020 (0.018)	-0.055** (0.025)	-0.001 (0.018)	-0.009 (0.018)	-0.015 (0.023)
Male	0.004 (0.026)	0.055** (0.025)	-0.114*** (0.037)	0.018 (0.025)	-0.024 (0.026)	-0.049 (0.032)
East		0.361*** (0.023)				0.312*** (0.026)
Central		0.261*** (0.024)				0.190*** (0.026)
Midgen2			0.448*** (0.112)			0.388*** (0.098)
Midgen1			0.697*** (0.121)			0.619*** (0.106)
Youngen			0.459*** (0.111)			0.464*** (0.096)
Midcom				0.005 (0.025)		-0.015 (0.024)
Bigcom				0.116*** (0.018)		0.077*** (0.019)
Foreignown				0.160*** (0.031)		0.116*** (0.031)
Privateown				-0.052*** (0.019)		-0.026 (0.018)
Stateown				0.008 (0.028)		0.012 (0.027)
Indmin					0.357 (0.442)	0.350 (0.427)

Table 4 (continued)

Dep var = lhrincome

	(1) Personal traits	(2) Personal traits + Geography	(3) Personal traits + Cohort	(4) Personal traits + Firm characteristics	(5) Personal traits + Industry	(6) Personal traits + Geography + Cohort + Firm characteristics + Industry
Indmanu					0.144*** (0.025)	0.040 (0.026)
Indelewatgas					0.223 (0.219)	0.090 (0.209)
Indconst					0.144*** (0.034)	0.103*** (0.033)
Indtransp					0.060 (0.048)	0.009 (0.046)
Indict					0.185** (0.090)	0.156* (0.086)
Indhotel					-0.118*** (0.028)	-0.102*** (0.027)
Indfinanc					0.089 (0.123)	0.127 (0.118)
Indestate					0.029 (0.041)	0.046 (0.040)
Indleasing					0.245*** (0.072)	0.232*** (0.069)
Indscience					0.139** (0.055)	0.104** (0.052)
Indenvtmange					-0.025 (0.103)	-0.045 (0.099)
Indservice					-0.025 (0.032)	-0.054* (0.031)
Indedu					0.115 (0.090)	0.111 (0.086)
Indwelfare					-0.090 (0.057)	-0.129** (0.054)
Indculture					0.087 (0.068)	0.095 (0.064)
Inddomesorg					-0.264* (0.147)	-0.355** (0.140)
Lambda	0.009 (0.069)	0.120* (0.067)	-0.755*** (0.146)	0.075 (0.068)	0.049 (0.068)	-0.411*** (0.132)
Cons	-0.779*** (0.292)	-0.518* (0.283)	-0.482 (0.324)	-0.725** (0.286)	-0.840*** (0.286)	-0.376 (0.298)

Table 4 (continued)

Dep var = Employed

	(1) Personal traits	(2) Personal traits + Geography	(3) Personal traits + Cohort	(4) Personal traits + Firm characteristics	(5) Personal traits + Industry	(6) Personal traits + Geography + Cohort + Firm characteristics + Industry
Age	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)
Health	0.622*** (0.162)	0.622*** (0.162)	0.622*** (0.162)	0.622*** (0.162)	0.622*** (0.162)	0.622*** (0.162)
Noconfid	0.008 (0.029)	0.008 (0.029)	0.008 (0.029)	0.008 (0.029)	0.008 (0.029)	0.008 (0.029)
Eduyear	0.100*** (0.008)	0.100*** (0.008)	0.100*** (0.008)	0.100*** (0.008)	0.100*** (0.008)	0.100*** (0.008)
Childum	-0.295*** (0.053)	-0.295*** (0.053)	-0.295*** (0.053)	-0.295*** (0.053)	-0.295*** (0.053)	-0.295*** (0.053)
Male	0.214*** (0.029)	0.214*** (0.029)	0.214*** (0.029)	0.214*** (0.029)	0.214*** (0.029)	0.214*** (0.029)
East	0.022 (0.041)	0.022 (0.041)	0.022 (0.041)	0.022 (0.041)	0.022 (0.041)	0.022 (0.041)
Central	0.023 (0.042)	0.023 (0.042)	0.023 (0.042)	0.023 (0.042)	0.023 (0.042)	0.023 (0.042)
Midgen2	-0.226 (0.188)	-0.226 (0.188)	-0.226 (0.188)	-0.226 (0.188)	-0.226 (0.188)	-0.226 (0.188)
Midgen1	-0.196 (0.211)	-0.196 (0.211)	-0.196 (0.211)	-0.196 (0.211)	-0.196 (0.211)	-0.196 (0.211)
Youngen	0.628*** (0.048)	0.628*** (0.048)	0.628*** (0.048)	0.628*** (0.048)	0.628*** (0.048)	0.628*** (0.048)
Cons	-1.565*** (0.089)	-1.565*** (0.089)	-1.565*** (0.089)	-1.565*** (0.089)	-1.565*** (0.089)	-1.565*** (0.089)
obs.	8325	8325	8325	8325	8325	8325
censored_obs.	5169	5169	5169	5169	5169	5169
uncensored_obs.	3156	3156	3156	3156	3156	3156
Wald_chi2	532.09	811.37	558.54	703.93	735.06	1055.64

Note: Significance level: 1% = ***, 5% = ** and 10% = *. For explanations of abbreviations, see Table 1.

The six Heckit tests share similar results. According to the first-stage selection results in the lower panel of the two tables, an urban worker who is young or self-confident is more likely to be employed, while both variables are insignificant to determine the employment status of a migrant. This may be because migrants move mainly because of looking for better job opportunity and higher wage in the city, therefore once they decide to move and become migrants they have a strong determination to work regardless of their age of confidence feeling. However, both urban and migrant workers who are male, more educated, and healthier, tend to have higher probability to be employed. An urban native who has the responsibility of child rearing is more likely to be employed. By contrast, a migrant rearing a child is less likely to find a job in a city because child rearing in city is more difficult and costly and may even be considered as a burden for the migrant. As for geography and age cohort, both are insignificant factors for determining employment status for the migrant; however, an urban native in the east is more likely to find a job than in the central region as the eastern urban area provides better labour conditions and job opportunities. Moreover, urban people of mid-generation are more likely to be hired, while younger generation of migrants exhibits an advantage in finding a job in the city. Thus, the employment selection behaviour for urban natives and migrants shares some commonalities but also has certain divergences.

According to the second-stage results of wage regression in Tables 3 and 4, sample correction terms derived from the first stage are significant for wage determination of both urban and migrant workers, implying the necessity to correct for sample selection bias. The negative coefficient of correction term means that the observed wage tends to underestimate the real one. Both years of education and work experience are positive and strongly significant for both urban and migrant workers, but the returns to work experience of migrant workers are nearly twice than that of urban workers implying that work experience is more important for those migrants who tend to be young, less educated and unskilled. Another reason is that the average years of work experience of the migrants is lower than that of urban workers. This result is thus consistent with the law of diminishing returns. In fact, migrants in some occupations with the same years of work experience as that of urban workers still receive a higher rate of return to work experience despite the fact that they earn less than their urban counterparts. This result supports the finding that migrant workers rely more on skill accumulation through on-the-job training. It also implies that, compared to an urban worker, migrant workers' human capital level in terms of work experience is relatively low. In fact, the average work experience of the urban is about three times that of the migrants. This may also be because migrants cannot work long in the city and have to return to their hometown voluntary or involuntary. The significant but

negative estimates of squared value of work experience are consistent with the nonlinear effect suggested by the literature.

In contrast, the results show that urban workers have higher rate of returns to education than the migrants implying that urban workers enjoy more education resources than do migrant workers both in quantity and quality.⁹ Despite the law of diminishing marginal returns, the rate of return to education of urban workers who have received longer years of education is still higher than that of the migrants.

Furthermore, two other human capital variables, height and health condition also show positive and significant effects on wage level for both urban and migrant workers, and their effects are relatively stronger for the migrants than for the urban workers. This may have to do with the job characteristics that migrants are mostly engaged in such as work that required more physical strength or in more risky working conditions in the manufacturing sector. All these results confirm that even under the Chinese segmented labour market environment, human capital remains an important dimension for understanding the determinants of labour income. Moreover, except for formal education in which urban workers have a greater advantage over the migrants, in other aspects of human capital such as work experience and health condition the migrants have larger rates of return. Our results suggest that human capital investment and accumulation can be an effective way to narrow the wage gap between urban and migrant workers.

As for geography, its coefficients are positive and significant; and, according to the magnitude, we find that for both urban and migrant workers their wage level is higher in Eastern and Central China than in Southwest China. This is consistent with our understanding that job opportunity is better in these regions. In regard to the cohort effect, there is an evident difference between urban and migrant workers. For urban workers, there are no significant differences among different age cohorts, while for migrants, young workers tend to earn more and the highest income goes to the age group between 30 and 45 years old. This shows that after controlling for personal traits, cohort effect only exists in migrant workers and not in urban workers. We attribute this phenomenon to the relatively stable work environment in urban areas faced by urban workers with different age cohorts. However, the younger generation of migrants with more work experience tends to earn more implying either better job opportunities or labour quality of the new generation of migrants.¹⁰

As for firm size, consistent with the literature, larger firms tend to pay higher wages. An urban worker receives a bigger wage premium in a medium-sized company (with employees between 50 and 500 persons), while a migrant earns a higher wage premium from a big company (with employees above 500 persons). This is because migrants usually work in big assembly

factories as operation workers or labourers.¹¹ For the type of firm ownership, both urban and migrant workers receive a higher wage premium from a foreign-owned company. However, in a private-owned company or a state-owned company only urban workers have a significant wage premium, while in a private-owned company, where migrant workers mostly worked, it pays a negative wage premium, i.e., migrant workers suffer a significant wage loss in private-owned companies. This result implies that private firms are most likely to take advantage in exploiting migrant workers.

