Rui YANG, Meng XIE

Leaning toward the Centers: International Networking at China's Five C9 League Universities

Abstract Scholarly relations between developed and developing countries have long been characterized by imbalances and asymmetries. The “centers” in the North give direction, provide models, produce research and function as the pinnacles of the academic system while institutions in developing countries copy their development from the “centers.” Recently, the academic world is becoming more multi-polarized, forcing a reconsideration of traditional concepts and theories. China is a good example. One effective approach has been to actively engage with the international community. This article reviews international networking at five C9 League universities. It finds that Chinese universities benefit from global engagement, with an imbalance between their engagement with developed and developing countries. As Chinese power rises, such an imbalance appears increasingly inappropriate.

Keywords globalization, international networking, C9 League

Introduction

Universities started as truly international institutions. With only minor exceptions, universities all over the world stemmed directly from the European medieval tradition, both in terms of their organizational patterns and their approaches to both knowledge and pedagogy. Since the start, universities always flowed across national borders. During the long past, scholarship was almost the only reason for universities to communicate internationally (Altbach, 1998). The present 21st century era of globalization has put the international dimension of universities on steroids. Internationalization has now become an imperative for almost all institutions of higher education, and few can avoid its impact. With a complex

Rui YANG (✉), Meng XIE

Faculty of Education, University of Hong Kong, Hong Kong, China
E-mail: yangrui@hku.hk

set of “boundary-breaking” tendencies entailed by globalization (Postiglione, 2005), higher education leaders around the globe are seeking new social orders and institutional rules in developing and sustaining partnerships that move across cultural and national borders. Both traditional and new higher education providers adopt international cooperation as a strategy to build up the capacity and competency of their institutions to seek resources internationally for staff and student development and to cope with the ever-changing global trends and agendas (Abbott, 2006).

The contemporary globally integrated economy is characterized by dynamic competition, with emerging economies such as BRICS countries (Brazil, Russia, India, China, and South Africa) becoming strong competitors to traditional developed countries. Universities, especially those of world-class status, have become an important dimension of global competition based on a market economy in the present knowledge society (Shin & Kehm, 2013). In sharp contrast to the past, what characterizes the contemporary exchanges and cooperation among universities is their strong orientation toward international competition and market share, resulting especially from the increasingly intensified shortage of financial resources and marketization. In order to enhance their influence, visibility and market share, universities now reach out proactively to the international community. They take a variety of factors into consideration, and their success depends also on their locality, resources, strategies, as well as on how they perceive their contexts and their positioning.

The reform and opening-up policy has transformed China into a global power within a relatively short period of time, and by extension, it has also changed the world substantially. China has initiated a new wave of reform to establish a world-class higher education system to support its international competition. It has taken policy and organizational initiatives to encourage its top-tier universities to engage in global collaboration and competition. Following the Projects 211 (initiated in 1995), and 985 (initiated in 1998), nine universities have banded together since 2009. They are named “C9 League” and sometimes dubbed the “Chinese Ivy League.” Sitting at the top in the Chinese higher education system in terms of both teaching and research, members of the C9 League are often seen as role models by their domestic peers. They accounted for 3% of China’s researchers, received 10% of the nation’s research expenditure, and produced 20% of academic publications and 30% of total citations between 2001 and 2010 (Eastern stars, 2011, February). They are the main force in

China's global engagement in higher education.

Formed in 2009, the C9 League is modelled on the American Ivy League. Comprising China's most renowned and oldest universities, it is an alliance of nine universities in Chinese mainland: Tsinghua University, Peking University, Harbin Institute of Technology, University of Science and Technology of China, Fudan University, Zhejiang University, Nanjing University, Shanghai Jiao Tong University, and Xi'an Jiaotong University. The member institutions communicate with each other to foster better students and share their resources so as to better commit themselves to world-class excellence. Set in a context of international higher education and built upon the researchers' earlier work on internationalization, this article examines the global engagement and networking of five C9 League member institutions (due to the availability of their information on-line) using the reported information listed on their websites as empirical evidence.

The Political Economy of International Networking in Higher Education

It is to some extent ironic that while the university continues to house most scholarly activities, it remains under-theorized, "compared with the Firm, the Government, or even the Army" (Marginson, 2006, p. 65). Although internationalization of higher education has recently caught much attention in academic circles and even among people from the business world, research on international networking among universities remains lacking. Most of the theories have only been formulated recently, with evident roots in long established views in the social sciences.

The educational exchange relationship between developed and developing (not accidentally non-Western) countries has tended to be characterized by imbalances and asymmetries. Traditional forms of North-South relationships have long existed between donors and recipients. International networking between universities in developed and developing nations has many constraints, arising from historical factors, of which many continue to pose barriers to genuine partnership. The relationship is located in a historical context of colonialism. Today, neo-colonialism is the relationship that developing countries have to deal with.

There are three forms of colonialism in education: classical, internal and neo-colonial. Classical colonialism is the traditional form of control that emerged in the colonies. Colonial schools were created to give support to the colonial power,

not to fulfil the needs of the local population or the colony. They taught the values and religions of the empire and served to increase the control of the colonists over the native population. Local people were educated to improve the dialogue between the indigenous population and the empire. Internal colonialism is the domination of a “nation” (defined geographically, linguistically, or culturally) within the national borders of another nation-state by another group or other groups. Some of these dominated “nations” may at one time have been independent. But they are not at this time independent. Neo-colonialism perpetuates the old and unwelcome colonial powers. Nations involved in neo-colonial relationships have formally become independent, but as they continue to depend strongly on the support of the industrialized nations, the notion of independence is an illusion. The state only appears outwardly independent. In reality, its economic and political systems and policies are directed from the outside.

Education is one essential element of the neo-colonial structure. It helps to maintain and to some extent perpetuate colonial links, as a result of the accelerated developments in science and technology in developed nations and the further lagging behind in the same fields in developing countries because of their shortage of scientists and technicians. This leads to the present international educational equation in which certain institutional and intellectual “centers” give direction, provide models, produce research, and in general function as the pinnacles of the academic system. At the opposite end of the spectrum are universities that are peripheral in the sense that they copy development from abroad, produce little that is original, and are generally not at the frontiers of knowledge. Educational institutions located in developing countries are strongly dependent on the institutions located in the centers (Altbach, 1998).

