June 2017

Higher Education Development in India and China: South Asian, Sinic, and Pan-Asian alternatives

Hantian Wu
Ontario Institute for Studies in Education of the University of Toronto, wuhantian7@gmail.com

Neville Panthaki
Independent Researcher, npanthaki@sympatico.ca

Follow this and additional works at: http://ir.lib.uwo.ca/cie-eci

Recommended Citation
Available at: http://ir.lib.uwo.ca/cie-eci/vol46/iss1/3

This Research paper/Rapport de recherche is brought to you for free and open access by Scholarship@Western. It has been accepted for inclusion in Comparative and International Education / Éducation Comparée et Internationale by an authorized administrator of Scholarship@Western. For more information, please contact tadam@uwo.ca.
Higher Education Development in India and China: South Asian, Sinic, and Pan-Asian alternatives
Le développement de l’enseignement supérieur en Inde et en Chine: Des alternatives sud-asiatiques, chinoises et pan-asiatiques

Hantian Wu, Ontario Institute for Studies in Education, University of Toronto
Neville Panthaki, Independent Researcher

Abstract
This study investigates the development of higher education in India and China over three time periods: colonial India and semi-colonial China, the Cold War during which India was “non-aligned” and “new China” embraced Communism; and the period after India’s neoliberal economic reforms and China’s “reform and opening-up.” Our study focuses on the second period when the rationales for post-independence higher education policies were intimately connected to sovereignty. A historical cross-comparative analysis is being employed to discern similarities and differences between India’s and China’s development of higher education systems. The purpose of our study is to contextualize the sociopolitical philosophies that guided the development and transformation of higher education systems in India and China with reference to their vision as non-Western civilizations. We utilize this historical analysis to discuss whether India and China will remain peripheral in the global system of knowledge production, or provide distinct South Asian, Sinic, and/or Pan-Asian alternatives in the future.

Résumé

Keywords: higher education; India; China; development; Cold War, centre-periphery
Mots-clés : enseignement supérieur ; Inde ; Chine ; développement ; Guerre Froide ; centre-périphérie

Introduction
India and China have their own historical heritage in higher education (HE) development, and their experience of HE modernization has been different from that of the West. In this paper, we seek to develop a comparative analysis of how the historical context has shaped the development of modern HE systems of India and China. The history of HE development in both countries can be divided into three periods: (1) colonial India before its independence (1947) and semi-colonial China before the Communist Revolution (1949), (2) the period after India’s independence (1947) and China’s Communist Revolution (1949), and (3) the period after India’s neoliberal economic reforms (1991) and China’s “reform and opening-up” policy (1978). Our main focus is the second
period when “non-aligned” India and “isolated” China developed their HE systems within the environments of respective government initiatives, which sought to assert postcolonial sovereignty and path independence within all social and economic sectors of the nation. During this period of great dynamism in both India and China, alternate-to-Western visions of modernity and development were conceptualized and became the basis for policy formulation and long-term strategic planning. We also consider the pre-independence education traditions of these two ancient civilizations as essential to the analysis of HE development in both countries.

Altbach (2001) has argued that although both India and China had made significant progress at the end of the 20th century, these two countries nevertheless remained “gigantic peripheries” in the international system of knowledge production. Altbach pointed out that “all contemporary universities are based on the Western model, regardless of their locations” (p. 200), and that “no developing country has made a serious attempt to build a new university model” (pp. 200–201). This present structure and operation of the modern university has clearly been derived from a model of the Western experience. Having become the normative global standard for HE, this model of the university was adopted by India and China (Kapur & Perry, 2014; Mahbubani & Chye, 2015; Yang, 2014). Indeed, it has been repeatedly noted that “no viable alternatives to the [Western] university have emerged […] and that all modern institutions of HE […] have common roots in the European historical experience” (Altbach, 2006, pp. 121–122). However, given their civilizations and historical contributions, is it not possible that contemporary India and China might develop a South Asian, Sinic, or possibly a Pan-Asian alternative within the world knowledge system? We employed a historical cross-comparative analysis to discern similarities and differences of HE development in India and China, considering their respective civilization patterns, modernization processes, postcolonial political ideological roots, and development strategies especially during the Cold War period. The comparative analysis may make it possible to anticipate their potential future role in the world system of knowledge production.

The purpose of this study is to understand the current challenges faced by India and China as they seek to enhance their respective worldwide cultural influence and status in the world knowledge system through the ongoing development of their HE systems. Within the article, we concentrate on the macro-historical mapping of national strategies of HE development in India and China. Our three research questions are: (1) How have history and context shaped the approaches and strategies for HE development in India and China? (2) How do these specific historical dimensions of HE inform their contemporary approaches to HE development? (3) Will India and China remain peripheral to the HE development, or will they bring fresh epistemological and institutional patterns that may shape a global university model in future?