As for industry type, urban workers tend to earn more in manufacturing; electric, water, and gas; information, computer, and software service; finance, real estate and leasing; scientific and technical service; education; health and social welfare; and domestic organization industries, while migrant workers earn more only in construction; information, computer, and software service; leasing; scientific and technical service; and education industries. The limited numbers and aspects of sectors that pay migrants better wages imply that migrants are likely segmented in the labour market (see also Meng and Zhang, 2001; Meng, 2012).

Table 5 summarizes decomposition of wage differentials. Tables 6 and 7 list unexplained and explained ratios. Group membership of workers' identity is not considered in Table 6 but is considered in Table 7.

When the urban worker is used as a reference group, the explained part is, in overall terms, larger than that of the case where the migrant is used as a reference group. Moreover, when geography, age cohort, firm size and ownership, and industry type are simultaneously added to the basic model, unexplained ratio can be reduced to 11% in the case where the urban worker is the reference group and to 15% in the case where the migrant is the reference group. The value of the unexplained ratio is close to that of Lee (2012) and Zhang et al. (2016) but smaller than that of Magnani and Zhu (2012).¹²

Columns (1) and (6) are the two baseline cases. Column (1) only considers personal traits, while column (6) considers personal traits, geography, age cohort, firm characteristics and industry type simultaneously. According to column (1), we know that personal traits as a group of explanatory variables explain 76% of wage differential. The marginal effect of other variable groups, including geography, *age cohort*, firm size and ownership, and industry type added to the case of column (1), as column (6) shows, can only increase explained ratio by 13% in Panel I (increasing from 76% in column (1) to 89% in column (6)) and by 14% in Panel II (increasing from 71% in column (1) to 85% in column (6)). Therefore, difference in personal traits is crucial to explaining the wage differential between urban and migrant workers. Thus, the results in Table 6 show that our model specification in general explains up to 85-89% of the wage gap.

Table 5 Summary of Income Differential Decomposition

	(1) Personal Traits	(2) (1) + Geography	(3) (1) + Cohort	(4) (1) + Firm Type (Size and Ownership)	(5) (1) + Industry Type	(6) All Included
Panel I. Urban as reference						
A: coefficient; explained	0.33	0.32	0.31	0.36	0.35	0.34
B: coefficient; unexplained	-0.84	-0.97	-1.42	-0.79	-1.04	-1.76
C: constant; unexplained	1.22	1.46	1.09	1.19	1.43	1.72
Panel II. Migrant as reference						
A: coefficient; explained	0.19	0.19	0.20	0.20	0.17	0.16
B: coefficient; unexplained	-0.71	-0.84	-1.32	-0.64	-0.87	-1.58
C: constant; unexplained	1.22	1.46	1.09	1.19	1.43	1.72

Table 6 Unexplained and Explained Ratios (without Group Membership)

	(1) Personal Traits	(2) (1) + Geography	(3) (1) + Cohort	(4) (1) + Firm Type (Size and Ownership)	(5) (1) + Industry Type	(6) All Included
Panel I. Urban as reference						
exp(A)/(exp(A)+exp(B))	76%	78%	85%	76%	80%	89%
exp(B)/(exp(A)+exp(B))	24%	22%	15%	24%	20%	11%
Panel II. Migrant as reference						
exp(A)/(exp(A)+exp(B))	71%	74%	82%	70%	74%	85%
exp(B)/(exp(A)+exp(B))	29%	26%	18%	30%	26%	15%

Table 7 Unexplained and Explained Ratios (with Group Membership)

	(1) <i>Personal Traits</i>	(2) <i>(1) + Geography</i>	(3) <i>(1) + Cohort</i>	(4) <i>(1) + Firm Type (Size and Ownership)</i>	(5) <i>(1) + Industry Type</i>	(6) <i>All Included</i>
<i>Panel I. Urban as reference</i>						
$\exp(A)/(\exp(A)+\exp(B+C))$	49%	46%	66%	49%	49%	60%
$\exp(B+C)/(\exp(A)+\exp(B+C))$	51%	54%	34%	51%	51%	40%
<i>Panel II. Migrant as reference</i>						
$\exp(A)/(\exp(A)+\exp(B+C))$	42%	40%	60%	41%	40%	51%
$\exp(B+C)/(\exp(A)+\exp(B+C))$	58%	60%	40%	59%	60%	49%

Among the inclusion of other variables, the marginal contribution of adding cohort variable has the greatest effect, since it increases explained ratios of column (1) by 9% in Panel I (improving it from 76% to 85%) and 11% in Panel II (improving it from 71% to 82%). By contrast, firm characteristics accounts for the least additional contribution, and geography and industry type share similar marginal effects.

Finally, let us look at the case where group membership, which stands for the classification of the urban worker and the migrant, is considered. As Table 7 shows, when group membership, the variation in the interception of regression models, is considered as the unexplained part, the explained ratio will drop sharply from 70%-89% to 42%-60%. Meanwhile, we also find that the cohort variable is least affected by the inclusion of group membership. Compared to the drop on explained part with group membership by adding geography, firm characteristics, or industry type, the cohort variable brings about the smallest drop (from 85% in Panel I of Table 6 to 66% in Panel I of Table 7 and from 82% in Panel II of Table 6 to 60% in Panel II of Table 7). These results imply that group membership has less impact on the cohort variable. Since group membership is a crucial component of unexplained ratio, we argue that the inclusion of cohort variable will increase explained ratio. By contrast, when geography, firm characteristics and industry type, are added to column (1) of Table 7, there shows no significant increase in explained ratio under group membership. This result implies that if discrimination towards migrants is reflected in the group membership, then the discrimination may largely be related to geography, firm size and ownership, and industry type. These findings are consistent with that of Meng and Zhang (2001) and Appleton *et al.* (2004) who show significant labour market segregation and discrimination in occupation and industry to migrant workers in China.

By comparing the results from Table 6 and Table 7, we can conclude that including group membership will increase the unexplained part of wage differentials between the urban and migrant workers. This group membership leads to labour market segregation in geography, firm characteristics and industry type, and this kind of market segregation and discrimination can be approximated by the institutional arrangement of the household registration system (Hukou) that creates a rural-urban divide.

5. Conclusion

Using Blinder-Oaxaca decomposition method, this study analyzes the influence of personal traits, geography, age cohort, firm characteristics and industry type on wage differential between urban and migrant workers. The results show that, without considering unexplained part resulting from group

membership, up to 85-89% of wage differentials in China's labour market can be explained, which is consistent with the findings in Lee (2012) and Zhang *et al.* (2016). And, if we solely look at the influence of personal traits on wage differential, we find that they explain 71-76% of the wage differential. Among them, human capital variables such as education, work experience and health are important factors determining one's wage.

On the other hand, if group membership is considered, the explained ratios drop prevalently in all the cases to 42-60%. However, among them, the case where the cohort variable is added is least affected. This also suggests that the inclusion of firm characteristics and industry type variables without considering group membership is likely to underestimate the effect of discrimination as the migrants are subject to labour market discrimination and segregation by firms and industries. Likewise, the inclusion of group membership can be a good approximation for the estimation of total effect of discrimination in the Chinese labour market. In China, group membership between urban and migrant workers is mainly due to the institutional arrangement of the Hukou system.

In summary, our findings on the one hand, imply that wage differential of China's labour market is largely accounted for by the difference in human capital level, since personal traits such as education level, work experience, height and health condition are all crucial to determining wages. However, despite the fact that migrants are subject to less educational resources and opportunity to access education, they still have significant higher rates of return to health and work experience. Thus, policies towards improvement in human capital investment and accumulation of the migrants can be an effective means to narrow the wage gap between rural and urban workers. For example, equal access to education for the children of migrants, better health care coverage for the migrant workers, and providing more on-the-job training for the migrants.