Another critical factor in understanding current international networking among universities is, as noted above, the historical roots of the university in nearly all parts of today’s world. Elements of universities’ long historical traditions directly affect global higher education and relations among academic institutions internationally. The German research university model and the American “multiversity” are among the most powerful academic influences worldwide of the past two centuries. The major expansion of universities from their European and North American heartland occurred from the mid-19th century to the present time, mainly through colonialism. Countries that escaped colonial domination and that established universities during this period adopted Western models, in some cases jettisoning indigenous institutions, as exemplified

in China, Japan and Thailand (Altbach & Selvaratnam, 1989). The most widely adapted contemporary American university system is based on an amalgam of elements, the English collegiate model, the German research concept, and the American tradition linking the university to society in terms of teaching, service and research. Academic systems in other countries have similarly evolved over time, and have all incorporated Western models and practices.

One legacy of this historical context is the language of instruction and research. English continues to dominate as the language of scientific communication worldwide. Many non-English speaking countries have instituted English as a key language of instruction. In a growing trend, some programs now allow studies in English in China and elsewhere (Kuroda, 2014; Wallitsch, 2014). As the main language of the Internet, the status of the English language has been strengthened even further. Major international websites operate in English, and a significant proportion of scientific communication takes place in English. Since language involves the dominance of ideas, not simply a tool of communication, this affects the content of curriculum and the form and substance of methodologies, approaches to science, and scholarly publication (Yang, 2012b). The power of English impacts the role of indigenous languages in the developing world, and forms part of the cultural and political environment of international education.

Meanwhile, the contemporary academic world is becoming more multi-polarized. A critical mass of non-Western scholarship is forcing a reconsideration of traditional concepts and theories. The latest work in research fields is often done at many more centers of scholarship than before. Some East Asian societies have made impressive achievements. For example, Chinese science has come into its own in a way that few believed would be possible. In the 1970s, China ranked 34th in the number of scientific articles cited internationally. China's international ranking increased from the 38th in 1979, to 23rd in 1982, 18th in 1992, 15th in 1989, 12th in 1988 and 5th in 2003 (Li, 2005, pp.3, 66; Donovan, 2000). The number of peer-reviewed papers published by Chinese researchers rose 64-fold over the past 30 years, overtaking Japan and the United Kingdom in 2006 to become the world's second largest producer of research papers. Jonathan Adams, a research evaluation director at Thomson Reuters, calls China's growth "awe-inspiring" (Moore, 2010, para. 8), while Marginson (2008) describes China as "remaking the knowledge economy landscape" (para. 4).

A Brief Trajectory of China's International Networking in Higher Education

As Knight and de Wit (1995) correctly detect, little research has been done on the historical roots of the wave of internationalization of higher education. This is even more the case in China. It is, however, important to link the generally acknowledged focus on internationalization of education in today's world to the original roots of the university, and to place the present developments in an historical perspective.

China's history as an ancient educational center in the region, if not the world, dates the internationalization of higher education back to Confucius, paralleled by a long history of educational exchange. However, modern Chinese higher education, similar to that in other non-Western countries, started with the introduction of elements of a Western higher education system. In this process, collaborations and fusions have long existed between this introduced Western culture and scholarship, and indigenous Chinese cultural values and educational traditions.

From the late Qing dynasty, internationalization gradually occurred at the institutional level through various cultural reforms and revolutions. Nonetheless, the question of how to treat foreign cultures properly, and how to manage the relationship between foreign and traditional cultures, is still debated in Chinese academic circles. Indeed, conflicts between indigenous and Western cultures have been a long-standing common problem in non-Western societies (Carnoy, 1976; Arnove, 1980; Branson & Miller, 1992), especially in those countries with long and rich cultural traditions.

Similar to cultural debates, the introduction of modern Western higher education was intermittent, although deepening gradually overall. Once China's defenses were broken in the 1840s (Hsü, 1990), it became impossible to contain Western science and technology. The Self-Strengthening Movement's *tiyong* formula (essential Chinese learning married to Western science and technology) dominated higher education, requiring introduction of foreign technology on the one hand and retention of the traditional cultural spirit on the other. Thus while many engineering schools were established, no teaching of Western philosophy and culture initially occurred in institutions of higher learning. After the Sino-Japanese War of 1894–1895, some Chinese began to realize that China

lagged behind not only in technology but also in culture and education. The debate on whether China needed to be substantially Westernized emerged, the classics were abolished, and the whole higher education system and its philosophical underpinnings began to reflect Western influences. Tensions between Chinese traditions and Western influences deepened and broadened in the first half of the 20th century (Hayhoe, 1996).

After the founding of the People's Republic of China, in the context of the Cold War, educational exchanges between the two blocs were prohibited. Internationalization was confined to the eastern bloc, with a special focus on the former Soviet Union. Historical statistics demonstrated that from 1949 to 1966, seventy-seven higher education delegations and 325 people visited other countries. China sent 10,670 students abroad numbering roughly 600 per annum (Ji, 1994, p.321). The vast majority of these visits were to the former Soviet Union and East European countries.

For a decade, during the Cultural Revolution (1966–1976) China's education was totally separated from other parts of the world, having no way to internationalize (Zheng & Yu, 1994). Only after China adopted the reform and opening policy in 1979 did the internationalization of higher education become a real prospect. In fact, international exchange in China's higher education restarted immediately after the Third Plenary Session of the Eleventh Central Committee in December 1978, which decided that China would start sending students abroad to study as well as host some foreign students itself. However, a good understanding of international exchange in higher education did not occur until December 1983 when Deng Xiaoping called for China's education to be geared toward the world. Higher education internationalization then became a conscious target, indeed, a development strategy. Its importance was enhanced by the *Decision on the Reform of China's Educational Structure* and further by the *Outline of China's Educational Reform and Development* (Central Committee of the Communist Party of China, 1985, 1993).