A Brief Review of Relevant Literature

As emerging economies with the world’s first and second largest HE systems, India and China together have recruited about 25% of the world’s HE-level students (Altbach, 2009a). In 2014, India had overtaken the United States in HE enrollment, becoming the world’s second largest HE system in terms of student numbers with an enrollment of 20 million (Altbach, 2014). In China, from the early 1900s to the late 2000s, its HE enrollments increased from 5 million to 27 million (Altbach, 2009b). As two of the most rapidly growing economies, both India and China have regarded HE as the key to national development. Altbach (2009b) argued that although “both countries are giving priority to HE to produce highly educated personnel and high quality research” (p. 39), India and China’s current importance in the world knowledge system “is largely unrelated to their own policies but results from the exodus of students and professionals to the West […]
since the 1970s” (p. 43). He went on to suggest that neither India nor China have taken advantage of their rich indigenous intellectual and academic traditions.

During its colonial period under British rule, India’s HE system remained fragmented, compartmentalized within ethno-religious boundaries. The British spent few resources on HE, restricting it to the development of an India-wide system for the licensing of colonial administrators (Altbach, 2014). Post-independence, India began systematic reforms to implement a national model of HE under central (federal) as well as state (provincial) control. However, government defence spending severely contracted education budgets. India was involved in a series of regional conflicts with China, Pakistan, and Sri Lanka, which was coupled with a series of provincial insurgencies. This amounted to nearly the entire Cold War period. As Altbach (2014) noted, the present situation regarding funding of Indian HE remains unchanged: “despite considerable rhetoric in the past few years about India’s HE ‘takeoff’ and the link between HE and recent economic growth, there is little evidence that [its] economic success has had much effect on improvements in HE” (p. 504).

In terms of China’s modern HE development, Yang (2011; 2013) pointed out that tensions still exist between China’s traditional educational model and the imposed Western models. From a historical perspective, Chinese educational institutions had a fundamentally different relation with the state compared to the situation in the Western model rooted in the European medieval universities (Yang, 2011). In terms of the present situation, China’s policy in HE development, to some extent, inherited the philosophical core of its reform in the 19th century (Yang, 2011), following the mentality of “keeping the Chinese substance and adopting Western techniques for their usefulness [zhong ti xi yong].” He concluded that “the development of Chinese modern universities has always been confronted with the absence of both classical and modern ideas of university;” while “Chinese long-standing traditions never attempted to seek the ontological significance of knowledge, top priority has always been given […] to practical demands” (Yang, 2011, p. 352). Above all, India and China as two emerging economies with increasing worldwide influence and rapid growth in both the economy and HE, their respective histories play a significant role in present HE development. Considering their respective historical roots related to HE development and present challenges in enhancing global influence and international status, it seems appropriate to seek answers from history for providing suggestions to both countries for their future actions and strategies. Therefore, it is necessary to investigate and compare the historical processes of HE development in India and China to further reveal their influences.

**Theoretical Framework**
The theoretical framework developed for this paper was informed by dependency theory and the centre-periphery model. We regard India and China as “gigantic peripheries” in HE (Altbach, 2001, p. 199) while noting how that status is now changing. Zha (2014) noted that there is a direct correlation between a strong state and HE development. Using this logic, we suggest that after 70 years of post-independence socioeconomic development, contemporary India and China now have the potential to develop a South Asian, Sinic, or Pan-Asian alternative (Mahbubani & Chye, 2015). We based our hypothesis on the resilience of civilizational characteristics that India and China displayed through their histories, which have informed their HE development and modernization experiences.

Dependency theory describes the relationship between developing and developed countries as “the outcome of domination by the ‘have’ countries over the ‘have-nots’” (Eckstein & Noah, 1984, p. 213). Following this theory, the centre-periphery model was developed as a “metaphor
which describes and attempts to explain the structural relationship between the advanced or metropolitan ‘centre’ and a less developed ‘periphery’, commonly applied to the relationship between developed and developing countries (Scott & Marshall, 2015, para.1). Applying the centre-periphery model to the world system of knowledge production, HE systems can be categorized as centres which have always dominated the production and distribution of knowledge or as peripheries which have tended to be dependent on the centres (Altbach, 2006). Regarding the development of peripheries, dependency theorists recommend de-linking from the global capitalist system, or attempting to reduce the degree of their exploitation in the international context. During the Cold War era, in an effort to escape de facto global political bipolarity, post-independence India and China attempted to establish their own modern HE systems, which were neither wholly Western nor wholly Soviet. The Indian and Chinese HE systems were shaped by policies whose rationale stressed sovereignty preservation and referenced their rich cultural histories of education.

Many scholars argue that HE systems should be free of state control and generated by the market rather than planned by state-centred bureaucrats and politicians (Johnstone, 1999; Larabee, 1997; Pusser, 2008). Zha (2014) has noted, however, that China has taken advantage of a strong state when developing its HE system. Zha (2014) has argued that “a well-ordered society requires a strong state, the rule of law, and democratic accountability. . . [and] it is also a strong state that must come first, while states that democratize before acquiring the capacity to rule effectively, are likely to fail” (Zha, 2014, p. 48). We could infer that periphery countries such as India and China require strong government as a precondition for establishing and developing HE systems. What is noteworthy, however, is that in contrast to China’s sustained history as a centralizing state with national meritocratic examinations (Marginson, 2011), India’s centralization has only emerged since 1947 (independence). Nevertheless, developments in both countries during the second historical period reflect a strong determination to develop a socioeconomic model capable of preserving national sovereignty while promoting rapid industrialization.

