

China's Cambodia Strategy

PAUL MARKS

© 2000 Paul Marks

From *Parameters*, Autumn 2000, pp. 92-108.

[Go to Autumn issue Table of Contents.](#)

[Go to Cumulative Article Index.](#)

National security strategy has been defined as the art and science of developing, applying, and coordinating the instruments of national power (diplomatic, economic, military, and informational) to achieve objectives that contribute to national security.[1] The purpose of this article is to present a case study of how the People's Republic of China is successfully applying all four instruments of national power to enhance its relationship with the Kingdom of Cambodia as part of a national security strategy of building regional alliances to counter US influence and to ensure China's security in Southeast Asia.

Since 1955 China's stated foreign policy has centered on five "Principles of Peaceful Coexistence." [2] But in the words of China scholar Michael Yahuda, "An immense gap exists between the declaratory principles of friendship, equality, mutual benefit, and noninterference that supposedly guide Chinese diplomacy, and the actual conduct of China's foreign policy, which is characterized by an exceptionally high dose of realism and a lack of openness." [3] China rails against "hegemonism," meaning America as the only superpower, and "power politics," meaning America's tendency to use force as a substitute for foreign policy.

A means to counter American influence might be alliances, yet China has few. Columbia Professor Samuel Kim calls China a "group of one" because of its tendency to see itself as set apart from others. [4] This may be changing. Chinese relations with Pakistan and Russia may be moving toward formal alliances, and in Southeast Asia China's relations with Burma, Cambodia, and, most recently, Indonesia may be a sign of things to come. Yan Xuetong of the China Institute of Contemporary International Relations, a research center affiliated with the Chinese equivalent of the CIA, stated in the *China Daily* recently, "Diplomacy is a fine art, but its essence is simple: to push for maximum international support while upholding national interests. Achieving both can fortify a region militarily and put its economy on par with the world's best. China should take note here and apply diplomacy to foster good neighbor relations. Developing good relations, especially with Southeast Asian nations, should be China's priority." [5] Yan goes on to say that "China's national interest cannot be separated economically, militarily, or politically from the interests of other Asian countries," and "tighter regional relations can also help defuse international hegemonism by the United States because regional alliances can rival US power and cut into its influence." Although couched in the language of shared interests, Yan's commentary reflects the geopolitical reality that China is competing with the United States for influence in Southeast Asia. [6] It is the countries of the Association of South-East Asian Nations (ASEAN) closest to the United States, including two treaty allies, which stand in the way of China's dominance of that part of Asia. [7] If China can maintain a divided ASEAN, it can prevent an anti-China security consensus from developing. China is pursuing relationships with Burma, Cambodia, and Indonesia with this probable objective. This article discusses the application and coordination of China's instruments of national power to build a closer relationship with an unlikely partner, Cambodia.

Historical Ties

A close China-Cambodia relationship appears awkward on the surface because China was the devoted and dedicated patron of Pol Pot and the Khmer Rouge from its inception in the 1960s through insurgency, conquest, genocide, defeat, insurgency, and peace.[8] Cambodian Prime Minister Hun Sen, by contrast, has dedicated his life since 1977 to destroying the Khmer Rouge movement in which he was once a battalion commander. Although it was the People's Army of Vietnam that pushed the Khmer Rouge into Thailand in January 1979, it was Hun Sen and his peers in the Cambodian People's Party that assumed political leadership, led Cambodia into the 1991 Paris Peace Accords, and, arguably, earned a place in two coalition governments following elections in 1993 and 1998. Hun Sen wrote in a 1988 essay that China was the root of all that was evil in Cambodia. But just as Cambodia and Cambodians are demonstrating an almost unfathomable capacity to let bygones be bygones with regard to the former Khmer Rouge, Hun Sen has now buried the past and is embracing China, which he sees as a means of bringing economic development to Cambodia.