Overall, the past three decades have seen several different stages in the internationalization of higher education in China. The first occurred before 1985 when China resumed its limited contact with other countries and began to expand its associations internationally once more. A striking feature of this stage was that educational exchange activities began to separate themselves from politics. The Central Government played a key role in seeking exchanges, and also established various programs and controlled overall planning.

Since 1985, as devolution increased in China's higher education system, provincial governments and individual institutions of higher education gained more autonomy in internationalization activities. Institutional exchanges grew swiftly. Institutes under the then State Education Commission, for example, established institutional cooperative programs with more than 300 universities in about 20 countries by the end of the 1980s. While institutional linkages grew rapidly, central and provincial governments increasingly restricted their role to ensuring quality control and efficiency.

The period from the 1990s to the present may justly be seen as the "golden time" for internationalizing China's higher education. Although it may be still comparatively weak internationally in terms of scale and extent, China has gradually established a comprehensive program of higher education internationalization, of which the main components include sending personnel (students, teachers, and administrators) abroad for training; receiving foreign students; exchanging scholars; cooperating in administration and research; holding and participating international conferences; introducing foreign investments into Chinese higher education; and implementing educational assistance to other less developed countries, especially in Africa.

Contemporary International Networking at Five C9 League Universities

China has made remarkable achievements in higher education in recent years. Since the 1990s, Chinese higher education policies have emphasized the quest for world-class universities. The Program for Education Reform and Development in China (1993), the Education Act of the People's Republic of China (1995), Projects 211 and 985, and the dramatic expansion of Chinese higher education starting from 1999 reflect a fervent desire to "catch up" with the West. This desire reflects larger changes in Chinese society as China reforms its economy to adopt market principles. A desire for internationally competitive universities provides the impetus for China's best institutions to follow the lead of European and North American universities and embrace "international" norms.

However, China's notion of world-class status is imitative rather than innovative. In striving for "international" standing, top Chinese universities compare themselves with their prominent Western peers such as Oxford and Yale. Their reaching out and engagement in international competition and

collaboration therefore focus overwhelmingly on the West. The catch-up mindset since the 19th century remains strong in China. Chinese higher education institutions are still chasing after their peers in the “centers” mainly in North America and Europe. It is becoming increasingly clear that they are doing so with their own ambitions of establishing a strong higher education system that is supportive of the policy initiative of building national strength through science and education (Yang & Welch, 2012). They are establishing effective global networks and strategic collaboration with global international partners, especially with the most prestigious ones. Chinese national flagship higher institutions have proactively embraced the practice in the West, especially in the United States.

Within China, however, there has been a great divide between institutions. Cross-border collaboration and exchange has been dominated by top universities which are well facilitated to reach out to the international community. Their capacity to connect globally has been strongly supported by national policy initiatives such as Projects 211 and 985 and the quest for world-class universities in terms of both financial and human resources (Shin & Kehm, 2013). A small number of research universities are selected and intensively supported by national programs. C9 league universities, as China’s top institutions, are the first to be selected by Projects 211 and 985, as shown in Table 1 below. They have also received political support directly from the central government to enhance their internationalization and global engagement.

All C9 League universities are striving for global visibility and impact, and are vigorously establishing international networks to enhance their cooperation with world renowned institutions, research centers and enterprises. For example, with the purpose of becoming a world-class university, Peking University has adopted “promoting platforms of exchange” as its fourth most important strategy. The university realizes the strategic importance of creating effective platforms from which it can gain access to Western culture and cutting-edge knowledge and innovation. Other institutions have a similar understanding and have identified their corresponding strategies. According to their official web-based data, Tsinghua University, Peking University, and Nanjing University have established university-level partnerships with respectively 228, 268, and 248 international peers. Their partners are spread around the globe. Shanghai Jiao Tong University and Xi’an Jiaotong University have 136 and 145 international partner institutions in Asia, Europe, Oceania, North and South America respectively as of July 2014.

Table 1 Years of Establishment and Global Ranking of C9 League Institutions

University	Year Founded	Project 985 Phase I	Project 985 Phase II	Project 985 Phase III	THE	QS	ARWU
Shanghai Jiao Tong University	1896	1.2	0.6	2.6	301–350	123	151–200
Xi'an Jiaotong University	1896	0.9	0.6	1.5	–	372	301–400
Zhejiang University	1897	1.4	0.7	2.64	301–350	165	151–200
Peking University	1898	1.8	0.9	4.0	45	46	151–200
Nanjing University	1902	1.2	0.6	2.6	251–275	175	201–300
Fudan University	1905	1.2	0.6	2.6	201–225	88	151–200
Tsinghua University	1911	1.8	0.9	4.0	50	48	151–200
Harbin Institute of Technology	1920	1.0	–	–	–	495–500	301–400
University of Science and Technology of China	1958	0.9	0.6	1.8	201–225	174	201–300

Notes: a) The unit of 985 project fund is billion RMB; b) THE (Times Higher Education) ranking is based on the 2013/2014 exercise, QS (Quacquarelli Symonds) ranking is based on the 2013 exercise, and ARWU (Academic Ranking of World University) is based on the 2013 exercise by Shanghai Jiao Tong University.

Although their global networks span the world, C9 League universities appear to have a strong desire to collaborate with the best-known, top-ranked higher education institutions and research centers that are mainly concentrated in North America and Europe. For example, Tsinghua University keeps its tradition of building strategic partnerships with MIT, Stanford, Harvard, Cambridge, Oxford and other world top-tier universities. Students at Tsinghua gain access to distinguished international education programs (e.g., degree programs, exchange programs, summer internships and joint research activities) which have been jointly developed with these prestigious universities. Tsinghua actively participates in the forward-looking and very high-level scientific research cooperation, which not only contributes to the improvement of Tsinghua's scientific research level, but also helps Tsinghua enhance its international reputation.

Also, more than 60% of five C9 League universities' international partnerships are in the North American and European heartlands. This suggests that China's top universities look to the best institutions in major countries such as the United

States, the United Kingdom, Germany, France, Canada and Australia, as illustrated by Fig.1 and Fig. 2 below. Such a bias toward Western counties is hardly surprising considering the facts that these countries are the most developed economically and technologically; that historically modern universities are deeply rooted in the heritages these countries share; and that contemporary global higher education has been dominated by the standards set by the institutions in such “centers.” While the Chinese have paid attention to many parts of the world, international engagement and collaboration of the C9 League institutions has favored prominent Western universities particularly.