The Precolonial Past: Historical Roots and Civilization Patterns
To appreciate the impact of the deep-rooted civilization patterns on their respective modern HE systems, we first review the precolonial legacies of HE in India and China. There were two pedagogical traditions that were layered together in ancient India before the arrival of Persian-influenced Islamic traditions: the indigenous traditions of the subcontinent’s aboriginal peoples (the Adivasis), and the Dharmic traditions of what is today considered Hinduism and Buddhism (Mookerji, 1944). The features of ancient Indian education “at its best and at its earliest” were “revealed in Vedic literature, especially the literature of the Brãhmanas, Upanishads, and Ārāiyakas” (Mookerji, 1944, p. 63). The most notable centres of education were not located in urban areas but within the lush surroundings of forests. It is obvious that the attachment to the natural environment as an atmosphere for proper and inspired teaching and learning is an Adivasis-inspired concept rather than one that owes its origins to the pastoral and post-urbanized Aryans of the Indian subcontinent. During the Vedic age (about 1500–500 B.C.E.), teaching and learning were a collaborative effort of self-reflective practices where “the constant touch between the teacher and taught was vital to education” (Mookerji, 1944, p. 66). Under this model, learning experience was individualized, and the aim of education was mainly to attain an enlightened “self-fulfillment” (Mookerji, 1944, p. 67). Education was the process by which the acknowledgment of the phenomenon of interdependence was acquired. This wisdom was demonstrated by promoting social harmony in accordance with natural and divine law (Crozet, 2012).
Following the nomenclature of the Vedic period, associated with the production of the pedagogy of the Four Vedas (canon), the Upanishad period was one of intense questioning and educational reform where the precepts of the Vedas, the organization of society, and the purpose of education was contested (within the works of the Upanishads). This was a period of pedagogical evolution (circa 500 B.C.E–1000 C.E.), diversification, and reinterpretation or questioning of the primacy of the Vedic texts. Siddhartha Gautama (The Buddha: 563–482 B.C.E.) was a product of the Upanishad era. The characteristics of Indian HE during the height of its Buddhist period were reflected in the curriculum of Nalanda “university” in the 7th century C.E. According to the writings of two Chinese monks Xuanzang and Yijing who visited Nalanda during their travels in India in the 7th century C.E., Nalanda’s curriculum had five major components in addition to Mahayana Buddhist texts: discourse analysis [sabdavidya], arts [silpashanavidya], diagnostic medicine [cikitsavidya], epistemology [heuvidya], and metaphysics [adhyatmavidya] (Pinkney, 2015).

Contrasting with the cultural diversity of the Indian subcontinent, ancient China was predominantly a unified empire with a highly systematic civil service system based on Confucianism. Confucianism is the most important philosophical tradition of education in ancient China, although Taoism and Buddhism also profoundly influenced Chinese intellectuals’ spiritual world. Confucianism became China’s official philosophy in the mid-2nd century B.C.E. (Wang, 1990), and thereafter became the philosophical basis of education in ancient China through the establishment of official academies and the imperial examination system (Gan, 2011). The Han dynasty created China’s first imperial academy in 124 B.C. to teach official posts candidates Confucian classics, making Confucian education serve the state (Marginson, 2011). In the 6th century C.E., the Sui dynasty established a fully systematized three-grade imperial civil service examination system [keju], with the roles of training and recruiting scholar civil servants firmly in place by the time of Empress Wu Zetian (624–705) of the Tang dynasty (Marginson, 2011).

After a long process of development, Chinese classical institutions of higher learning “had reached their definitive form in the 12th century”, which was “largely due to the emergence of Song neo-Confucianism as the dominant form of scholarship, and the work of several great [neo-Confucian] scholars” (Hayhoe, 2001, p. 327). In the Song dynasty (960–1279), “the formal pole of traditional Chinese higher learning, imperial institutions at capital, provincial and prefectural levels which administered the civil service examinations [keju], had reached institutional forms that were relatively stable—the taixue, the guozijian, the Hanlin academy” (Hayhoe, 2001, p.326). In terms of non-governmental HE institutions (HEIs), the academies [shuyuan] developed from private libraries and Buddhist temples served as alternative institutions for scholarly research outside the imperial bureaucracy and examination system (Hayhoe, 2001). The curriculum in Song academies reflected the characteristics of ancient Chinese HE during this period and mainly contained the Four Books and Five Classics [Sishu Wujing], Song Dynasty neo-Confucianism scholars’ commentaries, as well as history and poetry (Song Yuan Xue An; cited by Liu, 2014).