Furthermore, we also find that the addition of the cohort variable helps to increase explained ratio, whereas other factors such as geography, firm characteristics and industry type are more accountable for the discrimination towards migrants who are poorly paid due to labour market segmentation under different group membership between the urban and migrant workers. Thus, model specification without considering group membership is likely to underestimate the effect of discrimination. The cohort effect may represent better labour quality of new generations of migrants or better working conditions due to government policy such as the implementation of the Labor Contract Law in 2008. However, the effect of group membership actually reflects the institutional arrangement of household registration (Hukou) system that not only discriminates against the migrants in their identity, wage compensation and social welfare entitlement, but also on their children's

education opportunity and admittance, which significantly imposes a negative effect on the future generation of migrants. Thus, an institutional reform to abolish the Hukou system is perhaps a critical policy to close the income gap between the rural and urban divide and a fundamental of the reform should focus on how to give equal access of public goods and social services for citizens within the same city.¹³

Appendix

Proof of equation (3)

Consider the case where migrant is used as a reference group, wage differential can be expressed as:

$$\begin{aligned} & \overline{INC}_u - \overline{INC}_m \\ &= (e^{\overline{X}_u \hat{\beta}_u} - e^{\overline{X}_m \hat{\beta}_m}) \\ &= e^{\overline{X}_m \hat{\beta}_m} (e^{(\overline{X}_u \hat{\beta}_u - \overline{X}_m \hat{\beta}_m) + (\overline{X}_u \hat{\beta}_m - \overline{X}_m \hat{\beta}_m)} - 1) \\ &= \overline{INC}_m (e^{(\overline{X}_u \hat{\beta}_u - \overline{X}_m \hat{\beta}_m) + (\overline{X}_u \hat{\beta}_m - \overline{X}_m \hat{\beta}_m)} - 1) \text{ which can be alternatively expressed} \\ & \text{as } (\overline{INC}_u - \overline{INC}_m) / \overline{INC}_m = e^{\overline{X}_u (\hat{\beta}_u - \hat{\beta}_m)} e^{(\overline{X}_u - \overline{X}_m) \hat{\beta}_m} - 1. \end{aligned}$$

This equation describes wage differential between urban and migrant workers as a deviation from the average wage level of migrant workers, \overline{INC}_m . We treat $\overline{X}_u - \overline{X}_m'$, $\hat{\beta}_u - \hat{\beta}_m$ and $(\overline{X}_u \hat{\beta}_u - \overline{X}_m \hat{\beta}_m) + (\overline{X}_u \hat{\beta}_m - \overline{X}_m \hat{\beta}_m)$ as three sources of the deviation so we decompose the deviation as three parts influenced by the three factors. We give each part an equal weight so $e^{\overline{X}_u (\hat{\beta}_u - \hat{\beta}_m)} e^{(\overline{X}_u - \overline{X}_m) \hat{\beta}_m}$ can be expressed as a sum of:

- (i) $e^{\overline{X}_u (\hat{\beta}_u - \hat{\beta}_m)} e^{(\overline{X}_u - \overline{X}_m) \hat{\beta}_m}$ where $\overline{X}_u' = \overline{X}_m'$, $\hat{\beta}_u \neq \hat{\beta}_m$ and $(\overline{X}_u \hat{\beta}_u - \overline{X}_m \hat{\beta}_m) + (\overline{X}_u \hat{\beta}_m - \overline{X}_m \hat{\beta}_m) \neq 0$,
- (ii) $e^{\overline{X}_u (\hat{\beta}_u - \hat{\beta}_m)} e^{(\overline{X}_u - \overline{X}_m) \hat{\beta}_m}$ where $\overline{X}_u' \neq \overline{X}_m'$, $\hat{\beta}_u = \hat{\beta}_m$ and $(\overline{X}_u \hat{\beta}_u - \overline{X}_m \hat{\beta}_m) + (\overline{X}_u \hat{\beta}_m - \overline{X}_m \hat{\beta}_m) \neq 0$, and
- (iii) $e^{\overline{X}_u (\hat{\beta}_u - \hat{\beta}_m)} e^{(\overline{X}_u - \overline{X}_m) \hat{\beta}_m}$ where $\overline{X}_u' \neq \overline{X}_m'$, $\hat{\beta}_u \neq \hat{\beta}_m$ and $(\overline{X}_u \hat{\beta}_u - \overline{X}_m \hat{\beta}_m) + (\overline{X}_u \hat{\beta}_m - \overline{X}_m \hat{\beta}_m) = 0$.

$$\begin{aligned} \text{Thus, } (\overline{INC}_u - \overline{INC}_m) / \overline{INC}_m &= [e^{\overline{X}_u (\hat{\beta}_u - \hat{\beta}_m)} e^{(\overline{X}_u - \overline{X}_m) \hat{\beta}_m} |_{\overline{X}_u' = \overline{X}_m'} + \\ & e^{\overline{X}_u (\hat{\beta}_u - \hat{\beta}_m)} e^{(\overline{X}_u - \overline{X}_m) \hat{\beta}_m} |_{\hat{\beta}_u = \hat{\beta}_m} + e^{\overline{X}_u (\hat{\beta}_u - \hat{\beta}_m)} e^{(\overline{X}_u - \overline{X}_m) \hat{\beta}_m} |_{\overline{X}_u' (\hat{\beta}_u - \hat{\beta}_m) = -(\overline{X}_u - \overline{X}_m) \hat{\beta}_m}] / \\ & 3 - 1 \propto e^{\overline{X}_u (\hat{\beta}_u - \hat{\beta}_m)} + e^{(\overline{X}_u - \overline{X}_m) \hat{\beta}_m}. \end{aligned}$$

Notes

- * Yih-chyi Chuang 莊奕琦 is a distinguished professor of the Department of Economics at the National Chengchi University, Taipei, Taiwan. He received his Ph.D. in Economics from University of Chicago in 1993. He was a visiting professor at Georgetown University in 1999 and Fulbright scholar at Fairbank Center for East Asian Research of Harvard University in 2003. From 2005 to 2016, he was invited as a guest professor at Free University of Berlin in Germany during the summer/winter terms. From 2012 to 2015, he served as the Dean of College of Social Sciences and the Director of Taiwan Studies Center at NCCU. His major teaching and research areas are theories of growth and development, education and labour market, and international trade and investment. He can be reached at <yccchuang03@gmail.com>.
- ** Eric Yan (顏扶昌) received his Ph.D. degree in Economics from the Dept. of Economics, Monash Business School, Monash University, Melbourne, Australia in 2012. Since then, he had worked as a postdoctoral researcher at the Dept. of Economics, National Chengchi University and Institute of Economics, Academia Sinica in Taiwan. He can be reached at <fulgent945@hotmail.com>.
1. The number of floating population increased from 25 million people in 1990 to 37 million persons in 1997. According to the National Bureau of Statistics of China, there were around 140 million rural-to-urban migrants in 2008.
 2. In the early 1980s, the household responsibility system, which replaced the production team system as the agriculture production and accounting unit, allowed households to contract land, machinery and other facilities from the collective farms. By the end of 1983, 94.2% of production teams had adopted the system. See, e.g., Lin (1987).
 3. The plan, also referred to as Family Planning Policy, was implemented in 1979 and called for each family to have one child only in order to curb a then-surgeing population and limit the demands for resources that may slowdown the development of the whole economy.
 4. As illustrated in the Twelve Five-Year Plan (2010-2015) and Third Plenary Session of the 18th Central Committee of CCP in November, 2013, the major issues of future economic reform in China are to change the development strategy leaning towards more inward-oriented and deepen the market orientation by using urbanization as a vehicle to narrow rural-urban income gap.
 5. For example, Bound and Johnson (1992), Mincer (1991), Allen (1991), and Krueger (1993) relate wage inequality to technology; Beaudry and Green (2005) relate wage inequality to human capital; Forbes (2001) relates wage inequality to trade that spreads technology; and Altonji and Blank (1999) and Heckman (1998) consider discrimination to be the cause of wage inequality.
 6. Oaxaca & Ransom (1994) show that the decomposition approaches can be further generalized as:

$$\ln \bar{W}_U - \ln \bar{W}_M = (\bar{X}_U - \bar{X}_M)\hat{\beta}^* + \bar{X}_U(\hat{\beta}_U - \hat{\beta}^*) + \bar{X}_M(\hat{\beta}^* - \hat{\beta}_M)$$

where $\hat{\beta}^*$ is the real non-discriminated coefficients of wage structure, which by definition is a weighted average of $\hat{\beta}_U$ and $\hat{\beta}_M$, i.e., $\hat{\beta}^* = \Omega\hat{\beta}_U + (I - \Omega)\hat{\beta}_M$ and Ω is a matrix of weights and I is an identity matrix.

7. See Appendix for detailed derivation.
8. We choose monthly wage above RMB500 as the threshold for full-time worker because RMB500 is the lower bound of minimum monthly wage among those cities and provinces under survey.
9. Urban citizens are guaranteed to received formal education and used to have educational subsidy from their work unit (Danwei), while children of migrants without Hukou cannot gain entry to a school in the city.
10. In 2008, the Labor Contract Law was implemented in China. Since then, the government set the minimum wage and adjust at an average annual growth rate of 15% to 20%, which has significantly increased the wage of young migrant workers.
11. For example, Foxconn, the giant electronics manufacturing subcontractor and the world's second largest private employer after Wal-Mart, employed some 1.4 million workers in China in 2013. Foxconn's Longhua facility in the Shenzhen Special Economic Zone alone hired some 300,000 Chinese migrant workers to do the assembling of IT products, especially for the Apple Company.
12. Magnani and Zhu (2012) also point out that controlling for occupation and industry variables in decomposition may underestimate discrimination effects.
13. In recent years, China's Ministry of Public Security has been considering reforms to the controversial household registration (Hukou) system, including replacing temporary residence permits held by migrant workers in cities with permanent ones. A new measure of the reform requires temporary residents to obtain certain points before becoming permanent residents. China's Ministry of Public Security announced that it had issued 28.9 million new urban residency permits in 2016. However, the new point system will still involve salary, tax payment, education level and years of residence of applicants, which would result in new unequal relations among citizens. Thus, in our view the fundamental of the reform is how to give equal access of public goods and social services for citizens within the same city.