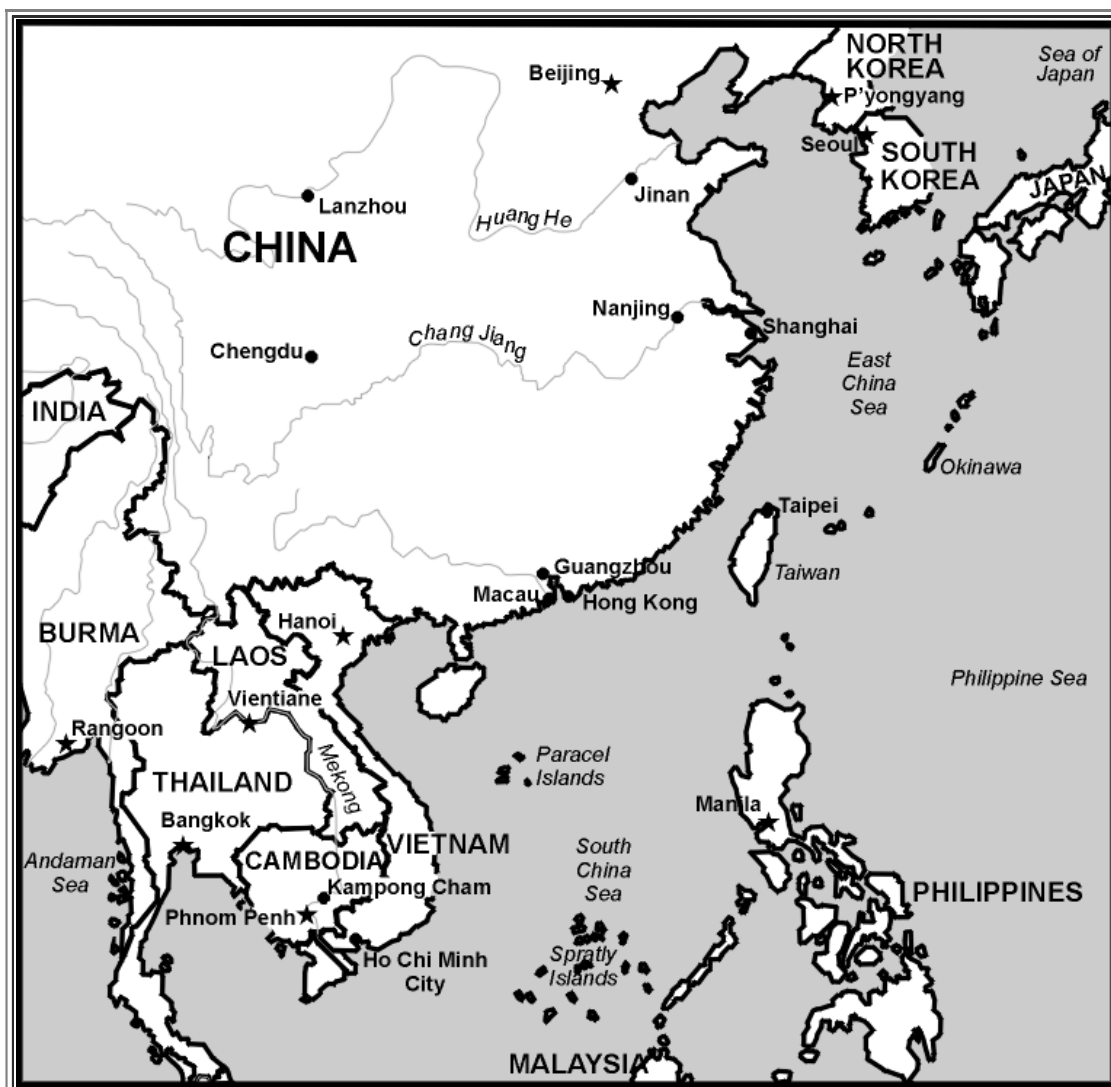


Figure 1. Cambodia and China.

There are other factors that make a close Sino-Cambodian relationship possible. The most important, as I will discuss shortly, is the role of Cambodia's ethnic Chinese. Although persecuted by the Khmer Rouge, historically Cambodia's Chinese have been relatively well-integrated members of society. They have miraculously rebounded from a 20-year period of repression that began with legalized discrimination under Lon Nol from 1970 to 1975, deteriorated into horrific ethnic cleansing under the Khmer Rouge that reduced their numbers from 430,000 in 1975 to 215,000 in 1979, and continued as official discrimination under the

Vietnamese from 1979 to 1989. They now once again dominate commerce, just as they generally have since the 15th century, when Phnom Penh evolved as Cambodia's capital based on its status as a trading port dominated by Cantonese Chinese.[9] Historically, Cambodia's indigenous Chinese were not rice farmers like most Cambodians, but rather the buyers to whom the farmers sold their surplus, and the merchants who sold everything else of use in an agricultural society. They are once again returning to these functions, and their economic capacity is being multiplied by an influx of Chinese investment, both official and private, that would be the envy of any developing country.

Another factor enabling a Sino-Cambodian relationship is King Sihanouk. Cambodia has enjoyed a unique and special position in Chinese foreign policy since Zhou Enlai befriended Sihanouk at the Bandung Conference in Indonesia in 1955. After diplomatic recognition in 1958, Cambodia became the first noncommunist country to receive official aid from the PRC. The honeymoon continued until 1967 when two facets of Chinese foreign policy collided in Cambodia. One, support to communist insurgency, in this case the Khmer Rouge, was clandestine and duplicitous. When armed revolt began in April 1967, Sihanouk at first suspected the North Vietnamese, but within a month he had decided that the Chinese were the real force behind *les Khmer Rouges* (a name he coined). The other facet, a spillover from the Cultural Revolution, was an open anti-Sihanouk leftism promoted by the Chinese Embassy in Phnom Penh that led Sihanouk to almost sever relations in the summer of 1967.[10] That was just a bump in the road, however, because in 1970 China housed Sihanouk when Lon Nol overthrew him, and in 1979 China embraced Sihanouk when he was again forced into exile. Sihanouk maintains a residence in Beijing, and he is careful to ensure that he is always seen as supporting China.