It is clear that in ancient India and China, HE was an outgrowth of philosophical and spiritual systems. If we regard both historical traditions as mental states, their HE may be considered examples of holistic education. The learning process in ancient India was an endeavour to develop the mind, body, and spirit through the comprehension of the human biosphere and theological precepts. In ancient China, the aim of learning, in the words of the Great Learning [Da Xue], one of the Four Books [Si Shu], was “self-cultivation, family harmony, state-governing, and world peace” [xiushen qijia zhiguo pintianxia] (Zhang, 1998). According to Hayhoe and Liu (2010), “Confucian scholarship tends to focus on understanding history and human interrelationships and to explore issues of good governance, from the local to the global” (p. 94).
Ancient India and China focused on imparting knowledge from what is presently considered the field of humanities and social sciences, and they also had interdisciplinary traditions of integrating different subjects. It is also noteworthy that both India and China were source civilizations that exported knowledge, culture, and philosophy throughout the ancient world. From 1500 to 1800, “Europeans were influenced by China because they regarded Chinese culture as superior, and they were receptive to borrow from China” (Mungello, 2005, p. 77). Of course, this situation changed dramatically during the period of Western imperialism.

The Encounter with Imperialism and HE Modernization: The Historical Context of Modern HE systems in India and China

Next, we review and compare HE modernization processes in India and China during the colonial era when both civilizations moved from the “centre” to the “periphery” of the world knowledge system. Colonial rule by Great Britain in India was exercised by the East India Company (1600–1857) prior to India formally becoming a part of the British Empire (1858–1947). During this period, Indian pedagogies were eclipsed by British attempts to implement Western education. In 1835 Thomas Babington Macaulay delivered his Minute on Education to the British Governor General’s Council of India. Macaulay expressed the view that a loyal bureaucratic class of Indians could be produced through an English-medium education system (Macaulay, 1835). In agreement, Governor General Lord William Bentinck issued a proclamation replacing Sanskrit and Persian with English as the official language of governance and administration. Western-style universities were established in Calcutta, Bombay and Madras in 1857 following the model of the University of London (Choudhary, 2008). The Indian Universities’ Commission, organized by the Viceroy’s administration in 1902, furthered the replication of British colonial education by strengthening the utilitarian aspect of the curriculum in Indian universities. In response to such efforts, Indian nationalists organized the National Council for Education in 1906, which proclaimed an Indian boycott of British institutions of HE in India (Mukherjee & Mukherjee, 1957).

While a British HE model was imposed in India by the British colonizers, China adopted several different Western HE models in an effort to combat political instability and to promote national defence. Even though China was officially independent prior to 1949, in reality a situation of semi-colonization existed. During the self-strengthening movement [yangwu yundong] launched in 1860, Western technology was introduced for the purpose of national salvation, and one of China’s earliest modern government institutions of higher learning, the School of Combined Learning [tong wen guan] was established for providing education in specific areas needed to deal with the Western incursion (Hayhoe, 1996). In 1905, the civil service examination [keju] was ended by the Qing government; China’s traditional HEIs as part of the old system lost their legitimacy and viability. China attempted to establish modern HE by importing a Japanese model (before 1911), followed by European models (German and French), and subsequently the U.S. model promoted by John Dewey. By the 1930s, the Nationalist Chinese government had reverted to European models for HE (Hayhoe, 1996).

During their respective colonial and semi-colonial eras, India and China’s ancient education traditions were interrupted by the imposition or adoption of Western HE models. China abolished its imperial examination system and tried to establish modern institutions that drew on foreign models for self-strengthening. In India, the purpose and function of HE shifted from an indigenous understanding of education for self-reflection to the British practice of education for the breeding and licensing of colonial bureaucrats, or the subcontracting of imperial functionaries. During these processes, India and China became peripheral countries of global knowledge.
production, and were transformed from major source civilizations known for exporting cultures and Philosophies to oppressed colonial and semi-colonial societies that were recipients of Western knowledge and culture. Most importantly, India and China were characterized by the West as “premodern,” as intellectually inferior civilizations with regard to their HE capacity to contribute to politically stable, economically vibrant, and military capable nation-states.

The Post-Independence Cold War Era: Development Ideologies and HE Systems within the Context of Geopolitics

Having reviewed the historical heritage, we now analyze the geopolitical context surrounding Indian and Chinese post-independence development ideologies, and their relation to HE reform and development. After its independence in 1947, India began to construct an endogenous ideology. Its political elements were social-democratic and state-controlled market protectionism. Prime Minister Jawaharlal Nehru described himself as a “socialist and republican” (Kotovsky, 1989). He developed his ideology based on a fusion of elements including socialism, capitalism, Gandhian Swaraj (cultural sovereignty and social autonomy), and nationalism (Kotovsky, 1989; Zhu, 1998). Nehru proclaimed his intention to pursue a non-aligned foreign policy in an effort to preserve India’s political sovereignty amidst Cold War bipolarity (Ganguly & Pardesi, 2009). He believed this was required in order for India to retain the sovereignty of its actions toward autonomous development. In 1955, along with the leaders of several “Third World” countries, Nehru as the “acknowledged senior statesman” chaired the Asia-Africa Conference in Bandung. This gathering of newly independent former colonies grew in participants; it became the impetus for the Non-Aligned Movement (GCIS, 2001, para.1).