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Research Note

Chinese System of Science & Technology and Cooperation in Science & Technology between Thailand and China¹

*Tang Zhimin**

Panyahpiwat Institute of Management, Thailand

Abstract

This paper intends to fill a gap in the literature on the past performance and future development of cooperation in science and technology (S&T) between China and one of its Southeast Asian neighbours, Thailand. It is divided into two parts: the first part looks at the system of science and technology in China. After an introduction on China's position in science and technology *vis-à-vis* leading countries of the world, it then presents: 1) the organizational structure of Chinese S&T system in terms of major players and sources of funds, 2) its vision for the future, 3) its leading sectors, and 4) its geographic distribution. The second part of the paper discusses the cooperation in S&T between Thailand and China. It covers: 1) key players and mechanism of international S&T cooperation in China, 2) sources of research and development (R&D) funds in Thailand, and 3) major mechanism and areas of S&T cooperation between Thailand and China. The strategic values of S&T cooperation between the two countries are found to be: 1) China as a source of funds and technology, 2) strength of Thailand in selected areas, such as agriculture and medicine, 3) common problems in economic and social development to be resolved by S&T, and 4) position of Thailand as a gateway towards continental ASEAN. The paper concludes that the past performance of S&T cooperation has laid down a strong foundation for the future. The strategic values of S&T cooperation can be fully realized with the development of promising sectors in strategic locations with prospective partners and through potential mechanisms.

Keywords: *cooperation in science and technology, China, Thailand*

1. The Motives of China Proposing the 21st Century Maritime Silk Road

Economic relationship between Thailand and China has attracted increasing attention in the literature, especially in light of industrial capacity cooperation

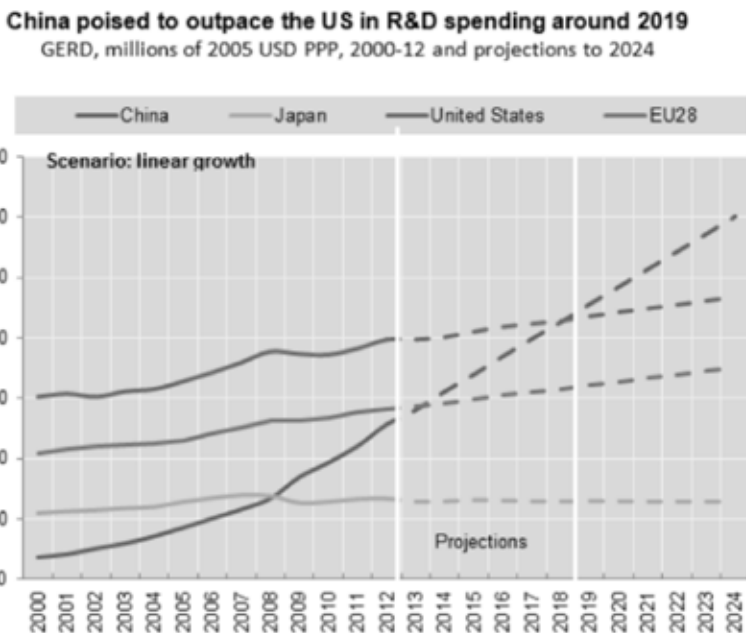
between China and ASEAN and the Chinese One Belt One Road initiative. There is also increasing interest in the innovation capability of Chinese firms (Yip and McKern, 2016). One less covered area, however, is the cooperation in science and technology (S&T) between the two countries. This paper intends to fill this gap with an analysis on its past performance and suggestions for future development.

2. Part I: System of Science and Technology in China

2.1. China as a Rising Power in the World of S&T

China is a rising power in the world of S&T. On the input side, it spent US\$220 billion or 2.1% of its gross domestic product (GDP) on R&D in 2015. According to a report by the Organisation for Economic Co-operation and Development (OECD), the size of China’s R&D expenditure is second in the world in purchasing power parity (PPP) term and is expected to surpass the USA in 2019 (Figure 1). China also has the most R&D human resource in the world, with 1.52 million FTE (full time equivalent) R&D researchers (Table 1), even though its R&D researchers per 10,000 employment still lags behind leading countries in the world (CASTED, 2015).²

Figure 1 Gross Expenditure on R&D of China



Source: *OECD Science, Technology and Industry Outlook 2014*.

Table 1 R&D Human Resource in China and Thailand*

<i>Country</i>	<i>R&D Researcher FTE (mil.)</i>	<i>R&D Researcher /10,000 employment</i>
China	1.52	19.7
USA	1.27	87.4
Japan	0.68	104.7
Russia	0.44	62.2
Germany	0.36	84.2
South Korea	0.35	134.9
Thailand	0.06	9.0

Note: * 2014 figures, except for Thailand which is for year 2012.

Source: *OECD Science, Technology and Industry Outlook 2014* and Ministry of Science and Technology (MOST), Thailand.

On the output side, China is one of the frontrunners in terms of patent for invention and SCI (Science Citation Index). In 2015, it ranked among the top 2 in the world in SCI in seven subject areas (Agriculture, Chemistry, Computer, Engineering, Material Science, Mathematics and Pharmaceutical). It is also ranked No. 1 in terms of patent application and No. 2 in terms of patent granted among all countries for patents registered in China.³

2.2. The Structure of Chinese S&T System

The S&T system in China can be understood in terms of its major players and sources of funds.

2.2.1. Major Players

The major players in the S&T ecosystem spans from national and provincial level units, cross-unit platforms, to enterprises, universities and research institutes. At the national level, the top policy maker is “The Leading Group of National Science and Education” (国家科技教育领导小组), a cross ministry steering group chaired by the Prime Minister. While the Ministry of Science & Technology (MOST) (科技部), makes plans, issues policies and regulations on S&T of the civil side, the State Administration of S&T & Industry for National Defense (SASTIND) (国家国防科工局) plans and regulates R&D and related industry on the side of national defence.

Besides MOST and SASTIND, other ministries and commissions such as the Ministry of Education and Ministry of Industry & Information also manage S&T resources under their jurisdiction.⁴ Other important

organizations at the national level may also include the Chinese Academy of Science (CAS) (中国科学院), Chinese Academy of Engineering (CAE) (中国工程院), and China Association of Science & Technology (CAST) (中国科协). The CAS which plays a very important role in S&T cooperation between Thailand and China is China's highest academic body in science, with 12 local academies and 114 research institutes.⁵ The CAE, on the other hand, is the highest honorary and consulting body for engineering. Similar to CAS, it has a fellow (院士) system. However it does not have its own research institutes. The CAST is a public organization for S&T workers in China.

Most national level organizations have their subordinate units at the provincial and local level, such as the Department of S&T at provincial and municipal levels reporting to MOST, and local academies of CAS. At the grassroots level, S&T resources are distributed in three groups: (1) state-owned universities, research institutes reporting to MOST, SASTIND, other ministries and commissions, CAS, provincial or local governments, (2) state-owned enterprises especially those qualified as High & New Technology Enterprises (HNTE),⁶ (3) the private sector: private universities, private research institutes and private firms that qualified as HNTE.

Some enterprises, universities and research institutes are certified to set up cross unit platforms such as State Key Laboratory (国家重点实验室) for R&D activities and State Incubator (国家级孵化器) for turning innovation into business startup. Another kind of platform is the State High & New Technology (HNT) Industry Development Zone (国家高新技术产业开发区) set up by provincial or local governments, where special policy incentives are given to qualified HNT firms.

2.2.2. Sources of Funds

There used to be two major sources of funds for R&D at the national level: a) various funds from the S&T Plan of MOST (科技部科技计划) (Table 2), and b) "National Natural Science Foundation" (NNSF) (国家自然科学基金) (Table 3).

In 2015, these funds were consolidated into a system of five categories, namely: (1) National Natural Science Foundation (国家自然科学基金), (2) State S&T Special Program (国家科技重大专项), (3) State Key R&D Plan (国家重点研发计划), (4) Technology Innovation Guidance Special Program (技术创新引导专项), and (5) Base & Talent Special Program (基地和人才专项).⁷

Other sources of funds include: departments of the central government beside MOST, provincial and local governments, self-raised funds by universities, research institutes and enterprises, as well as foreign funds from international projects.

Table 2 Structure of Funding in the S&T Plan of MOST

<i>Category</i>	<i>Program</i>
State Program	国家科技重大专项 State S&T Major Project 国家重点基础研究发展计划 (973) State Basic Research Program (973) 国家高技术研究发展计划 (863) State High Technology Research and Development Program (863) 国家科技支撑计划 The State Key Technology R&D Program 国家国际科技合作计划 State International S&T Cooperation
Policy Guidance Program	星火计划 Spark Program (rural development) 火炬计划 Torch Program (commercialization) 国家重点新产品计划 State Key New Product Program 国家软科学研究计划 State Soft Science Research Program
S&T Innovation Base Program	国家（重点）实验室 State Key Laboratory 国家科技基础条件平台 State ST Basic Platform 国家工程技术研究中心 State Engineering Technology Research Centers
Other Special Funds	科技型中小企业技术创新基金 S&T Oriented SME Technology Innovation Fund 科研院所技术开发研究专项资金 Technology Development Fund for Research Institute 农业科技成果转化资金 Fund for Application of Research Findings in Agriculture 科技富民强县专项行动计划 Specific Project for Enriching People and Strengthening County Economy with ST 科技基础性工作专项 Specific Project for S&T Infrastructure 国家磁约束核聚变能发展研究 State Research on Magnetic Confinement Fusion 国家重大科学仪器设备开发专项 State Special Project for Key Scientific Instrument & Equipment 科技惠民计划 Special Funds for S&T Program of Public Wellbeing

Source: S&T Plan of MOST, China.