Diplomatic Initiatives

On 5 and 6 July 1997, a faction of the Royal Cambodian Armed Forces loyal to "Second Prime Minister" Hun Sen attacked and defeated another faction of the military loyal to "First Prime Minister" Prince Norodom Ranariddh, the King's son and leader of the FUNCINPEC Party (the National United Front for an Independent, Peaceful, and Cooperative Cambodia). In a series of battles beginning west of the airport and eventually reaching Ranariddh's residence one block from the American Embassy, infantry, tanks, armored personnel carriers, and even mortars terrorized Phnom Penh and her one million residents. Ranariddh was out of the country, and he did not return until nearly a year later. Following the fighting, Hun Sen claimed that Taiwan had been covertly supporting the FUNCINPEC forces, and he promptly expelled Taiwan's unofficial liaison office from Phnom Penh.[11]

Hun Sen's expulsion of Taiwan's liaison office endeared him to China and opened the door for Chinese diplomatic initiatives. The fact that the United States suspended all military cooperation and economic assistance at the same time no doubt made the opportunity that much more attractive. China recognized the new government in meetings in mid-August with Hun Sen and Ung Huot, the new FUNCINPEC First Prime Minister, when they traveled to Beijing to visit King Sihanouk. Chinese Premier Li Peng told Hun Sen and Ung Huot that China would "never interfere" in Cambodia's internal politics, and that Cambodia's problems "must be resolved by the Cambodian people." [12] At the end of September, Hun Sen's Chief of Cabinet led another delegation to China to meet with the Chinese Trade Minister and other officials to draft memoranda of understanding on assistance for agriculture, power, fisheries, and maritime transport. In December, China delivered 116 military cargo trucks and 70 jeeps valued at \$2.8 million in what both sides claimed was part of a deal that pre-dated the events of 5 and 6 July. At the ceremony to receive the vehicles, Hun Sen praised China's sympathetic attitude toward post-July Cambodia:

Although some international community members have not yet clearly understood the real situation in Cambodia, a number of friendly countries have maintained their just and fair stance on the Cambodian issue. Among them, the PRC, which has firmly adhered to the principle of

peaceful coexistence, continues to respect the Kingdom of Cambodia's independence and sovereignty and does not poke its nose into Cambodian internal affairs.[13]

Cambodia's obligations in the diplomatic exchange are to comply with several relatively painless Chinese requirements in exchange for much-needed investment. First and foremost is support for China's "one-China" policy. King Sihanouk, President of the National Assembly Prince Ranariddh, and Prime Minister Hun Sen have strongly and repeatedly reiterated Cambodia's support for "one-China" in a number of public statements and actions.[14] In August 1999 King Sihanouk even wrote Hun Sen to suggest that the government ban Taiwanese investors from displaying the Republic of China flag or engaging in other such "subversive activities" on Taiwan's National Day.[15] Hun Sen has steadfastly refused to even consider allowing Taiwan to reopen an unofficial liaison office, to include squashing a November 1998 agreement by the Phnom Penh municipal government to allow Taipei City to open a cultural and economic liaison office.[16] Fortunately for Cambodia, stiff-arming Taiwan has had minimal effect on Taiwanese investment, which continues to compare favorably with that from China and Malaysia. Second, Cambodia has allowed China to actively assist in the cultural and economic revival of the Cambodian-Chinese community. Third, Cambodia has cooperated fully in Chinese investment activity in Cambodia. The latter two postures both support Cambodia's economic development, and thus agreement required no real sacrifice on Hun Sen's part.

Although domestic political opponents and opposition newspapers have criticized Hun Sen for playing the China card and pandering to China, there is little audience for such criticism. The biggest payoff for Cambodia thus far came in February 1999 when Hun Sen paid an official visit to Beijing. Hun Sen obtained \$18.3 million in foreign assistance guarantees and \$200 million in no-interest loans for infrastructure projects, and China summarized the visit as "a new high" in Cambodia-China relations.[17] China acknowledges that the \$218 million figure is one of the highest aid amounts they provide to any country in the world.[18]

Informational Leverage

The informational instrument of national power can include the use of culture to influence the actions of other states and peoples. China, with her rich history and strong cultural ties to ethnic Chinese everywhere, regardless of nationality or ideology, is particularly well suited to exercise this instrument of power. Overseas Chinese, for their part, have a unique ability to display immense pride in China's achievements and Chinese culture while at the same time acknowledging that they would not willingly agree to live under communism.

China's support of the cultural revival of Cambodia's Chinese community has focused primarily on the promotion of the Chinese language. In 1970 there were over 200 Chinese schools in Cambodia, serving approximately 150,000 students. The five largest of these schools were in Phnom Penh. They were called public schools because school boards administered them, but tuition was still required. The remainder were purely private institutions. Students at these schools either did not pursue a Cambodian education, or pursued it half-days. In 1970 Lon Nol ordered all Chinese schools closed because of the perceived role that they played in spreading subversion (an ironic decision given that Lon Nol and his wife were Chinese-Cambodian, and Lon Nol had Taiwanese advisors from 1972 to 1975). The Vietnamese who occupied Cambodia from 1979 to 1989 continued the ban on Chinese culture, and it was not until Prime Minister Hun Sen issued a decree in 1990 permitting multilingual education and allowing minorities the right of association that reviving Chinese-language education became possible.[19]