During the Indian national struggle for independence, aspirations were raised regarding the character of the postcolonial Indian state. For the Indian National Congress, which transitioned from the leader of an anti-imperial struggle into the ruling government of an independent country, developing the national economy and social welfare became paramount, given that India had emerged impoverished from imperialism and out of the ethnic violence of the partition of South Asia in 1947. Under the guidance of Nehru’s ideology of the “middle-way,” India’s economic policy became a combination of central planning and limited free market protectionism. Similar to the Soviet model, India devised Five-Year Plans and developed a state-owned economy in the field of basic and heavy industries. Yet there was also government support for the development of the private sector (Zhu, 1998). The Indian government strictly limited foreign trade and investment until the beginning of liberal reforms in the 1990s (Kelegama & Parikh, 2003). Constraints of revenue and concerns that education should facilitate rapid heavy industry development caused successive post-independence Indian governments to focus their education policy in the area of university reform. Rather than beginning comprehensive and systemic education sector expansion, the Indian policy was to create institutions for scientific and technical skills acquisition.

HEIs in independent India are recognized by the University Grants Commission which was created by the University Grants Commission Act in 1956. Central universities, HEIs operated by the federal state, were established by various acts of parliament and are regulated by the Ministry of Human Resource Development (University Grants Commission, n.d.). For example, in 1966 the Jawaharlal Nehru University was established by the Jawaharlal Nehru University Act (1966). However, it is important to note that until a Constitutional Amendment in 1976, education in India was solely under the jurisdiction of individual states (provinces). Thus, the majority of HEIs in India are state universities which are funded and regulated by state-level governments. Since its
independence, India’s HE has developed rapidly on a relatively weak base (Agarwal, 2007). During the 1950s and 1960s, the total enrollments of Indian HE increased by 13% to 14% annually (Agarwal, 2007). Similar to its economic system which contains both public and private sectors, in addition to public funded provincial universities, India’s “tradition of private and community participation” in HE “continued for a few years after independence” (Agarwal, 2007, p.199). However, in the 1960s and 1970s, the Indian government took over the financial responsibility, making previous private HEIs grant-in-aid institutions (Agarwal, 2007).

During its Second Five-Year Plan (1956–1961), the Indian government began to establish the Indian Institutes of Technology (IITs) as “institutions of national importance” (IIT Act, 1961). Autonomous HE development was considered by Nehru to be an essential aspect of non-alignment and the key to India retaining its political sovereignty. Hence, the IITs were among the first central universities, and the IIT Acts of 1956 and 1961 provided IITs autonomy, placing them under federal authority. The IITs were extra-constitutional (1950) in nature because they were deemed to be a matter of national security, or at least a means for securing the nation. Pertaining to HE development, Nehru’s non-aligned policy practically meant that India could collaborate globally with partners from either the West (U.S., U.K., France, West Germany) or the Soviet Union, while seeking patterns and partners for establishing IITs in various Indian regions (Indiresan, n.d.). In 1951, India already established its first IIT in Kharagpur, which served as an Indian model of technical HE. Nevertheless, international aid played an important role in the IIT projects. The IIT Act of 1956 states that “assistance of different nations to the four IITs would help to produce alternative patterns in order to develop different methods of training high level technical personnel” (Indiresan & Nigam, 1993, p. 345). In 1958, IIT-Bombay was established with aid from the Soviet Union. With aid from West Germany, IIT-Madras was founded in 1959. Also in that year, IIT-Kanpur was established with aid from the United States of America.

The curriculum in the IITs was designed to “develop character, outlook and mental ability” for “useful citizenship” (Indiresan & Nigam, 1993, p. 341). Using MIT as an “example” rather than a “model,” the original IIT (Kharagpur) developed its own curriculum, which became the basis of the curricula adopted by other IITs (Indiresan & Nigam, 1993, pp. 342–343). Yet, the curricula in different IITs had “some variations” which reflected “the academic traditions of the nations from whom they receive technical assistance” (Indiresan & Nigam, 1993, p. 343). For example, at IIT Madras, assisted by West Germany, the emphasis was on workshop, practice, and engineering drawing, with special attention paid to the innovation of industries in the region. IIT Madras also introduced the German laboratory system with the establishment of an independent laboratory head, workshop, and store. The curriculum at IIT-Kanpur, assisted by the U.S., had an engineering science orientation that emphasized self-study (Indiresan & Nigam, 1993).

After the establishment of the People’s Republic of China in 1949, China followed the ideologies of Marxism-Leninism and Maoism. China first imitated and then broke away from both the ideology and economic model of the Soviet Union. From 1953 to 1956, the Chinese Communist Party implemented the “Three Major (socialist) Transformations [san da gaizao]” to build China into an industrialized socialist country with a state-owned and controlled economic system (Dong, 1989). Similar to India, China’s national investment mainly focused on heavy industry and defence (Dong, 1989). The relations between China and the Soviet Union became severely strained by the late 1950s. In the early 1970s, Mao developed his “Three Worlds Theory” which divides countries into three categories: the U.S. and the Soviet Union constitutes the “First World”; the “Second World” contains other developed countries (Yee, 1983); and the Asian, African, and Latin American developing countries were viewed as the “Third World.” China’s
diplomatic strategy moved from “leaning to one side,” the side of the USSR-led socialist countries (1949 to the early 1960s), to antagonizing both superpowers (1966–1976), and finally to cooperating with Western nations against the Soviet Union (Qi, C., 1997). China also began to develop its relations with other “Third World” countries from the early 1970s.