Table 3 Structure of National Natural Science Foundation (NNSF)

<i>Program</i>	<i>No. of Projects</i>
面上项目 General Project	16709
重点项目 Key Project	625
重大项目 Big Project	20
重大研究计划项目 Big Research Plan	420
重点国际（地区）合作研究项目 Key International Cooperation	105
人才项目系列的青年科学基金项目 Youth Science Foundation	16155
地区科学基金项目 Regional Science Foundation	2829
优秀青年科学基金项目 Excellent Youth Science Foundation	400
国家杰出青年科学基金项目 State Distinguished Youth	198
创新研究群体项目 Innovation Group	38
海外及港澳学者合作研究基金项目 Oversea Scholar	136
国家重大科研仪器研制项目 State Key Equipment	5
联合基金项目 Joint Foundation	580
外国青年学者研究基金项目 Foreign Youth Foundation	107
国际（地区）组织间合作交流项目 International Organizations	384

Source: National Natural Science Foundation (NNSF), China 2013.

2.3. The Vision for the Future

It is interesting to note how the above mentioned policy makers and practitioners in Chinese S&T system would view its future direction. Such a vision for the future is laid out in two important policy documents.

The first document is the State Council “Outline of National Mid & Long Term Development Plan for S&T 2006-2020” (国家中长期科学和技术发展规划纲要) published in 2006. It sets out 11 main areas (e.g. energy, water and mineral resources), 13 major programs (e.g. core electronic devices, high-end generic chips and basic software), and 8 cutting-edge technologies (e.g. biotechnology and information technology) (Table 4) for S&T development in China.

The second is the one recently issued by the Central Committee of CPC and State Council in 2016: “Outline of National Strategy for Innovation Driven Development (国家创新驱动发展战略纲要)”. It envisages a three step development strategy with three milestones: to build China as an “innovation oriented country” in 2020, a “leading innovation oriented country” in 2030 and a “world power of S&T innovation” in 2050 (Table 5).

Table 4 Main Areas, Major Programs, and Technology in Development Plan for S&T 2006-2020

11 Main Areas	<ol style="list-style-type: none"> 1) 能源 Energy 2) 水和矿产资源 Water and Mineral Resources 3) 环境 Environment 4) 农业 Agriculture 5) 制造业 Manufacturing Industry 6) 交通运输业 Transportation Sector 7) 信息产业及现代服务业 Information Industry and Modern Service Industry 8) 人口与健康 Population and Health 9) 城镇化与城市发展 Urbanization and City Development 10) 公共安全 Public Security 11) 国防 National Defense
13 Major Programs	<ol style="list-style-type: none"> 1) 核高基 Core Electronic Devices, High-end Generic Chips Basic Software 2) 大规模集成电路装备 Super Large-scale Integrated Circuit 3) 新一代宽带移动通信 Next Generation Broadband Mobile Telecommunication 4) 高档数控机床制造技术 High-end Numerically Controlled Machine Tools 5) 大型油气煤层开发 Development of Large Oil-gas Fields & Coal-bed Methane 6) 大型核电站 Large Advanced Reactor Nuclear Power Station 7) 水体污染治理 Water Body Contamination Control and Treatment 8) 转基因生物新品种培育 New Genetically Modified Varieties 9) 重大新药创制 Major New Drugs Discovery 10) 重大传染病防治 Prevention and Treatment of Major Infectious Diseases 11) 大型飞机 Large Passenger Aircrafts 12) 高分辨率对地观测系统 High Resolution Earth Observation Systems 13) 载人航天与探月工程 Manned Space Flights & Moon Probe
8 Cutting-edge Technologies	<ol style="list-style-type: none"> 1) 生物技术 Biotechnology 2) 信息技术 Information Technology 3) 新材料技术 Advanced Materials Technology 4) 先进制造技术 Advanced Manufacturing Technology 5) 先进能源技术 Advanced Energy Technology 6) 海洋技术 Marine Technology 7) 激光技术 Laser Technology 8) 空天技术 Aerospace Technology

Source: State Council: Outline of National Mid & Long Term Development Plan for S&T 2006-2020.

Table 5 Three Step Development Milestone of S&T in China

<i>Year</i>	<i>Milestone</i>	<i>Target</i>
2020	Innovation oriented country	A few industries in mid to high value chain R&D 2.5% of GDP, S&T contribution >60% Knowledge intensive service 20% GDP Independent innovation of key technology
2030	A leading innovation oriented country	Main industries in mid to high value chain S&T from follow-up, going side by side to leading R&D 2.8% of GDP
2050	A world power of S&T innovation	Leading in S&T and national defence World leading universities, research institutes and innovative companies

Source: Central Committee of CPC and State Council (2016), Outline of National Strategy for Innovation Driven Development.

2.4. Leading Sectors of S&T in China

China is a very unique country in S&T development. While the government expects only a few of its industries to be in the mid to high position of the value chain by 2020 in the national strategy discussed earlier, China does have quite a few world class S&T achievements. Besides the country is very quick to absorb and adept western technology in the context of the developing world. Both features make cooperation with China in S&T attractive for other developing countries like Thailand.

China's world class achievement is well summarized in a recent speech by President Xi Jinping in the national S&T innovation forum.⁸ In the speech he named 10 "World Class Achievements in Basic Science" (e.g. "theory of continental origin of oil" and "artificially synthesized bovine insulin") and 13 "Breakthroughs in Technology & Engineering" (e.g. "atomic & hydrogen bomb, and satellite" and "super hybrid rice") (Table 6).

The large treasury of S&T achievements in China could be discovered in the following database: (a) the list of five state S&T awards (国家最高科学技术奖), e.g. "State Natural Science Award", and "State Technological Innovation Award";⁹ (b) database of achievements in the S&T plan of MOST, which records the achievement in the funding through the S&T plan as discussed above, classified by subject areas;¹⁰ and (c) database of national S&T commercialization projects listed in industrial sectors.¹¹

Table 6 World Class Achievements and Breakthrough in S&T in China

World Class Achievement in Basic Science (10)	Theory of continental origin of oil 陆相成油理论 Artificially synthesized bovine insulin 人工合成牛胰岛素 Theory of several complex variables 多复变函数论 High temperature superconductivity 高温超导 Neutrino Physics 中微子物理 Quantum anomalous Hall effect 量子反常霍尔效应 Nanotechnology 纳米科技 Stem-cell research 干细胞研究 Biomarkers for early diagnosis of cancer 肿瘤早期诊断标志物 Human genome sequencing 人类基因组测序
Breakthrough in Technology & Engineering (13)	Atomic & hydrogen bomb, satellite 两弹一星 Super hybrid rice 超级杂交水稻 Chinese-character laser phototypesetting 汉字激光照排 High-performance computer 高性能计算机 Three Gorges Project 三峡工程 Manned space flight 载人航天 Lunar exploration 探月工程 Mobile communication 移动通信 Quantum communication 量子通讯 Beidou navigation 北斗导航 Manned deep submergence 载人深潜 High-speed railways 高速铁路 Aircraft carrier 航空母舰

Source: Xi Jinping, “Strive for Building a World S&T Power” (为建设世界科技强国而奋斗), Speech delivered on the National S&T Innovation Forum on 30 May 2016.

2.5. Geographic Distribution of S&T Resource in China

S&T resources in China, however, are unequally distributed geographically. For example, the top five provincial units (Guangdong, Jiangsu, Zhejiang, Shandong and Beijing) account for 51% of R&D personnel in the country (Table 7). The top five provincial units (Guangdong, Beijing, Jiangsu, Shanghai and Zhejiang) account for 54% of patent invention in the country.¹² These provincial units also accounted for the highest R&D expenditure in China (Table 8).

Table 7 R&D Personnel by Provincial Units in China

<i>Provincial Unit</i>	<i>R&D Personnel 1000</i>	<i>Provincial Unit</i>	<i>R&D Personnel 1000</i>
广东 Guangdong	501.7	黑龙江 Heilongjiang	62.7
江苏 Jiangsu	466.2	重庆 Chongqing	52.6
浙江 Zhejiang	311.0	山西 Shanxi	49.0
山东 Shandong	279.3	吉林 Jilin	48.0
北京 Beijing	242.2	江西 Jiangxi	43.5
上海 Shanghai	165.8	广西 Guangxi	40.7
河南 Henan	152.3	内蒙古 Inner Mongolia	37.3
湖北 Hubei	133.1	云南 Yunnan	28.5
福建 Fujian	122.5	甘肃 Gansu	25.0
安徽 Anhui	119.3	贵州 Guizhou	23.9
四川 Sichuan	109.7	新疆 Xinjiang	15.8
湖南 Hunan	103.4	宁夏 Ningxia	8.2
天津 Tianjin	100.2	海南 Hainan	7.0
辽宁 Liaoning	94.9	青海 Qinghai	4.8
陕西 Shaanxi	93.5	西藏 Tibet	1.2
河北 Hebei	89.5	TOTAL	3532.8

Source: MOST 2015, China Science and Technology Statistics Data Book 2014.