Hun Sen's personal interest in reviving Cambodia's ethnic Chinese community likely grew from a combination of economic and personal factors. Economically, Hun Sen was convinced by 1990 that only capitalism could bring development to Cambodia.[20] Personally, Hun Sen and his wife both grew up in villages along the Mekong River in an area of Kampong Cham Province rich with ethnic Cham and Cambodian Chinese.[21] It may be more than coincidence, then, that the first Chinese-language school to open in Cambodia in 21 years,

in November 1991 in Memot, was in a remote part of Kampong Cham Province where Hun Sen's brother was governor and where Hun Sen had been based as an insurgent years before.[22]

The growth of Chinese-language education and the revival of the Chinese community expanded dramatically in 1998 and 1999, in no small part due to assistance and encouragement from China. After increasing from 13 schools in December 1995 to 60 in September 1999, the number was up to 70 by December 1999 and continues to grow. The Chinese government's role has included providing partial funding for school construction, influencing the Cambodian government to return Chinese schools that were confiscated by previous regimes (but buying them back if necessary), producing textbooks incorporating Cambodian history and geography at Jinan University in China, conducting inspection visits, and funding participation in conferences on Chinese-language teaching in China and other Asian countries.

The success of the Chinese-language schools can be seen in the fact that one elementary school in Phnom Penh has over 10,000 students and claims to be the largest overseas Chinese school in the world.[23] The principal and over half of the teachers are from China, a situation common to most of the "public" Chinese schools. A sample of the informational instrument of national power at work in microcosm was seen in this school after the United States bombed the Chinese Embassy in Belgrade in May 1999. At the same time that Chinese investors in Cambodia were protesting outside the US Embassy in Phnom Penh, the mainland Chinese principal began a month-long campaign to "combat Western influences" among his pupils.[24]

In 1998 China began offering scholarships for Chinese-Cambodians to attend high school and college in China, and in 1999 Fujian Province's Overseas Chinese University (and affiliated high school), established by Zhou Enlai in 1960, began advertising discounted tuition for Cambodian-Chinese.[25] A Cambodian-Chinese Association established a Chinese Language Primary School Teacher's Training Course in Phnom Penh in March of 1999, and the Chinese Language Propagation Office of China's State Council dispatched three professional educators to form the faculty. The first one-year course graduated in February 2000.[26]

Besides influencing the attitudes of Chinese Cambodians, a further noteworthy phenomenon associated with the growth of the Chinese-language schools is the increasing number of ethnic Khmer that are enrolling. Estimates run as high as 30 percent of students. In an essay published in a local newspaper, a sixth-grade student in a provincial Chinese school wrote of the challenges teachers were facing with the influx of Cambodian students, but she concluded that ultimately the stricter discipline and better learning environment were good for her new classmates.[27]

A significant enabler of the growth of Chinese-language education has been the publication of a Chinese-language newspaper in Phnom Penh beginning in December 1993.[28] Articles highlight the educational revival, and schools can advertise for students and conduct fundraising that has reached out to Chinese-Cambodians as far away as Paris. The paper plays an active role in the community, to include publishing at least one student essay per day. A sign of official approval of the resurgence of the Chinese language was the initiation of a nightly Chinese-language television news broadcast on a government channel in June 1998, although the official rationale was to accommodate Chinese-speaking investors.[29]

Another area in which China applies the informational instrument of national power is support for Chinese-Cambodian social organizations. On 26 November 1990, following Hun Sen's decree restoring certain rights to Cambodia's minorities including the right of association, an organization called the Cambodian-Chinese General Assembly began in Phnom Penh "with a desk." [30] This organization sought to serve as an umbrella group for the revival of Chinese social institutions that had been dormant for 15 to 20 years. There was no organization with this exact name previously, but it was functionally similar to a Council of *Congrégation* Chiefs that as early as 1863 had served a supervisory role over the Chinese community in Cambodia by resolving disputes and setting overall direction for ethnic Chinese.[31] The five *congrégations* whose chiefs

made up the council were hometown associations made up of Chinese immigrants and their descendants from Chaozhou (Teochiu) City, Guangzhou (Canton) City, Fujian (Hokkien) Province, Hainan Province, and the non-geographic Kejiaren (Hakka). These associations, sometimes referred to as guilds, were responsible for tax collection, identity cards, resident permits, and a variety of social welfare functions until 1958, when their legal authority was taken away. The associations continued to perform community functions such as managing cemeteries, schools, sports clubs, and a hospital until the Khmer Rouge obliterated them. They have now returned, and they are thriving.