During China’s First Five-Year Plan (1953–1957), the Soviet Union provided 156 key construction aid projects (150 of them were actually implemented) to help China establish its industrial system, mainly in the fields of energy and defence (Sun, 1999). Up to July 1960, when China broke relations with the Soviet Union, over 3000 Soviet experts had been sent to China and 68 key construction aid projects had been completed during the First Five-Year Plan (Sun, 1999). The Soviet Union also provided construction aid in the field of HE. From 1952 to 1953, with the Soviet Union’s aid, China established the Harbin Institute of Military Engineering as a Soviet model military engineering university (Zhao, 2006). The whole Chinese HE system was reformed along Soviet lines in 1952. During the 1960s, internationally self-isolated after the end of Soviet aid, China made remarkable achievements in science and technology, especially in the fields of heavy industry and defence industry (“Xingjiapo,” 1970).

Beginning in the 1950s, “all foreign [Western] universities or those financed by foreign religious bodies and governments in China were abolished” (Huang, 2003, p. 232). Closely following the Soviet model of HE, China established a highly centralized and structured HE system (Yao, 1996). In the reform of 1952, six major [military] regions became units for political-administrative planning and HEIs in each region were restructured around specialist definitions of knowledge. Each region was allowed to have “one or two comprehensive universities, one or two [leading] polytechnic universities, one major normal university, one to three agricultural universities, and other specialist institutions” (Hayhoe, 1996, p. 77). Some of the previous comprehensive universities, such as Tsinghua University and Zhejiang University, were restructured into polytechnic universities. “Department within the universities became more specialized; physics, for example, was subdivided into numerous categories such as theoretical physics, solid physics, and optics, with a different teaching plan for each” (Wang & Li, 2001, p. 315). During this period, HEIs were administrated by different sectors of the central government. Leading polytechnic and comprehensive universities were under the Ministry of HE, while specialized HEIs, such as those focusing on agriculture, engineering, medicine, economics, political science and law, were placed under the relevant national ministries.

In 1956 Mao Zedong “criticized the practice of ‘total acceptance and mechanical application’ of Soviet examples” in his On Ten Major Relationships (Yao, 1996, p. 245). By 1958, China began to break from the Soviet economic model as Sino-Soviet political tensions rose. Accordingly, China began to develop its own pattern of HE. For example, China ended the Soviet-model practice of separating basic science and technology, and attempted to combine teaching, scientific research, and productive labour (Yao, 1996). Basic science was brought back into the specialist polytechnic and engineering universities, and new universities, such as the Chinese University of Science and Technology, were founded which brought together areas that had been institutionally separated under the Soviet model (Hayhoe, 1996).

In 1958, the Communist Party published its Instructions on Educational Work stating that “education must serve the proletariat” and should be “combined with productive labour.” Following this guiding principle, factories attempted to establish universities, while HEIs started to set up their own factories (Gao, 2008). In 1966, China abolished the College Entrance Examination and reformed HE admission criteria. The Chinese government published the Notice on the Reforms of College Enrollment Work and established a recommendation-based admission
system. During the “Cultural Revolution,” workers, peasants, soldiers, and some rural youth were admitted by HEIs based on recommendations provided by their administrative leaders (Deng, 2014). Mao stated that the major purpose of recruiting HE students mainly from workers, peasants, and soldiers was to provide opportunities for the productive classes to take part in the creation of a new socioeconomic experiment (Shi, Zhou, & Huang, 1974).

China also decentralized its HE administration system in the later 1950s and enhanced provincial-level control. More attention was given to indigenous knowledge, with the founding of colleges of traditional Chinese medicine in every province and autonomous region between 1956 and 1960 (Hayhoe, 1996). In September 1958, China proposed the target of popularizing HE in 15 years under the climate of the “Great Leap Forward” (1958–1960) (Zhou, 2014). Although this target was unrealistic, given the social and economic conditions at that time, Chinese HE did experience three consecutive years of expansion. In 1957, the total number of China’s HEIs was 229, increasing to 1289 in 1960 (Zhou, 2014). New provincial comprehensive universities were established in most provinces, sometimes absorbing specialist ministry institutions that had originally been established and controlled from Beijing. Relatively underdeveloped provinces and autonomous regions such as Qinghai, Inner Mongolia, and Xinjiang, got their first universities, with enthusiastic graduates of some of the best national universities taking up assignments to teach there (Hayhoe, 1996).