Table 8 R&D Expenditure by Provincial Units in China

<i>Provincial Unit</i>	<i>R&D exp. (billion RMB)</i>	<i>Provincial Unit</i>	<i>R&D exp. (billion RMB)</i>
江苏 Jiangsu	148.7	重庆 Chongqing	17.7
广东 Guangdong	144.4	黑龙江 Heilongjiang	16.5
北京 Beijing	118.5	山西 Shanxi	15.5
山东 Shandong	117.6	江西 Jiangxi	13.6
浙江 Zhejiang	81.7	吉林 Jilin	12.0
上海 Shanghai	77.7	内蒙古 Inner Mongolia	11.7
湖北 Hubei	44.6	广西 Guangxi	10.8
辽宁 Liaoning	44.6	云南 Yunnan	8.0
天津 Tianjin	42.8	甘肃 Gansu	6.7
四川 Sichuan	40.0	贵州 Guizhou	4.7
河南 Henan	35.5	新疆 Xinjiang	4.6
安徽 Anhui	35.2	宁夏 Ningxia	2.1
陕西 Shaanxi	34.3	海南 Hainan	1.5
湖南 Hunan	32.7	青海 Qinghai	1.4
福建 Fujian	31.4	西藏 Tibet	0.2
河北 Hebei	28.2	TOTAL	1184.7

Source: MOST 2015, China Science and Technology Statistics Data Book 2014.

Each provincial unit, however, has its unique potential for S&T cooperation with Thailand. It could be discovered through the three database mentioned above: (a) the list of national S&T award winner in provincial units, (b) database of achievements in the S&T plan of MOST, classified in provincial units, (c) database of national S&T commercialization projects listed in provincial units, plus (d) list of HNT development zone & HNT enterprise in provincial units (see more information on HNT in Appendix B).

3. Part II: Cooperation in S&T between Thailand and China

3.1. Key Players and Mechanism of International S&T Cooperation in China

China's position of S&T at the global stage is also strengthened by its active involvement in international S&T cooperation.

At the national level, international S&T cooperation of China is led by the Department of International Cooperation (DIC) of the Ministry of Science and Technology (MOST) (科技部合作司) and a semi-government body called the China S&T Exchange Center (CSTEC) (中国科学技术交流中心). The cooperation is carried out through two major mechanisms: funding and international cooperation base.

The major funding come through the "State International S&T Cooperation Program" (国家国际科技合作专项) of MOST. The program supported 410 projects with a total budget of RMB5 billion in 2013.¹³ Another important source of fund is the "National Natural Science Foundation" (NNSF) (国家自然科学基金). For example in 2013, it supported 105 projects in the program of "Key International Cooperation" (重点国际(地区)合作研究项目), 136 projects in the program of "Research Foundation for Oversea Scholar" (海外及港澳学者合作研究基金项目), 107 projects in the program of "Foreign Young Scholar Foundation" (外国青年学者研究基金项目), and 384 projects in the program of "Cooperation with International Organizations" (国际(地区)组织间合作交流项目).¹⁴ There is also an annual "International S&T Cooperation Award" (国际科学技术合作奖) among the five prestigious state awards for science and technology.¹⁵

Another important mechanism is the "International S&T Cooperation Base" established by local governments, enterprises, universities and research institutes and certified by MOST. They include the "International Innovation Park" (国际创新园), "International Joint Research Center" (国际联合研究中心), "International Technology Transfer Center" (国际技术转移中心), and "International S&T Cooperation Demonstration Base" (示范型国际科技合作基地) (Table 9). These bases provide space, lab & equipment and serve as platforms for international cooperation.

Table 9 International S&T Cooperation Base in China (2015)

<i>Base</i>	<i>Number</i>	<i>Example</i>
International Innovation Park 国际创新园	25	北京国家生物医药国际创新园 Beijing National Biological Medicine International Innovation Park, 2013 Beijing Economic Technology Development Zone
International Joint Research Center 国际联合研究中心	131	干细胞国际联合研究中心 Stem cell International Joint Research Center Peking University, 2007
International Technology Transfer Center 国际技术转移中心	34	中国-东盟国际技术转移中心 China ASEAN International Technology Transfer Center Guangxi ST Information Network Centre, 2013
International S&T Cooperation Demonstration Base 示范型国际科技合作基地	359	成都中医药大学国际科技合作基地 Chengdu University of Traditional Chinese Medicine International S&T Cooperation Base, CDUCTM, 2007

Source: Chinese International S&T Cooperation Base <<http://www.cistc.com>>.

3.2. Sources of R&D Funds in Thailand

From the Thai side, cooperation in S&T with China is supported by various sources of R&D funds. They include funding from the “National Research Council of Thailand” (NRCT) and “Thailand Research Fund” (TRF), autonomous agencies and public organizations of MOST (such as NSTDA, TISTR, GISTDA, and BIOTEC), other ministries (such as MUA, MOI, MOAC, and MOPH¹⁶), and private sectors (Table 10).

3.3. Major Mechanism and Areas of S&T Cooperation between Thailand and China

The full fledged S&T cooperation between Thailand and China can be dated back to 1978 when an inter-government joint committee was setup. Today there are two major coordination mechanisms between the countries: the Inter-Government Joint Committee and the Inter-Department Joint Committee.

The Inter-Government Joint Committee was set up in 1978 and had held 21 meetings by 2014. The counterparts are the Ministry of Science

Table 10 Selected Sources of R&D Funds in Thailand

BIOTEC	National Center for Genetic Engineering & Biotechnology (under NSTDA)
GISTDA	Geo-information & Space Technology Development Agency
HSRI	Health System Research Institute
NIA	National Innovation Agency
NRCT	National Research Council of Thailand
NSTDA	National Science & Technology Development Agency
TCELS	Thailand Center of Excellence for Life Sciences
TISTR	Thailand Institute of Science & Technology Research
TRF	Thailand Research Fund

Source: Author's compilation.

& Technology (MOST) of China and Ministry of Foreign Affairs (MOFA) of Thailand. Its recent focus includes: agriculture, energy, public health, traditional medicine, innovation, IT and scientific cooperation in the GMS (Greater Mekong Subregion). Its major instruments include joint research and personnel exchange programs.

The Inter-Department Joint Committee was set up recently in 2013 and had held three meetings by 2016. The counterparts are Ministry of Science & Technology (MOST) of both countries. Its major instruments are 6 working groups, namely, "Thailand-China Joint Research Center on Railway System", "Space Technology Application", "Technology Transfer Center", "Talented Young Scientists Program (TYSP)", "New and Renewable Energy Cooperation", and "STI Policy Cooperation" (Table 11). The themes of the six working groups also reveal the current direction of S&T cooperation of the two countries.

Various projects of S&T cooperation between Thailand and China can be grouped in the following six clusters:

- Projects initiated by H.R.H. Princess Sirindhorn with Chinese partners such as Yunnan Observatories (YNO) and Institute of Remote Sensing Applications (IRSA) (Table 12).
- Projects of autonomous agencies and public organizations of MOST, e.g. space cooperation and satellite data sharing by GISTDA, agriculture and railway transportation by TISTR.
- Joint research projects funded by NNSF of China and NRCT/TRF of Thailand.¹⁷
- Projects of other ministries, e.g. MOPH or state owned enterprise (SOE).

- Projects of research institutes, e.g. Phuket Marine Biological Center (PMBC).
- Projects of private business, e.g. CP Group.

In conclusion, the major sectors of S&T cooperation between Thailand and China spreads from agriculture, new energy, public health, traditional medicine, to space technology (remote sensing), astronomy and environment. There are also initiatives for cooperation in S&T policy making which would encourage innovation and entrepreneurship.

Table 11 Working Group of the Joint Committee between MOST of Thailand and China

<i>Working Group</i>	<i>Thai Side</i>	<i>Chinese Side</i>
Thailand-China Joint Research Center on Railway System	Thailand Institute of Science & Technology Research (TISTR) National Science & Technology Development Agency (NSTDA) National Science Technology & Innovation Policy Office (STI)	China Southern Railway (CSR)
Space Technology Application	Geo-information & Space Technology Development Agency (GISTDA)	National Remote Sensing Center of China (NRSCC), China Centre for Resources Satellite Data and Application (CRESDA)
Technology Transfer Center	National Science & Technology Development Agency (NSTDA)	DOST Guangxi (Guangxi Academy of Science) (Guangxi ASEAN Technology Transfer Center)
Talented Young Scientists Program (TYSP)	National Science Technology & Innovation Policy Office (STI)	China Science & Technology Transfer Centre (CSTEC)
New and Renewable Energy Cooperation	National Science & Technology Development Agency (NSTDA)	DOST Guangxi
STI Policy Cooperation	National Science Technology and Innovation Policy Office (STI)	Great Wall Enterprise Institute (GEI) Chinese Academy of Science and Technology for Development (CASTED)

Source: MOST Thailand.

Table 12 Projects Initiated by H.R.H. Princess Sirindhorn

<i>Partners in China</i>	<i>Provincial Unit</i>
Yunnan Observatories (YNO)	Yunnan
Institute of Remote Sensing Applications (IRSA)	Beijing
Shanghai Synchrotron Radiation Facility (SSRF)	Shanghai
Institute of Computing Technology (ICT)	Beijing
Institute of Atmospheric Physics (IAP)	Beijing
Institute of Geographic Sciences & Natural Resources Research (IGSNRR)	Beijing
College of Physical Science, GUCAS	Beijing
Institute of High Energy Physics (IHEP)	Beijing
National Center for Nano-sciences & Technology	Beijing
Institute of Earth Environment	Shaanxi
Peking Union Medical College	Beijing
China Medical Board	Beijing

Source: Chulalongkorn University, 2016.

There is a reasonable spread of cooperating partners in various provincial units in China, including S&T centres in China such as Beijing and Shanghai, and southern provincial units which are close to Thailand such as Yunnan and Guangxi.