China's tactic has been to focus its efforts on the largest grouping, the Cambodian-Chinese General Assembly. By routing most coordination efforts through the assembly, China has lent its weight to an overarching organization that can guide the community. For instance, the Chinese-language schools that the Chinese Embassy agrees to support financially are only those run by school boards made up of members of a provincial, district, or, if in Phnom Penh, hometown (Teochiu, Hokkien, Hakka, Hainan, Canton) Cambodian-Chinese Association. The Embassy first provides the funds to the General Assembly, which further disburses to the school boards, thus strengthening the position of the General Assembly. In fact in the recent elections to select the third leadership council (apparently on three-year terms), the previous head of the Education Office, who simultaneously held the office of Vice President, was elected as the new President. [32]

From 1990 to 1999 the assembly and subordinate organizations grew from nothing to five hometown associations, 18 provincial chapters, 38 district chapters, 70 Chinese schools serving more than 50,000 students, a headquarters and library built with the support of the Chinese Embassy, a training course for Chinese teachers, and a partnership with a packaging company from Guangxi to generate operating income. [33] Among the organizations just listed there are varying degrees of subordination ranging from direct ownership to indirect control (e.g., the hometown associations and the private Chinese schools are independent), but in most cases there is a benefit to the hierarchical relationship. Business relationships, for instance, often start within these associations, and typically the richer the businessman, the higher the position he will have in the association structure.

China's support of the Cambodian-Chinese General Assembly includes trips to China. In addition to the education conferences already mentioned, in 1998 the Guangdong Province People's Government Overseas Chinese Affairs Office hosted a nine-person delegation to attend a PRC 49th anniversary celebration followed by a ten-day tour of China. In 1999 Beijing authorities extended a similar invitation to the then Vice President (now President) of the assembly and three others to attend the 50th anniversary celebrations in Beijing. [34]

China's objective in cultivating the Chinese-Cambodian community--something it most certainly did not do during 1975-1979 when the Khmer Rouge killed one of every two Chinese-Cambodians despite the presence of several thousand PRC advisors--can be seen in comments that the Chinese Ambassador to Cambodia made to a Guangdong television crew filming a special on Cambodia's ethnic Chinese in February 2000. Ambassador Yan Tingai said that the Cambodian government greatly appreciates the role the Chinese-Cambodians are playing in economic reconstruction. He added that the "popularization of the Chinese language in Cambodia far exceeds that in any other Southeast Asian country. This feather in the cap of Cambodia's Chinese has made an enormous contribution to both glorifying Chinese culture and developing the friendship between Cambodia and China." [35]

Given that the Khmer Rouge nearly destroyed Cambodia's own proud cultural heritage, resentment of China's aggressive support of Chinese culture could be a potential source of friction within Cambodian society. [36] This has likely not occurred because China balances the support of Chinese culture with economic development projects that affect all Cambodians, and because the Cambodian leadership fully supports and

in many cases participates in many of the activities that bring the Chinese-Cambodian community into contact with the Chinese Embassy, Chinese aid personnel, and Chinese businessmen. Some senior members of the Cambodian People's Party have personal connections with China that influence their attitudes, such as Senate President Chea Sim educating his son in Hainan,[37] and other key politicians are Chinese-Cambodian themselves, such as Minister of State Sok An (Cambodian People's Party), Minister of State and Information Minister Lu Laysreng (FUNCINPEC), and Minister of Construction Im Chhum Lim (CPP). Phnom Penh Mayor Chea Sophara (CPP) has never publicly stated that he is of Chinese descent, but he has acknowledged studying Chinese and enrolling his children in Chinese schools. Mayor Chea is so active within the Cambodian Chinese community that he gives the impression of being in a political campaign.[38] Given the wealth that the ethnic Chinese control, this is probably not an unwise strategy. In the national election in July 1998, three political parties, including the winning Cambodian People's Party, published Chinese-language campaign literature.[39] The bottom line is that neither at the man-on-the street level nor among the political leadership does China's promotion of Chinese culture cause undue concern.

Economic Cooperation

As a totalitarian government with elements of a market economy, the PRC possesses a unique ability to apply the economic instrument of national power to assist a developing country. Besides the obvious tool of grant economic assistance, state-run enterprises that are subordinate to government organs also have the capability to invest abroad. Chinese investment in Cambodia tripled from 1997 to 1998, and went up another 40 percent in 1999, making China Cambodia's first or second largest source of foreign investment.[40]

Besides encouraging and even coordinating the efforts of Chinese enterprises to invest in Cambodia, the PRC practices a unique method of dispensing its official aid entirely through contracts to Chinese firms, many of which are themselves government entities. This proto-capitalist process is similar to the manner in which the US Agency for International Development (USAID) awards contracts for everything from road building to democracy development, although by contrast the Chinese process is not open to public scrutiny, and USAID does not generally contract other agencies within the US government. It is apparent from the wide range of state-run Chinese enterprises active in Cambodia that there is an effort to spread the wealth among a range of enterprises. Many of these corporations, in particular those subordinate to Chinese provincial governments, specialize in overseas economic development, and some have also garnered Asian Development Bank and World Bank contracts for development projects in Cambodia.[41]

Official Chinese involvement in encouraging investment in Cambodia is also evident in the continuous stream of investment delegations that have visited Cambodia since 1998. One of the most significant visits occurred shortly after Hun Sen's visit to Beijing in February 1999. Mr. Wang Jun, the Chairman of the China International Trade and Investment Corporation (CITIC), the investment arm of the State Council, spent several days in March 1999 discussing with both Hun Sen and the Minister of Commerce a tax-free manufacturing zone near Sihanoukville.[42] Mr. Wang is also Chairman of Polytechnologies, the largest corporate entity owned by the People's Liberation Army. A month after Wang's visit a new Cambodian company with Cambodian-Chinese management announced that it had received official approval to serve as CITIC's partner in the tax-free industrial zone.[43]