Discussion
After their independence, through the Cold War era, India and China attempted to develop and implement national models of HE with strong governmental intervention. Their respective ideological foundations, political systems, and development strategies influenced HE development in India and China. Yet, despite differences of ideology and history, post-independence HE reform and expansion in India and China were both centrally organized and directed by strong national/central governments. While both were clearly influenced by the Soviet model, neither India nor China completely adhered to any particular foreign HE path. Instead, “tentative” models of HE were intended to promote intellectual autonomy in support of newly won political sovereignty with “the obvious and pressing demands of a growing industrial society” (Wang & Li, 2001, p. 315). Both India and China felt threatened during the Cold War because the U.S. and the Soviet Union demanded synchronicity of foreign and domestic policies from their respective proxies.

The HE legacy of this period is rich. It has provided the foundation upon which contemporary notions of the “superpower” potential (Mahbubani & Chye, 2015) of Indian and Chinese HE is based. Presently, significant proportions of top universities in India and China are polytechnic HEIs that were established or reconstructed by the central/national governments during the Cold War era. These include India’s IITs and China’s top polytechnic universities, such as Tsinghua University and the University of Science and Technology of China. China’s strong state tradition is still a key element in its HE development. Although contemporary Chinese HEIs have not been given much administrative autonomy compared to India, the scholar-official tradition has meant that Chinese intellectuals have felt tremendous responsibility for the state (Hayhoe & Liu, 2010).

Considering economic development and defence capacity, the key to safe-guarding national sovereignty, heavy industry, science, and engineering were emphasized as the core disciplines to be serviced by HE in India and China. Indian and Chinese governments attempted to establish national HE systems that would enable autonomous development of their economies
and societies; it is for this reason that Indian and Chinese HE focused on application-oriented engineering and technology disciplines during the Cold War (Biswas & Agrawal, 1994) in contrast to their precolonial traditions of holistic education. Industrialization resulted in the shedding of government sponsorship for the arts, culture and spirituality, all of which had been an important part of pre-independence and precolonial Indian and Chinese traditions of holistic education. Post-independence Indian and Chinese governments considered these features less relevant, outdated, or even dangerous, as aspects of the lives of “modern” citizens. Mao believed that radical political movements or revolutions were required for China to free itself from its feudal past. Nehru sympathized with certain aspects of India’s cultural heritage but thought it mostly incompatible with the objective of building a modern nation. Hence, despite differences in governance and policy focus, India and China conscientiously modelled their postcolonial HEIs in an effort to promote either a sociohistoric or geocultural form of development and modernity that would allow them to become globally competitive in the future (Biswas & Agrawal, 1994). Moreover, both national agendas were location and chronologically oriented rather than being adopted or based on applied theories originating from the circumstantial experiences of a foreign past.

Towards the end of the Cold War, after experiencing a series of destructive political movements, China’s political leaders in the post-Mao era utilized more pragmatic rather than ideological policies to deal with China’s socioeconomic challenges. Since 1978, Deng Xiaoping’s “theory of developing socialism with Chinese characteristics” has become the cornerstone of the policy of “Reform and Opening Up” and the development of a “socialist market economy with Chinese characteristics” (Han, 2008; Wei, 2014). After the collapse of the Soviet Union, the Indian governments of Narasimha Rao and Manmohan Singh undertook neoliberal economic reforms (1991) in India to promote global integration and faster paced economic development (Panagariya, 2005). Currently, China and India are the second and third largest economies in the world (GDP-PPP). Both countries have made great strides in HE development and are even considered to have the potential to become HE “superpowers” (e.g., Mahbubani & Chye, 2015).

The current question is perhaps not whether India and China will emerge as contenders for global HE dominance, but whether their future development will be accompanied by a reconceptualization of Western HE models. Given their precolonial heritage, India and China could infuse HEIs with cultural features based on their unique pedagogical traditions. With the benefit of 70 years of socioeconomic development and political sustainability behind them (since their respective independence in 1947 and 1949), India and China could reassert their civilizations weight by challenging the global privileging of the Western model of HE. A South Asian, Sinic, or Pan-Asian university could conceivably come into being with an epistemological foundation that reconceptualizes the purpose and character of education. As the majority of nations in the post-Cold War globe seek to reset parameters for the international system that embrace multipolarity, India and China stand poised to leverage the soft power of their alternate (non-Western) histories and civilizational traditions, as they move back from the “periphery” to the “centre” of the world knowledge system. For instance, India’s precolonial educational tradition of promoting social harmony in accordance with natural and divine law (Crozet, 2012) may have positive implications within the context of globalization. In terms of China, the Confucian notion of “harmonious coexistence within diversity [he er butong]” (Hayhoe & Liu, 2010, p. 94) reflects a tradition of the toleration of diversity, which may enable China’s HE development to contribute to a more harmonious international community.