3.4. Strategic Values and Potentials for Future Cooperation

From interviews with policy makers, researchers and business practitioners in Thailand and China, it is found that the strategic values of S&T cooperation between the two countries are widely appreciated for the following reasons: 1) China is viewed as a source of funds and technology by the Thai side, 2) Thailand has strength in selected areas, such as agriculture and medicine, as viewed by the Chinese side, 3) both countries share common problems in economic and social development to be resolved by S&T, such as economic transition towards value added through innovation, and environment protection, and 4) Thailand is also attractive to Chinese partners as a hub of the AEC, a gateway towards continental ASEAN.

The past performance of S&T cooperation between the two countries has laid down a strong foundation for the future. The strategic value of S&T

cooperation between Thailand and China mentioned above can be fully realized with the development of promising sectors, in potential locations, with prospective partners and through potential mechanisms.

With reference to the 12 “Target Economic Sectors” in the “The National STI Policy & Plan 2012-2021” and recently named “10 New Engines of Growth” of Thailand 4.0 by the Thai government, potential sectors for S&T cooperation between Thailand and China are proposed as: next generation automotive, smart electronics, agriculture & biotechnology, food for the future, robotic, aviation & logistics, biofuels & biochemical, petrochemical, digital, and medicine.

Based on information on geographic distribution of S&T resources in China (see section 2.5), new locations in China for S&T cooperation should be identified, focusing on the unique feature of each provincial unit and expanding connection with the R&D rich provinces such as Guangdong, Jiangsu and Zhejiang.

Based on information on S&T system (see section 2.2), cooperation can be extended from the current partners of research institutes of CAS (Chinese Academy of Science) and universities to various platforms for research and technology transfer, private research institutes, and business sectors with patent or knowhow.

In terms of mechanism of cooperation, while maintaining the practice of personnel exchange and training, as well as joint research projects, new mechanisms may be introduced. They include platforms like joint lab, technology transfer, technology standard development, capacity building for business startup (incubator), and sharing the experience of S&T strategy and policy development.

Appendix A

Data Sources of S&T in China

There are three major sources of S&T information in China: the Ministry of S&T (MOST) (科技部), the Chinese Academy of S&T Development Strategy (CASTED) (中国科技发展战略研究院), and the National Statistics Bureau (NSB) (国家统计局) (Table A1). S&T information in the *Chinese S&T Statistics Date Book* (中国科技统计数据) is organized in terms of “human resource”, “funding”, “output” and “high technology” (Table A2). The “National Innovation Index” assess the innovation capability of the country in terms of “innovation input”, “innovation synergy”, “intellectual property” and “innovation impact” (Table A3).

Table A1 Key Sources of S&T Information in China

<i>Source</i>	<i>Name of Publication</i>	<i>Chinese Name of Publication</i>
MOST	Chinese S&T Statistics Date Book Annual Report of the State Program of S&T Development	中国科技统计数据 国家科技计划年度报告
CASTED	National Innovation Index Report	国家创新指数报告
NSB	Chinese S&T Statistics Yearbook Chinese High Tech Industry Statistics Yearbook	中国科技统计年鉴 中国高技术产业统计年鉴

Note: MOST – Ministry of S&T; CASTED – Chinese Academy of S&T Development Strategy 中国科技发展战略研究院; NSB – National Statistics Bureau 国家统计局.

Table A2 System of S&T Indicators in China

<i>Category</i>	<i>Details</i>
Human Resource	R&D personnel R&D personnel per 10,000 total employment R&D personnel by sector & type of activity R&D personnel by region Graduates by field of study Overseas Chinese students and returnees
Funding	Gross Domestic Expenditure on R&D GERD by source of funds and sector GERD by region Central and local government S&T expenditure Local government S&T expenditure by region
Output	Patent applications filed and granted by SIPO Domestic invention patents by sector Domestic S&T papers by type of institution Chinese S&T papers indexed by SCI, EI and CPCI-S
High Technology	National imports and exports of high-tech products National imports and exports of high-tech products by sectors Main economic indicators of high-tech industry by sectors National high and new technology zone

Source: MOST, *Chinese S&T Statistics Date Book*.

Table A3 Assessment of Innovation Capability of China

<i>Category</i>	<i>Details</i>
Innovation Input	Funding R&D Personnel R&D Institutes
Innovation Synergy	Cooperation between Production, Education & Research Resource Integration (acquisition, absorption & R&D) Joint Innovation
Intellectual Property (IP)	IP Creation IP Protection IP Usage
Innovation Impact	Value Realization (value of new product) Market Power (patent owned, PCT patent proportion) Economic & Social Development (labour productivity, energy consumption)

Source: CASTED, *National Innovation Index Report*.

Appendix B

High and New Technology Enterprises (HNTE) in China

Enterprises may be certified as HNTE based on a list of qualifications, e.g. ownership of core IP, R&D personnel as a proportion of employees, R&D expense as a proportion of annual sales, revenue from HNT products (Table B1). The HNT should also be included in the list published by MOST (Table B2). Qualified enterprises will receive tax incentives (e.g. a corporate income tax rate of 15% instead of the normal 25%, and government grants, etc.).

Table B1 List of Qualification for HNTE

<i>Category</i>	<i>Qualification for HNTE</i>
Ownership of core IP	From proprietary R&D, purchase, donation, acquisition, but not from licensing
Technology	Include in the catalogue of supported HNT (see Table B2)
R&D personnel	10% of enterprise's total employees (no need for college diploma)
R&D expense	5%: SME (small and medium-size enterprises) annual sales <RMB50 million, 4%: annual sales 50-200 RMB million, 3%: annual sales >200 RMB million (record of past 3 years)
Revenue	Revenue from HNT products and services not <60%
Innovation capability	Proprietary IP, Organization of R&D, Usage of S&T results, Growth indicator

Table B1 (continued)

<i>Category</i>	<i>Qualification of HNTE</i>
Firm registration	For more than one year
Clean Record	Clean record of safety, quality and environmental issues in the past year

Source: Ministry of Finance (MOF), State Administration of Taxation (SAT) and MOST – Administrative Measures for Certification of HNTE (2016).

Table B2 Catalogue of the HNT supported by Government

<i>Technology</i>	<i>Details</i>
Electronic & Information (8)	Software (12), Microelectronic (6), Computer and Network (4), Telecommunication (10), Broadcasting and TV (9), New Electronic Components (7), Information Security (8), Intelligent Transportation & Railway Transportation (6)
Biology & New Medicine (7)	Medical Biology (6), Traditional and Natural Medicine (4), Chemical Medicine (5), New Preparation (4), Medical Equipment (6), Light Industry and Chemical Biology (6), Modern Agriculture (5)
Aviation & Aerospace (2)	Aviation (6), Aerospace (8)
New Material (6)	Metal (8), Non-metal and Inorganic (5), High Molecular (6), Biological and Medical (8), Fine Chemicals (4), Materials for Art and Culture Industry (5)
Hi Tech Service (8)	R&D and Design (2), Certification and Standardization (2), IT (3), Specialized Service, IP, E-commerce and Logistics (2), Urban Management and Social Service (4), Cultural Creation (4)
New Energy & Energy Saving (4)	Renewable Clean Energy (4), Nuclear and hydrogen (2), New Energy Transform and Storage (4), High Performance Energy Saving (8)
Resource & Environment (8)	Water Pollution Control (6), Air Pollution Control (5), Solid Waste Processing and Utilization (6), Physical Pollution (2), Environment Monitoring and Emergency (4), Eco-environment protection, Clean Production and Recycling (4), Resource Exploration and Utilization (7)
Advanced Manufacturing & Automation (9)	Industrial Production Process Control (5), Production Safety (3), High Performance Intelligent Instruments and Meters (5), Advanced Manufacturing (6), New Machinery (4), Electric Power System (5), Automobile and Railway Vehicle (5), Ship and Ocean Engineering (2), Culture Industry Upgrading (2)

Source: MOF, SAT, & MOST – Administrative Measures for Certification of HNTE (2016).

Notes

- * Dr. Tang Zhi Min 汤之敏 is Dean of International College, and Director of China ASEAN Studies, Panyahpiwat Institute of Management, Thailand. He received his PhD in economics from Cambridge University. The academic and professional career of Professor Dr. Tang in the past 20 years spanned across the UK, France, USA, Australia, South East Asia, India and Great China. He and his team have won research grants from various government agencies and multinational firms. His recent research interests include market entry strategy in China and AEC, Chinese ODI and MNC in Thailand, and internationalization of RMB. He can be reached at <zmt66@hotmail.com>.
1. This paper is based on information from a consulting project conducted by the author for the Ministry of Science & Technology of Thailand.
 2. For a detailed discussion on the data source of S&T in China, see Appendix A.
 3. Source: Institute of Scientific and Technical Information of China (ISTIC).
 4. A longer list of these other ministries and commissions may include the Ministry of Transport, Ministry of Agriculture, Ministry of Water Resources, State Forestry Administration, Ministry of Land and Resources, National Health and Family Planning Commission, etc.
 5. Source: CAS website retrieved in May 2016.
 6. For details of HNTE, see Appendix B.
 7. Source: MOST 2015 – Plan for Deepening Reform of the Management of S&T Plan Financed by Central Budget.
 8. Xi Jinping, Strive for Building a World S&T Power (为建设世界科技强国而奋斗), speech delivered on the National S&T Innovation Forum on 30 May 2016.
 9. The five awards are: State Supreme ST Award (国家最高科学技术奖), State Natural Science Award (国家自然科学奖), State Technological Innovation Award (国家技术发明奖), State S&T Advancement Award (国家科学技术进步奖) and International S&T Cooperation Award (国际科学技术合作奖). The database can be accessed from the website of the National Office for S&T Awards (国家科技奖励办公室).
 10. It can be accessed through the website of the National S&T Report Service (国家科技报告服务系统).
 11. It can be accessed through the website of the National S&T Achievement Database (国家科技成果转化项目库).
 12. Source: National Innovation Index Report 2014.
 13. Source: Annual Report of the State Program of ST Development 2014.
 14. Source: National Natural Science Foundation.
 15. Peerasak Srinives of Thailand won the International ST Cooperation Award in 2014 for his research in bean seed, a cooperation project between Kasetsart University of Thailand and Jiangsu Academy of Agricultural Science of China.
 16. MUA: Ministry of University Affairs, MOI: Ministry of Industry, MOAC: Ministry of Agriculture & Cooperation, MOPH: Ministry of Public Health.
 17. For example, there are six joint research projects funded by NNSF of China and NRCT of Thailand, and five joint research projects funded by NNSF of China and TRF of Thailand. Each project lasts for three years with a funding of RMB3 million from China.