Another facet of Chinese assistance to Cambodia's economic development is official encouragement of business links between the hometown associations in Cambodia and potential investors from those areas in China. This is especially true with regard to private and semi-private firms from Guangdong Province, the ancestral home of approximately 90 percent of Cambodia's Chinese. Business contacts are facilitated through the Overseas Chinese Liaison Offices of Guangdong Province and Guangzhou, Shantou, Jieyang, and Chaozhou cities. A number of delegations of private businessmen from Guangdong have visited Cambodia through this means, and often a Chinese-Cambodian tycoon, Theng Bunma, hosts them. Theng, who once

shot out the tire of a Cambodian airliner for losing his luggage, is the premier example of how personal connections in both China and Cambodia mix. In a promotional brochure dated March 1999 titled "Tying the Knot Between Cambodia and China," Theng displays photographs of receiving awards from both King Sihanouk and Prime Minister Hun Sen, as well as photographs of visits with the Chairman of the Chinese People's Political Consultative Conference, the Director of the State Council Office of Overseas Chinese Affairs, the Communist Party Secretary of Shantou City, and a variety of lesser officials and business partners in China, including an alternate member of the Central Committee.[44] Featured prominently in the brochure is a business partner, Indonesian Ted Sioeng. Sioeng was the key figure in the illegal Chinese attempts to influence American elections in 1995 and 1996, and he is well connected at numerous levels of the Chinese Communist Party, including the United Front Work Department of the Chinese People's Consultative Congress that oversees Beijing's efforts to build influence among Chinese communities in foreign countries. [45]

An additional factor in China's ability to leverage the economic instrument of national power is the degree to which the local Chinese Chamber of Commerce and the Hong Kong and Macau Business Association are active in both the domestic and international political scenes in Cambodia. The Chinese Chamber of Commerce is composed of businesses from China. They regularly hold combined seminars with the Economic-Commercial Office of the Embassy for new and current investors. They make contributions to worthy causes such as providing uniforms for Cambodia's national basketball squad. They also play politics. Just five days before the national election in July 1998, for instance, the Cambodian Chief of Police flew the President of the Chamber to the western city of Pailin in a government helicopter to sign a \$6 million agreement between her company, a Cambodian partner, and the municipality to invest in infrastructure projects.[46] What appears to have been a Tammany Hall attempt to buy the loyalty of the ex-Khmer Rouge municipality failed, however, when Pailin elected a member of the opposition Sam Rainsy Party to the National Assembly.

The Chamber also led demonstrations outside the US Embassy in May 1999 to protest the American bombing of the Chinese Embassy in Belgrade, and in March 2000 it held a special session attended by 30 Chinese businesses to voice their support for China's White Paper on the Taiwan problem.[47] The Hong Kong and Macau Business Association held a similar session in which it condemned "any outside country that speaks without authority out of both sides of its mouth while moving closer to wild hegemonism." [48] As a business organization whose 100 members include a large number of garment factories exporting 90 percent of their product to the United States, the necessity for such vitriol is not clear. Nevertheless, they pledged in a quarter-page, red-ink ad on the front of the local Chinese newspaper to "resolutely uphold and support" China's position on Taiwan.[49]

Last but not least, Chinese enterprises in Cambodia are highly dependent on the Chinese-Cambodian community for everything from accountants to shop foremen to janitors.[50] That symbiotic relationship increases both the economic and political status of Chinese Cambodians, and it provides an additional means through which China can leverage the economic instrument of national power. Part of that relationship is the coveted opportunity for international travel and training, and China's proximity and affordability make it a workable option for staff training--provided the staff speak Chinese. A private bank in Phnom Penh which claims to have 33 percent of all savings accounts in Cambodia, for instance, recently began sending staff to Sun Yatsen University in Guangzhou for advanced schooling in business management.[51]

Military Initiatives

The first post-July 1997 indicator of increased security cooperation between the PRC and Cambodia arrived quite visibly in late 1997 in the form of the 186 trucks and jeeps mentioned earlier, although the soft-loan purchase agreement probably was made before July 1997. It is likely that when Hun Sen and Ung Huot were

in Beijing in August 1997 they signed an agreement for law-enforcement training assistance, because in August 1998 China sent a police training team to Cambodia to provide two weeks of training in investigative techniques and physical security to 100 Cambodian policemen as part of a 21 August 1997 agreement.[52]