Fig. 1 Number of Partner Institutions in North and South American Countries

Fig. 2 Number of Partner Institutions in European Countries

Factors contributing to this biased situation are many. Fundamentally, the global dominance of the Western model is the context in which China's best universities engage themselves internationally. To a great extent, the North American-European university model determines the direction of change at China's top universities. In particular, C9 League institutions are looking to the most elite United States universities for standards, policy innovation and solutions to solve their own development problems (Yang, 2013). The sources for China's reform ideas are often external. China's entry into the WTO ensures that international rather than traditional domestic approaches to higher education are used. There has been a strong impetus to be in line with the best European and North American institutions, aiming at transforming China's top universities into globally competitive universities (Mohrman, 2008). In reality, collaboration with prestigious international partners means high quality research and productivity. This has become the normal practice of C9 League universities, as remarked by Professor Xiaojing Ma, who has first a Ph.D from the University of Edinburgh and later held a Professorship at Cornell University and now serves as the Associate Dean of the School of Life Sciences and Biotechnology at Shanghai Jiao Tong University:

China hasn't been a research powerhouse like the US. Most of the time people don't readily recognize publications solely out of China. But if you have international collaborators, especially well-known collaborators, audiences outside China tend to read the article. Then, therefore, the chances of citing it are higher.... 10 years ago, we were happy with publication. Now everyone realizes that's not enough. We need to produce quality papers that people will read, will cite and have potential implications for science or practical applications. (Morgan, 2013, p. 2)

Indeed, the C9 League institutions have benefited from international collaboration, evidenced by the dramatic growth in their international publications, paper citations and continuous improvement in global rankings. For instance, China's highly respected Tsinghua University and Peking University have been ranked within the world's top 50 by both the *Times Higher Education* and Quacquarelli Symonds (QS), with Tsinghua as 36th and Peking as 41th in the 2014 World Reputation Rankings by the *Times Higher Education*, and 46th and 48th respectively in QS 2013 World University Rankings. While it is necessary to note the flaws in such ranking systems, it is still fair to say that such

impressive performances by China’s top institutions indicate, at least to some degree, the great achievements they have made.

In comparison with the overrepresentation of North American and European partners, Asian peers are much less visible, yet are becoming increasingly important in the international engagement at C9 League universities. In general, around 30% of their international partners are based in Asia. For C9 League universities, the geographical location of an institution is an important factor in their selection of international partners. It is easier to establish research groups with institutions that are geographically closer. With recent impressive higher education development in East Asia, C9 League universities are establishing closer partnerships with their peers in the region such as those in Japan, Korea, Chinese Hong Kong, Singapore and Chinese Taiwan, even including some in less developed ASEAN nations (see Table 2). However, the most significant partner in Asia has always been Japan, which has long developed a highly sophisticated higher education system and has been a powerhouse in world science and technology for decades.

Table 2 Five C9 League Universities’ Partner Institutions in Asian Countries

	Japan	Korea	Singapore	Malaysia	Vietnam	Israel	Others
Tsinghua University	27	9	2	1	4	4	13
Peking University	33	18	2	4	2	3	13
Shanghai Jiao Tong University	6	6	0	0	0	0	0
Nanjing University	29	30	2	1	0	3	7
Xi’an Jiaotong University	44	11	3	2	0	0	0

The C9 League universities have also established partnerships with international organizations and multinational corporations. As members of international associations such as the Association of Pacific Rim Universities (APRU), the Association of East Asian Research Universities (AEARU), the International Alliance of Research Universities (IARU), China’s top universities play an active role in addressing regional and global problems such as climate change and global security. Such collaboration helps Chinese universities position themselves globally. More and more prestigious multinational enterprises, such as Siemens, Microsoft, Toyota and the Boeing Company, work

with Chinese research universities, often in the form of joint research centers or laboratories. For example, Lucent Technologies Inc. and Fudan University have jointly established a laboratory funded by the enterprise. The research conducted under such collaboration is often cutting-edge. A variety of forms of collaboration between C9 League universities and international enterprises exist ranging from knowledge exchange, joint development, overseas licensing to technology transfer, and cooperation funding, to name but a few.

Three Major Issues

International networking is critically significant for C9 League universities to position themselves in the contemporary global system which is unfair politically and biased culturally. The harsh reality was formed historically, and thus is difficult to change. In order to win the race, China needs to be in it first. In this aspect, China's approach to internationalizing its top universities has featured proactive engagement, with particularly focus on the North American and European regions. This has proven to be effective. By engaging with the world, China's higher education has successfully established itself, with continuous remarkable progress made by its best universities. Accordingly, their global influence keeps growing. Global engagement has also facilitated them to foster global vision and perspective among their leaders, academics and students. However, based on our longstanding professional observation and academic enquiry, three major issues could be identified as obstacles to the healthy future development of global engagement at China's flagship universities:

First, international engagement at China's best universities remains overly dominated by relations with Western institutions. Indeed, this is in continuity with China's policy of learning from the West since the 19th century. It has been not only necessary for China's survival but also strategically effective. Since the opening and reform policy was implemented, there has been a shift from previous reliance on Soviet experience to acceptance of Western (especially American) policies and practices, often without fully understanding the consequences of such changes. University reforms in China today are a combination of externally imposed standards forcing China to adopt international (usually Western, and often American) models of education and administration, as well as voluntary and even enthusiastically acceptance of foreign standards of academic excellence. Most of the international models for reform used by Chinese universities are based on the

American experience and gained through educational exchange as well as international collaboration. This is even more the case with China's most prestigious institutions such as Peking, Tsinghua, and Fudan Universities.