India’s and China’s historical and philosophical heritage may be further utilized to support contemporary HE development strategies. For instance, the Confucius Institute (CI) project as a
cultural and educational diplomacy program based on HE cooperation has been initiated by the Chinese government to promote traditional Chinese culture overseas (Lo & Pan, 2014). The CIs are non-profit institutions established in foreign universities on the basis of Sino-foreign HE partnerships (Hanban, 2007). Initiated by the Office of Chinese Language Council International (or Hanban), a central-level functional unit of the Chinese government, CIs provide Chinese language and cultural education and organize Sino-foreign cultural exchange activities overseas (Hanban, 2007). In a unique Chinese approach to utilizing traditional culture to enhance the worldwide influence of its universities, over 500 CIs have been established in 130 countries/regions since 2004 (Hanban, n.d.). Correspondingly, as home to worldwide influential spiritual traditions and their corresponding philosophies, India might seek to promote an educational diplomacy that is both cross-cultural and interdisciplinary. Indian attempts to resurrect the vision of Nalanda University as a Pan-Asian endeavour and its continued IndiAfrica collaborations illustrate such possibilities (Pinkney, 2015). Reinitiated as a concept nearly 800 years after its destruction, the idea of reviving Nalanda University in 2006 began as an Indian and Southeast Asian vision. At the East Asia Summit (EAS) in 2007, the India delegation announced their intention to recreate Nalanda as a site for cross-cultural and interdisciplinary HE (Nalanda University, n.d.a). The Nalanda intergovernmental Memorandum of Understanding came into force at the EAS 2013 and has been signed by 17 nations (Nalanda University, n.d.b). While its self-designated mandate is to help “forge a continent based on the foundations of peace and harmony,” Nalanda recognizes that a pan-Asian model of HE is not exclusive of non-Asian traditions, but that its core is “hallowed universalism” (Nalanda University, n.d.c, para. 2): Our challenge is to match the excellence of Nalanda of the first millennium C.E. for the third millennium C.E. A university of the third millennium has to be universalist in its outlook, open to currents of thought and practice from around the globe, and it has to respond to the needs of a world which has miles to travel before it can ensure peace and prosperity with equity and hope for all the people of the world (Nalanda University, n.d.c, para. 3).

Conclusion
As source civilizations of exporting knowledge, culture, and philosophy throughout the ancient world, India’s and China’s respective status in the world system of knowledge production changed dramatically during the period of Western imperialism, moving from the “centre” to the “periphery.” Autonomous HE models established by post-independence India and communist China under strong governments are the foundation for the significant socioeconomic achievements of these nations today. During this period, India and China adhered to an HE policy that was utilitarian and application-oriented, as an extension of their development strategies. Reflecting upon their respective historical roots and development process, it seems appropriate for India and China to consider whether their respective precolonial epistemological tradition and post-independence national visions as autonomous alternate global stakeholders can be leveraged as anchoring points towards the promotion of alternate South Asian, Sinic, and/or Pan-Asian models of HE.

The cosmopolitan appeal of the spiritual foundations of these two civilizations provides India and China the potential to utilize their HE development to modify the existing structure of the world knowledge system, and to promote a shift from the global privileging of the Western mode to the spread and incorporation of diverse epistemological traditions. Cultures are not monolithic; Indian and Chinese ways of knowing and being are alternatives to Western models. It thus seems appropriate to anticipate that the global “re-emergence” of India and China will be
accompanied by alternate epistemological and institutional patterns that may shape a future global university model.

References


Altbach, P. (2001). Gigantic Peripheries: India and China in international knowledge system. In R. Hayhoe, & J. Pan (Eds.), *Knowledge across culture: A contribution to dialogue among civilization* (pp.199–214). Hong Kong: Comparative Education Research Centre, the University of Hong Kong.


Hayhoe, R. (2001). Lessons from the Chinese academy. In R. Hayhoe & J. Pan (Eds.), *Knowledge across culture: A contribution to dialogue among civilizations* (pp.323–347.). Hong Kong: Comparative Education Research Centre, the University of Hong Kong.

Hayhoe, R., & Liu, J. (2010). China’s universities, cross-border education and the dialogue among civilizations. In D. Chapman, W. Cummings, & G. Postiglione (Eds.), *Border Crossing in East Asian Higher Education* (pp.77–102.). Hong Kong: Comparative Education Centre, University of Hong Kong and Springer Press.


Zha, Q. (2014). The State, the university, and capital: their relations through Fukuyama’s lens. Comparative & International Higher Education, 6, 49–53.


Hantian Wu is a doctoral candidate in educational leadership and policy with a specialization in comparative, international and development education in Ontario Institute for Studies in Education at University of Toronto. His research interests include comparative and international higher education, higher education policy, and higher education in East Asia and the BRIC countries. He earned his master’s degree in economics and education from the Teachers College of Columbia University.

Neville Panthaki is an independent researcher and has instructed courses as a sessional member of faculty within the fields of comparative Eurasian history, Modern Europe, Russian history, South Asian studies, peace and conflict, and religious and intellectual thought. His research interests are also within those fields. Interdisciplinary by training, he holds a Joint Collaborative PhD (Social Justice Education/Comparative International Development/South Asian Studies), PhD—ABD (Eurasian History), MA (History and Politics), Graduate Diploma in International and Security Studies, BEd., and Honours BA (History, Political Science, Philosophy).