A series of high-level visits in 1999 may serve as the precursor for increased cooperation. Cambodia's Co-Defense Ministers, Tea Banh and Prince Sisowath Sirirath, traveled to China for five days in March 1999 at the invitation of Chinese Defense Minister Chi Haotian. They met with Vice President Hu Jintao and Chief of the PLA General Staff Fu Quanyou.[53] In a summary of PLA achievements for 1999, China called this visit an indicator of the emergence of China's foreign military relations "as an energetic and dynamic part of China's all-around foreign policy." [54] In October 1999, at the invitation of Fu Quanyou, a 12-member Cambodian delegation headed by armed forces Commander-in-Chief General Ke Kim Yan--and including army commander Lieutenant General Meas Sophea and the commanders of the navy and air force--visited Beijing, Shanghai, and Guangzhou.[55] Shortly thereafter, Zhou Kunren, the Senior Commissar of the PLA Logistics Department, visited Cambodia.[56] An unconfirmed Cambodian press report claims that Zhou offered Cambodia 250 tanks, 230 artillery pieces, 100 military trucks, and an undisclosed number of machine guns, with Hun Sen reportedly responding that he would accept the aid but not at this time.[57] More believable is the arrival in December 1999 of \$1.5 million in construction materiel for new barracks, ten jeeps, ten ambulances, and parachutes for the Cambodian armed forces' one parachute battalion.[58] Also in late 1999 China hosted Cambodian military personnel at a PLA engineering school for a 20-day course in humanitarian demining.[59]

Although these military contacts are only a beginning, it is likely that they will grow in much the same way that China has developed military ties with other developing nations. A significant difference is that Cambodia simply does not have the funds to buy Chinese hardware, nor is Hun Sen likely to ask to divert any significant portion of the \$200 million in credits (as well as remaining aid from previous years). Cambodia would send military personnel to China for training and would accept Chinese training assistance if offered.[60]

Strategic Implications

The purpose of this article has been to present a descriptive study of China's direct and indirect application of the four instruments of national power to achieve objectives in Cambodia that contribute to China's national security. What are those objectives? The diplomatic is perhaps most clear: Cambodia's support in the United Nations and as a spoiler in ASEAN would be useful to China. The economic objective is less clear. Cambodia has great potential to become a major producer of agricultural products such as natural oils, rice, and seafood, but its 11.3 million people are an extremely minor market for Chinese goods. The information objective of promoting Chinese culture and the idea of a Greater China supports the other instruments by enhancing the interdependence between Cambodia's Chinese, its economy, and its politics.

The military objective, in the long term, stands to make the greatest contribution to China's national security. Cambodia sits in a critical geostrategic position, and China has since 1955 demonstrated an almost bewildering desire for access to Cambodia, whether the purpose was to counter US influence, to funnel supplies to North Vietnam and the Viet Cong, or to counter Vietnam. During the height of Sino-Cambodian relations, during the Pol Pot Khmer Rouge regime, PLA engineers supervised the slave-labor construction of an airfield at Kampong Chhnang that was (and is) capable of handling any aircraft in the world. Given that the Khmer Rouge had no air force and that the base included a command center built into a nearby mountain, the facility was clearly intended as a forward base for the PLA air force.

Today, China's increasing exports and an increasing demand for oil are driving the Chinese navy to pay more attention to sea-lanes, as reflected by the plan to augment the existing three fleets with a roving fourth force to reinforce the other fleets and to project power into the South China Sea and the Pacific and Indian oceans.

[61] Situated in the center of mainland Southeast Asia, the Cambodian port of Sihanoukville would provide an excellent base for projecting maritime power into the Gulf of Thailand and the Straits of Malacca. Cambodian airfields could also make up for China's lack of in-flight refueling capacity for warplanes providing maritime air cover. Such bases would not only protect China's interests, they would drive a wedge both within ASEAN and between ASEAN and the United States.

Clearly China has exercised all four instruments of power--diplomatic, informational, economic, and military--to improve its relationship with Cambodia. In doing so, it continues to promote its national strategy of building regional alliances to counter US influence and to strengthen its own security in Southeast Asia.

NOTES

The author wishes to thank Colonel (Ret.) Monte Bullard, Colonel (Ret.) Ed O'Dowd, and Lieutenant Colonel (Ret.) Geoff Babb for providing frank and useful comments on earlier drafts of this article.

1. Joint Chiefs of Staff, Joint Publication No. 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Washington: GPO, 23 March 1994).

2. The five principles are: respect for the sovereignty and territorial integrity of all states, nonaggression against other states, noninterference in the internal affairs of other states, equality and mutual benefits, and peaceful coexistence.

3. Michael Yahuda, "China's Search for a Global Role," *Current History*, 98 (September 1999), 268.

4. Ibid.

5. Yan Xuetong, "Best friends next door," *China Daily*, 7 March 2000, Internet, <http://www.china-daily.com.cn/cndydb/2000/03/d4-1tie.307.html>, accessed 7 July 2000.

6. The Philippines might wonder where those "shared interests" are when it comes to questions of sovereignty over the Spratly Islands. For a recent statement of Chinese inflexibility there, see James East, "Beijing Warns Against Joint Military Games," *South China Morning Post*, 16 March 2000.

7. Ian James Storey, "Living with the Colossus: How Southeast Asian Countries Cope with China," *Parameters*, 29 (Winter 1990-2000), 111-25, discusses how the five founding members of ASEAN plus Brunei look outside of ASEAN, primarily to the United States, to counterbalance China. He states that among ASEAN members, Burma and Thailand feel the least threatened by China. I would add Cambodia to this group (Storey stated that he was examining how all ten members of ASEAN planned to cope with China, but he omitted Cambodia from his analysis).