The unreserved adoption of Western (especially United States) policy and practice may not be totally appropriate for a country with a very different history and cultural traditions. As Mohrman (2005) has correctly pointed out, at a minimum Chinese universities could benefit from studying the problems that have plagued American universities, learning from the examples of what not to do in the effort to reform China's higher education institutions. There is an urgent need for critical examination of the long-term consequences of grafting American academic practices onto a Chinese base. The American higher education is rooted in its history, culture and social needs in ways that serve the American society.

With strikingly different cultural values and heritages, the Chinese need to look at knowledge and its production outside China more critically. Will Chinese academics continue to look outside their borders for standards of excellence, implying that Western educational norms are superior and that Chinese universities remain inferior? This touches on the longstanding issue in Chinese education that indigenous Chinese wisdom and the imported Western knowledge have never been on an equal footing. It reminds us that real knowledge is only produced by some particular countries in a particular way (Appadurai, 2001). Currently, China lacks sufficient will to challenge the phenomenon of Western educational system and structures continuing to define education for the rest of the world, and by extension, define what knowledge is and who may claim competence in it.

Second, higher education is not only an integral part of national power, but also a significant form of soft power. The concept of soft power was first introduced by the Harvard University political scientist Joseph Nye (1990), who borrowed what Peter Bachrach and Morton Baratz called the "second face of power" much earlier. Soft power is the ability to get what you want through attraction rather than coercion or payments. It arises from the attractiveness of a country's culture, political ideals, and policies. It uses a different type of currency to engender cooperation. The soft power of a country rests primarily on three resources: its culture, its political values, and its foreign policies (Nye, 2004). Universities can develop their own soft power, such as international student enrolments, visiting scholars from foreign countries, and academic and scientific exchange, that may reinforce official foreign policy goals. International students usually return home with a greater appreciation of their host countries'

values and institutions. The millions of people who have studied in other countries constitute a remarkable reservoir of goodwill for those host countries. Many of the former students eventually wind up in positions where they can affect policy outcomes that are important to their host countries.

During the era of the Cold War, the ideological, political, and economic power struggle between the United States and Soviet Union dominated much of international higher education relations. Industrialized nations viewed higher education as another battleground for the hearts and minds of the world, particularly in the Third World. Assistance programs, scholarships, the translation and reprinting of books, the provision of foreign aid, and other initiatives were all seen as part of Cold War political strategies. While the situation has significantly changed, such a legacy of the politics of the Cold War lingers on. Politics remains essential to international academic relations. National interests and agendas, on all sides, remain involved in academic cooperation. The many government-sponsored scholarship programs that provide opportunities for international study often combine elements of altruism and national interest. Australia's Colombo Plan scholarship program, Germany's Deutsch Akademische Austauschdienst and the German Marshall Fund, the Japan Foundation for the Promotion of Science international programs, America's Fulbright programs, Humphrey scholarships, and others are all examples.

As Nye (2004) points out, China has already emerged as a giant of Asia, and even of the world. There are increasing signs of the expansion of China's soft power resources. One important area of Chinese soft power is the realm of higher education. Training future generations of intellectuals, technicians and political elites from other nations is a subtle but very significant form of soft power. This was the role of Great Britain as its imperial zenith and of the United States even since the 1950s, and now China increasingly fills this role (Shambaugh, 2005). While Chinese universities have had relatively little impact on their prioritized developed countries, their impact on the developing world has already been much evident, often achieved by provincial institutions (Yang, 2012a). The most systematically planned soft power policy so far involves building up the Confucius Institutes worldwide to spread the teaching of Mandarin Chinese and Chinese culture around the world (Liu, 2007). The institutes are a small but significant part of what seems to be the equivalent of a soft-power offensive via the promotion of Chinese language and culture, as well as preparing the way to raise Mandarin Chinese towards the status currently enjoyed by English. The

more successful the institutes are, the more potential for them to be used as agents of Beijing's foreign policy in future (Yang, 2007).

China is especially rich in soft power resources, and has much to contribute to the world community. This has become more important at the moment when human society is confronted with serious issues of sustainable development, and cultural conflicts. Higher education has a critical role to play here. This is also the level of height that China's higher education should aim at in its international exchange and cooperation. In this regard, Chinese universities are particularly well positioned, as Confucianism responds to a range of problems and issues facing Western societies with increasing subtlety and persuasiveness (Tu, 2002). Through promoting Eastern knowledge westward, they contribute uniquely to the global community, and establish themselves at the same time. There is a possibility of a deep-level foundation for creative thinking about a global human future that brings together aspects of the Chinese and Western philosophical heritages, an approach to human persons, knowledge and democratic development that is fundamentally different from those of Enlightenment thought (Hall & Ames, 1999), the neo-realism of Samuel Huntington (1993) and rights-based liberalism (Hayhoe, 2005).

While whether or not Confucianism might well become the salvation of the social sciences remains to be seen, such ideas open up hopes for genuine and profound forms of understanding and cooperation that embrace the spiritual, cultural, intellectual, and scientific aspects of knowledge and human life. They could enable us to move beyond the concepts of deterrence and the balance of power in neo-realism, and the overriding emphasis on a free market in neo-liberalism, into a dialogue over how to create a better world that is open to cultural and epistemological inputs from diverse regions and civilizations (Hayhoe, 2005), helping to understand how Chinese culture and Chinese epistemological traditions are beginning to have an impact on the mainstream thought and thus contributing broadly to global debates about the future of the human community. Such an understanding facilitates a reassessment of the moral and spiritual responsibility of the university as a knowledge institution (Wilshire, 1990; Schwehn, 1993), and contributes to readdressing the under-theorized university. A close scrutiny, however, reveals that China's current international engagement has not aimed high enough to work towards these goals. With such a shortage, it would not be surprising if future Chinese world-class universities lack substance.

Except for the Confucius Institutes, there has been a shortage of attention paid

to everyday interactions between Chinese universities and their foreign counterparts. Neither the Ministry of Education nor individual institutions have a clear understanding of the strategic role played by universities in the projection and enhancement of soft power. In an age of information, international education exchange and cooperation falls squarely under the rubric of soft power, and winning hearts and minds still constitutes an important part of the international higher education equation. Commensurate with its recent rise in economic and political power, China needs to enhance its concurrent soft power. Governmental tensions ebb and flow but connections between institutions of higher education are a steady and civilizing influence.