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Book Review

Book Review

Stephen FitzGerald, *Comrade Ambassador: Whitlam's Beijing Envoy*, Melbourne: Melbourne University Press, 2015, 272 pages.

Stephen FitzGerald was one of the few outsiders who was in China when some of the most momentous events and changes took place there. He was Australia's first ambassador to China following the opening of relations between Canberra and Beijing in 1973, and he served there until 1976. While in Beijing he was also Australia's ambassador to North Korea. Earlier he had travelled to different parts of China as a graduate student and later as a business consultant.

In this very well written book, FitzGerald captures the mood and temper of a defining period in the history of China and Australia. With so much written these days about China as a global economic power, FitzGerald's book covers a period when China was underdeveloped, internationally somewhat isolated, and with a national leadership deeply divided. It was also a difficult and dangerous time in China as a power transition from the men who founded the People's Republic to a new generation of leaders was taking place. More importantly, FitzGerald contends that the recognition of China marked a moment when Australia showed a capacity to move "from insularity and narrow intellectual horizons and racial exclusiveness towards being an open, tolerant and accepting one". Thus, the book is more than just about a changing China. It is also a thoughtful commentary of how Australians see themselves in relation to Asia. But it is the rise of China and its increasing dominance in the Asia-Pacific region that, as the writer argues, created new consciousness and forced Australians to turn their attention to a region they are increasingly a part of. This may not be easy as many Australians still consider their country as culturally European and its security American-backed.

In a way, FitzGerald stumbled into a China career. Growing up in Hobart, a small town in Tasmania, FitzGerald did not know a single Asian until he went to university. Prevailing then was the White Australia Policy which excluded Asian immigration.

On graduating, he joined the External Affairs Department where he found himself assigned to learn China. He was later sent to Hong Kong and Taiwan to continue his language study in a Chinese-speaking environment. But he became increasingly unhappy with the department's two-China policy and support for Taiwan in the United Nations.

FitzGerald resigned from the department and proceeded to the Australian National University. He did a doctoral thesis on contemporary China's relations with Southeast Asia's Chinese.

The Australian government viewed China then as a hostile expansionist power bent on extending its revolution to neighbouring countries. However, a re-think on Australia's foreign policy was taking place especially within the Australian Labour Party (ALP). This reassessment was to lead to a significant shift in Australia's foreign policy and eventually to a recognition of China. Several developments contributed to this review of Australia's position in the region. The most important was what FitzGerald described as leadership of ideas from politicians and the capacity of the Australian people to change. In this Gough Whitlam, the ALP leader, played a major part. As early as 1954 and later as opposition leader he was advocating the recognition of China and a review of how Canberra should relate to its Asian neighbours. And in FitzGerald, Whitlam found someone knowledgeable on China and sharing his vision of an Australia engaging more closely with Asia.

In 1971, Whitlam made an exploratory trip to China, taking FitzGerald with him. Elections were expected soon in Australia and opinion polls showed that the ALP would win. However, even to ALP supporters Whitlam's trip carried some political risks because they were unsure of how an electorate, still largely conservative and long led to believe that the Vietnam War was evidence of China's military expansionism, would react. But in fact the Vietnam War was already becoming very unpopular in Australia and anti-war protests were occurring in the streets and campus throughout the country.

FitzGerald gives a fascinating account of the meeting between Whitlam and Zhou En-lai. Chinese officials as well as a host of journalists from Australia and China were present at the meeting. As FitzGerald describes it, there was Whitlam's intellect, skill and knowledge to duel lightly with Zhou's charm, intelligence and fluency of thought across a range of international issues such as China's fear of being encircled by the United States, its concern about the resurgence of Japanese militarism, the war in Vietnam, and even the threat to China of the Soviet Union. Zhou did not accept that the Western security alliances were defensive in nature, pointing out that the Southeast Asia Treaty Organization (SEATO) was used by Australia to justify its involvement in the Vietnam war.

While the Australian visiting party was still in China, President Nixon announced that he would be visiting Beijing. The announcement could not have been better timed for Whitlam.

Whitlam, on taking office after winning the 1972 elections, established diplomatic relations with Beijing and appointed FitzGerald ambassador to China. It was a choice that Australia's Department of External Affairs was

not too enthusiastic about as many considered him too young at age 34 and too junior in service ranking for such an important posting. Later, FitzGerald was to find out how age was seen in China when he met Dong Biwu, acting President of China. Dong, aged 86, when intimating that he planned to retire in a couple more years to come urged FitzGerald to meet younger Chinese leaders. When asked who he should meet, Dong suggested the 75-year old Zhou En-lai.

FitzGerald met Zhou on two other occasions, including one when he accompanied Prime Minister Whitlam in October 1973. In the two meetings, Southeast Asia came up. At that point in time, no Southeast Asian countries had diplomatic relations with China. Whitlam, therefore, held that Australia's developing relations with China could prove to be a positive example for Southeast Asian governments towards normalizing ties with Beijing. At the same time, Whitlam advised the Chinese that Beijing's continued links with communist parties in Southeast Asia countries made it difficult for the governments in the region to establish diplomatic relations with China. There was also the question of the overseas Chinese communities in the region where some governments including the US were wary that overseas Chinese could be a potential fifth column for Beijing.

Zhou, on his part, reiterated that China was not expansionist and had no intention to use ethnic Chinese in Southeast Asia for interventionist purposes. Instead, he had urged them to be citizens and integrate into the local societies. Zhou maintained that problems in Southeast Asia could be settled only with complete US withdrawal from the region.

The book offers absorbing reading of the writer's travels in China. In 1966, while on a study tour as a graduate student FitzGerald encountered what he observed as the frenzy and cruelties unleashed by Mao Tze-tung's Cultural Revolution. It was a time when no one seemed sure as to who was in charge, and selected political leaders and intellectuals became targets of the Red Guard's anti-revisionist campaign. Among those "purged from society" were Liu Shaoqi, the *de jure* head of state, and Deng Xiaoping, a former party secretary-general. Many were killed by Red Guards who had gone on a country-wide rampage destroying cultural relics and religious buildings. FitzGerald arriving in Changsha with a party of Australian students came close to being sentenced to death by the Red Guards and was rescued only by the timely arrival of the People's Liberation Army (PLA). FitzGerald had tried to defend a fellow Australian member detained for throwing away a Mao memorabilia. On the same trip, FitzGerald described a terrifying moment during a flight when both the pilot and first officer left the flight deck unattended to read passages from *Quotations of Mao* to the passengers. It was almost with a touch of comic that FitzGerald related the incident and of many others in the book.

Some years later FitzGerald found himself in another unnerving situation when he was in Tientsin barely 140 km from the epicentre of a massive earthquake. The hotel where FitzGerald stayed was severely damaged and the wife of Gough Whitlam was slightly injured. She was travelling with Whitlam who had just been dismissed as Australia's Prime Minister. The Tangshan earthquake in 1976 which killed an estimated 500,000 was seen by many Chinese as a portent and indeed, a few months later, Mao the man who led the Chinese communist movement to victory in China passed away.

Although FitzGerald sees himself as a friend of China, he viewed events in the country objectively. On his return to Australia after completing his term as ambassador he joined the Australian National University (ANU) and was head of the Contemporary China Centre and for a while acting head of the Far Eastern History Department. He was regularly invited by various outside institutions to speak on China. Following the Tiananmen events in Beijing in 1989 when troops crushed a students' protest, FitzGerald spoke in support of the pro-democracy movement in rallies organized in various cities of Australia.

In the concluding chapters of the book, FitzGerald reflects on significant shifts in attitude towards Asia that he believes have taken place in Australia. Immigration numbers from Asia have risen; there are more intermarriages between existing inhabitants and immigrants and greater social interaction of the various groups. But he is concerned that there is still another Australia, one that is conservative and does not want change. He is critical of Australian leaders who allow politics that are inward-looking when dealing with Asia and indeed are "xenophobic, inhumane in attitudes to refugees, and slyly racist". Nevertheless, he is optimistic that Australia's changing approach to the Asian region and the country's growing acceptance of the enmeshing of the good of its European inheritance and the advantages of its natural region is a social transformation that is too strong to reverse. And to him it was engaging with China that marked the beginning of this change.

Lee Kam Hing
Institute of China Studies
University of Malaya

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