This needs to be understood in a historical context. Since the mid-19th century, China has been at the receiving end of the eastward movement of Western knowledge. The function of higher education institutions in absorbing knowledge has been emphasized. With the rise of China as a global power, the function of Chinese universities to project Eastern/Chinese knowledge westward needs to be considered seriously in their international exchange and collaboration, especially when there is a growing interest in China for study over traditional non-English speaking destinations. China is now one of the most popular study destinations for international students. By 2012, China had surpassed other leading countries, such as France, Germany, and Australia, to take up the number 3 spot among the world's most-popular study destinations for higher education studies (ICEF Monitor, 2014, June). Other facts also point to the growing significance of Chinese higher education including the fact that it is the largest system in the world in terms of sheer numbers and the second largest producer of scientific papers. They pave the way further for Chinese universities to play their soft power role in their routine international networking. This requires well-thought out long-term planning. Such careful thinking has been largely absent in the global reaching-out of Chinese universities.

Third, China badly needs to rapidly strengthen its international engagement in the humanities and social sciences. The contemporary social research has been dominated by the West. There has long been a tendency in non-Western nations to imitate the West (Kuhn & Weidemann, 2010), promoting the influence of a "captive mind" (Alatas, 1972), whose way of thinking is imitative and uncritical. Many indigenous theoretical contributions from non-Western regions are marginal in the mainstream. China is no exception. Many Chinese social researchers look to the West for ideas about institutions and policies and about

how they work in other jurisdictions. While China has a rich heritage of social thought, few scholars can articulate the relevance of Chinese classical social values. Since the West came to China with immense prestige during Qing dynasty, China's social traditions have been packaged poorly in light of westernization. This becomes increasingly inappropriate against a backdrop of a rising China. Integrating Chinese and Western ideas is urgently needed. It is high time to internationalize China's humanities and social sciences.

As one of the world's largest producers of social research outcomes, China's social researchers have not achieved the emerging visibility of their natural science and engineering peers in the international community. Few publications produced by Chinese social scientists have appeared in international citation indices (Cheng, 1991; Deng, 1995; Dirlik, Li, & Yen, 2012), an assessment that has become increasingly important in the evaluation of research in natural, technological and medical sciences, but has not been popularly employed as an effective means in social sciences, precisely because Chinese social scientists rarely publish internationally. China produced 116,700 Science Citation Index publications in 2008, but only 3,210 Social Science Citation Index publications; among them, only 1,125 had their first authors from China (Yang, 2012b). This is basically due to the varied ideologies, paradigms and discourses inherent in the humanities and social sciences, their high dependency on language to convey their meanings, and the fact that domestic considerations are given more weight in these fields (Altbach, 1998).

However, all signs indicate that in the 21st century, China's opening and reform policy is going to continue. An urgent task for China is to raise the level of internationalization of its social science research, as an indicator of its intent to integrate with the international scholarly community. China's social research needs to understand both the strengths and the limitations of Western theories and methods, resulting from their specific times and spaces. When Western social theories are applied into the Chinese context, they need to be modified, often substantially. The modification could only be done successfully by those who know both the Chinese and the Western academic discourses deeply. Chinese social researchers thus need to develop their unique perspectives and values based on rich local experience, an awareness of their local society and culture. Such a sense of locality should aim to achieve indigenization and international dialogue at the same time. It represents a call for diversity, and is therefore a necessary step toward a synthesis of unity and diversity. Great efforts are needed to avoid being unreceptive

to external sources of intellectual nourishments. Only by so doing could it allow Chinese social researchers to seize the initiative in identifying the real needs of their local societies and in setting up their own research agendas and targets.

Indeed, our turbulent and unpredictable times are ideal for such localized struggles to create new forms of knowledge and power, free from the tyranny of massive and totalizing ideologies (Sieber, 1981; Kothari, 1987; Brenkman, 1987). Chinese social researchers need to respond to this momentous challenge, rather than taking the rationality and progressiveness of science as an obvious fact. Well positioned by the wealth of its unique cultural heritages and its huge demographic and geographical size with a sufficient center of gravity to operate with relative autonomy, China's contemporary social experience has provided its social scientists with ideal opportunities to implement the enormous potential for a melding of values from Western academic traditions with aspects of Chinese traditional scholarship (Hayhoe, 2001).

However, as Liu and Liu (2009) have found, based on their analysis of Social Science Citation Index publications, mainland Chinese social researchers have much less international visibility compared with both close neighbors in Japan and Korea and with brothers and sisters in Chinese Hong Kong and Chinese Taiwan. Top tier Chinese mainland universities compare poorly with their peers in the region. Their findings have been confirmed by the most recent study by Jin (2014). What we have found in today's C9 institutions also echoes such findings. In general, although increasing consistently, international collaboration in social research remains a far cry from those in natural and engineering sciences among mainland Chinese flagship universities. While it is critically important for Chinese social researchers to understand political inequity and cultural bias (Qin & Zhang, 2008), to simply resist such criteria is not a wise choice. Instead, it is strategic for them to become familiar with the rules so as to win the game ultimately. This is certain to be an arduous task. But it is a rough and bumpy road that China has to take in order to produce work that is globally significant.

End Remarks

There are several reasons why China's leading universities have become the partners of choice for so many of the world's most distinguished universities: the large size of China's population, its significant role on the world stage, and its rapidly growing economy. But an essential ingredient is China's increasing

investment in its top universities and the leadership's recognition that outstanding universities can be engines of economic growth at a time when too many Western countries are reducing investment in their flagship universities and when Japan seems disinclined to increase the scientific capacity of its greatest institutions of higher education, the leaders of China are strategic in recognizing that substantial investment in Chinese universities is conducive toward future economic and cultural advancement. To pursue world-class status, Chinese universities need to go beyond their current approach to international exchange and cooperation, featured especially by seeking joint-ventures or acquiring more star professors from overseas. They must develop a deep understanding of their "Chineseness" that distinguishes themselves from others.

Few decisions of the 20th century have had as profound an impact on the 21st century world as Deng Xiaoping's announcement of the open-door policy in 1978. Deng was prophetic in his ambition to bridge minds by sending Chinese students to study overseas and by encouraging Chinese universities to exchange and cooperate with their counterparts worldwide. Three and a half decades later, the same mixture of vision and boldness is required. For every person working on a Chinese university campus as an academic or an administrative staff, ambition is also needed to support academic partnerships that create knowledge and address the crucial issues facing the global community. It is especially so when China plays an increasingly global role. China's top universities are best positioned to answer Mencius' call to get the most talented individuals from all corners of the globe and teach and nourish them. To do so, Chinese universities should reach out, far and wide, to embrace the entire world.

China's international networking is contextualized in the contemporary global knowledge network, a powerful and unequal international knowledge system featured by a center-periphery divide among nations. With the exponential growth of the internet and the status of the English language as a global language, the network has even substantially strengthened its functions (Yang, 2012b). For historical reasons, it is overwhelmingly dominated by the West. As a non-Western society, China faces additional challenges that make building an effective university system more difficult. There is a tension in the need for the Chinese academic system to lean toward the centers within the global knowledge network. China's best universities are on the horns of a dilemma: While they are playing a crucial role in national economic and social development, they find themselves at a disadvantage in the global network. The problems of looking outward and inward

at the same time are substantial, particularly when combined with immense pressures to contribute directly to national development and to participate in the international system (Altbach, 1998). This is a predicament felt almost on a daily basis by China's top-tier universities. In this sense, international networking could be a double-edged sword that has to be managed with great care, a broad and long vision as well as a strong sense of responsibility.

References

- Abbott, M. (2006). Competition and reform of the New Zealand tertiary education sector. *Journal of Education Policy*, 21(3), 367–387. doi: 10.1080/02680930600600663
- Alatas, S. H. (1972). The captive mind in development studies: Some neglected problems and the need for an autonomous social science tradition in Asia. *International Social Science Journal*, 24(1), 9–25.
- Altbach, P. G. (1998). *Comparative higher education: Knowledge, the university and development*. Hong Kong, China: Comparative Education Research Centre, University of Hong Kong.
- Altbach, P. G., & Selvaratnam, V. (Eds.). (1989). *From dependence to autonomy: The development of Asian universities*. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Appadurai, A. (2001). Grassroots globalisation and the research imagination. In A. Appadurai (Ed.), *Globalisation* (pp. 1–21). Durham, NC: Duke University Press.
- Arnone, R. F. (1980). *Philanthropy and cultural imperialism: The foundations at home and abroad*. Bloomington, IN: Indiana University Press.
- Branson, J., & Miller, D. (1992). Schooling and the imperial transformation of gender: A post-structuralist approach to the study of schooling in Bali, Indonesia. In R. Burns & A. Welch (Eds.), *Contemporary perspectives in comparative education* (pp. 223–264). New York, NY: Garland.
- Brenkman, J. (1987). *Culture and domination*. Ithaca, NY: Cornell University Press.
- Carnoy, M. (1976). *Education as cultural imperialism*. New York, NY: Longman.
- Central Committee of the Communist Party of China. (1985). 中共中央关于教育体制改革的决定 [Decisions on educational system reform]. 北京, 中国: 外文出版社 [Beijing, China: Foreign Languages Press].
- Central Committee of the Communist Party of China. (1993). 中国教育改革和发展纲要 [Outline for reform and development of education in China]. 北京, 中国: 人民出版社 [Beijing, China: People's Press].
- Cheng, K.-M. (1991). Challenging the North-South paradigm: Educational research in East Asia. In International Institute for Educational Planning, UNESCO & Institute of International Education, Stockholm University (Eds.), *Strengthening educational research*

- in developing countries* (pp.135–140). Stockholm, Sweden: Royal Swedish Academy of Sciences.
- Deng, Z. L. (1995). 社会科学的规范化与本土化: 学术讨论会辑要 [A summary of the symposium on the normalization and indigenization of social studies]. 中国社会科学季刊 [*Chinese Social Sciences Quarterly*], (10), 164–165.
- Dirlik, A., Li, G. N., & Yen, H.-P. (Eds.). (2012). *Sociology and anthropology in twentieth-century China: Between universalism and indigenization*. Hong Kong, China: The Chinese University Press.
- Donovan, B. (2000). A glimpse of journals publishing in China. *Learned Publishing*, 13(2), 128–129. doi: 10.1087/09531510050145470
- Eastern stars: Universities of China's C9 League excel in select fields. (2011, February). Retrieved July 26, 2014, from <http://www.timeshighereducation.co.uk/415193.article>
- Hall, D. L., & Ames, R. T. (1999). *The democracy of the dead: Dewey, Confucius, and the hope for democracy in China*. Chicago, IL & La Salle, IL: Open Court.
- Hayhoe, R. (1996). *China's universities 1895–1995: A century of cultural conflict*. New York, NY: Garland.
- Hayhoe, R. (2001). Lessons from the Chinese academy. In R. Hayhoe & J. Pan (Eds.), *Knowledge across cultures: A contribution to dialogue among civilizations* (pp.323–347). Hong Kong, China: University of Hong Kong, Comparative Education Research Centre.
- Hayhoe, R. (2005). Sino-American educational interaction from the microcosm of Fudan's early years. In C. Li (Ed.), *Bridging minds across the Pacific: U.S.-China educational exchanges, 1978–2003* (pp. 25–47). Lanham, MD: Lexington Books.
- Hsü, I. C. Y. (1990). *The rise of modern China*. New York, NY: Oxford University Press.
- Huntington, S. P. (1993). The clash of civilizations? *Foreign Affairs*, 72(3), 22–49. doi: 10.2307/20045621
- ICEF Monitor (2014, June). *China now the world's third most-popular study destination*. Retrieved July 28, 2014, from <http://monitor.icef.com/2014/06/china-now-the-worlds-third-most-popular-study-destination/>
- Ji, M. M. (Ed.). (1994). 中国高等教育改革与发展 [*Higher education reform and development in China*]. 北京, 中国: 高等教育出版社 [Beijing, China: Higher Education Press].
- Jin, Z. Y. (2014). 东亚地区社会科学学术水平比较研究: 基于文献被 SSCI 收录情况的定量分析[A comparative study of the social science research fields in East Asia: Based on the bibliometric analysis of SSCI publications]. 科学学研究 [*Studies in Science of Science*], 32(2), 161–169.
- Knight, J., & de Wit, H. (1995). Strategies for internationalization of higher education: Historical and conceptual perspectives. In H. De Wit (Ed.), *Strategies for internationalization: A comparative study of Australia, Canada, Europe and the United States of America* (pp. 5–32). Amsterdam, The Netherlands: EAIE.
- Kothari, R. (1987). On humane governance. *Alternatives: Global, Local, Political*, 12(3), 277–290. doi: 10.1177/030437548701200301

- Kuroda, C. (2014). The new sphere of international student education in Chinese higher education: A focus on English-medium degree programs. *Journal of Studies in International Education*, 18(5), 445–462. doi:10.1177/1028315313519824
- Kuhn, M., & Weidemann, D. (Eds.).(2010). *Internationalization of the social sciences: Asia-Latin America-Middle East-Africa-Eurasia*. New Brunswick, NJ: Transaction.
- Li, C. (Ed.). (2005). *Bridging minds across the Pacific: U.S.-China educational exchanges, 1978–2003*. Lanham, MD: Lexington Books.
- Liu, F. (2007). 孔子学院风靡全球 [*Confucius Institutes worldwide*]. Retrieved March 21, 2008, from <http://culture.people.com.cn/GB/87423/6631528.html>
- Liu, L., & Liu, N. C. (2009). 1978–2007 年我国大陆与我国台湾, 韩国, 日本高校 SSCI 论文的比较研究 [Comparative analysis of SSCI publications of universities in Chinese mainland, Chinese Taiwan, South Korea and Japan from 1978–2007]. *高等教育研究 [Journal of Higher Education]*, 30(12), 17–23.
- Marginson, S. (2006). The Anglo-American university at its global high tide. *Minerva*, 44, 65–87.doi: 10.1007/s11024-005-5399-2
- Marginson, S. (2008). *China: Rise of research in the Middle Kingdom*. Retrieved November 6, 2014, from <http://www.universityworldnews.com/article.php?story=20080814152535508>
- Mohrman, K. (2005). Sino-American educational exchange and the drive to create world-class universities. In C. Li (Ed.), *Bridging minds across the Pacific: U.S.-China educational exchanges, 1978–2003* (pp. 219–235). Lanham, MD: Lexington Books.
- Mohrman, K. (2008). The emerging global model with Chinese characteristics. *Higher Education Policy*, 21(1), 29–48.
- Moore, M. (2010). *China to lead world scientific research by 2020*. Retrieved November 6, 2014, from <http://www.telegraph.co.uk/news/worldnews/asia/china/7075698/China-to-lead-world-scientific-research-by-2020.html>
- Morgan, J. (2013). *China on the fast track*. Retrieved November 7, 2014, from <http://www.timeshighereducation.co.uk/features/china-on-the-fast-track/2009923.article>
- Nye, J. S. Jr. (1990). *Bound to lead: The changing nature of American power*. New York, NY: Basic Books.
- Nye, J. S. Jr. (2004). *Soft power: The means to success in world politics*. New York, NY: Public Affairs.
- Postiglione, G. (2005). Questioning center-periphery platforms. *Asia Pacific Journal of Education*, 25(2), 209–225. doi: 10.1080/02188790500338138
- Qin, H. X., & Zhang, R. J. (2008). SSCI 与高校人文社会科学学术评价之反思 [Reflection on SSCI and evaluation of university seniority in social scientific research]. *高等教育研究 [Journal of Higher Education]*, 29(3), 6–12.
- Schwehn, M. R. (1993). *Exiles from Eden: Religion and the academic vocation in America*. New York, NY: Oxford University Press.
- Shambaugh, D. (2005). Return to the Middle Kingdom? China and Asia in the early twenty-first century. In D. Shambaugh (Ed.), *Power shift: China and Asia's new dynamics* (pp. 23–47). Berkeley, CA: University of California Press.

- Sieber, S. D. (1981). *Fatal remedies: The ironies of social intervention*. New York, NY: Plenum.
- Shin, J. C., & Kehm, B. (Eds.). (2013). *Institutionalization of world-class university in global competition*. Dordrecht, The Netherlands: Springer.
- Tu, W-M. (2002). Beyond the Enlightenment mentality. In H. Y. Jung (Ed.), *Comparative political culture in the age of globalization: An introductory anthology* (pp. 251–266). Lanham, MD: Lexington Books.
- Wallitsch, K. N. (2014). *Internationalization, English medium programs, and the international graduate student experience in Japan: A case study* (Unpublished doctoral dissertation), University of Kentucky, Lexington, KY.
- Wilshire, B. (1990). *The moral collapse of the university: Professionalism, purity, and alienation*. Albany, NY: State University of New York Press.
- Yang, R. (2007). China's soft power projection in higher education. *International Higher Education*, 46, 24–25.
- Yang, R. (2012a). Internationalization, regionalization and soft power: China's relations with ASEAN member countries in higher education. *Frontiers of Education in China*, 7(4), 486–507. doi: 10.3868/s110-001-012-0025-3
- Yang, R. (2012b). Scholarly publishing, knowledge mobility and internationalization of Chinese universities. In T. Fenwick & L. Farrell (Eds.), *Knowledge mobilization and educational research: Politics, languages and responsibilities* (pp. 185–197). New York, NY: Routledge.
- Yang, R. (2013). Indigenizing the Western concept of the university: Chinese experience. *Asia Pacific Education Review*, 14(1), 85–92. doi: 10.1007/s12564-013-9254-0
- Yang, R., & Welch, A. (2012). A world-class university in China? The case of Tsinghua. *Higher Education*, 63(5), 645–666. doi: 10.1007/s10734-011-9465-4
- Zheng, D. Y., & Yu, L. (1994). 中国高等教育史 [History of Chinese higher education]. 上海, 中国: 华东师范大学出版社 [Shanghai, China: East China Normal University Press].