8. Evidence continues to emerge regarding the extent of Chinese support of the Khmer Rouge. Soviet Communist Party archives, for instance, recently revealed that during one Khmer Rouge raid into Vietnam in 1977, the Vietnamese captured several Chinese advisors accompanying the Khmer Rouge. See Stephen J. Morris, *Why Vietnam Invaded Cambodia: Political Culture and the Causes of War* (Stanford, Calif.: Stanford Univ. Press, 1999), p. 100. The beginning of the end of Chinese support for the Khmer Rouge was probably the deaths of two PLA peacekeepers in Cambodia in 1993. Although UN Transitional Authority in Cambodia investigations found that both deaths were due to PLA soldiers being in the proximity of Khmer Rouge attacks against State of Cambodia forces, the deaths were perceived at the time as deliberate attacks. And in any case, the fact that the Khmer Rouge was irresponsible enough to attack when Chinese personnel were nearby was an equally reprehensible display of poor judgment.

9. W. E. Willmott, "History and Sociology of the Chinese in Cambodia Prior to the French Protectorate," *Journal of Southeast Asian History*, 7 (No. 1, 1966), 24-27; and David Chandler, *A History of Cambodia* (Boulder, Colo.: Westview Press, 1993), p. 79.
10. Roger Smith, "Cambodia: Between Scylla and Charybdis," *Asian Survey*, 8 (January 1968), 75; and Michael Leifer, "Rebellion or Subversion in Cambodia?" *Current History*, 56 (February 1969), 91. Although China had been supporting the Khmer Rouge for several years, to include hosting Pol Pot in China in 1965, it has never been established that the Khmer Rouge was in fact responsible for the outbreak of armed rebellion in Battambang in April 1967.
11. Interview with Hun Sen by an unidentified Malaysian correspondent, Phnom Penh Capital City Radio, 5 August 1997, FBIS reference BK0508162997. During a trip to the Thai-Cambodian border in 1996, I observed several British-made Land Rovers painted camouflage, including one that was the assigned vehicle of the highest-ranking general officer loyal to the FUNCINPEC Party. Cambodian army personnel present said Taiwan had donated the vehicles to the Cambodia armed forces. Rather than intending to subvert the government, it is plausible that Taiwan was simply providing small-scale military aid to what it considered to be legitimate recipients.
12. *Phnom Penh Post*, 19 December 1997 - 1 January 1998.
13. Phnom Penh National Radio of Cambodia, 9 December 1997, FBIS reference BK1012083897.
14. For a sample, see "Hun Sen Congratulates China's 50 Years," *Huashang Ribao (China Business Daily)*, 5 October 1999; "Cambodian PM Meets Chinese Military Delegation," Xinhua New China News Agency (hereinafter NCNA), 29 October 1999; "Cambodian PM Reiterates One China Policy," NCNA (Phnom Penh), 11 November 1999; "Prince Ranariddh: Cambodia Sticks to One China Policy," NCNA (Phnom Penh), 4 November 1999.
15. *Huashang Ribao (China Business Daily)*, 20 August 1999 (hereinafter *HSRB*). This is a Chinese language newspaper published in Phnom Penh. Its masthead also carries the English name, *The Commercial Daily*. Translations are mine.
16. *HSRB*, 28 November 1998 and 7 April 1999. Also see *The Cambodia Daily*, 6 April 1999. Most countries that maintain diplomatic relations with Beijing at least allow unofficial Taiwanese representatives to issue visas and to look after citizen affairs. Cambodia is an exception. In March 2000 Cambodia even closed a private business dedicated to "promoting cultural and business interaction between Taiwan and Cambodia" at the request of the Chinese Embassy, which proudly proclaimed its triumph in a press release; *HSRB*, 17 March 2000.
17. Official Chinese press release cited in *The Cambodia Daily*, 11 February 1999.
18. *Phnom Penh Post*, 30 April - 13 May 1999. The international community pledged \$470 million in total assistance to Cambodia at a February 1999 Tokyo donors meeting, contingent on reforms and quarterly performance reports. Timetables for delivery of such pledges are always problematic. US humanitarian assistance to Cambodia in 1999, routed through NGOs only, was \$10 million.
19. Chang Qing, "Opinion: Happy to See the Opening of Cambodian Chinese Teachers Training," *HSRB*, 19 March 1999.
20. Hun Sen received a Ph.D. from a Vietnamese university for a dissertation that included a discussion of using elements of capitalism within a socialist system. Political realities would have prohibited him from

referring to Deng Xiaoping or the Chinese experience in this area, so he chose Lenin's New Economic Policy of 1921 as the theoretical basis for his ideas. Most of the dissertation is reproduced in a book by him only available, to my knowledge, in Chinese. See Xing Heping, "Why Did Hun Sen Write *Cambodia: 130 Years?* --Prime Minister Hun Sen Responds to his Translator," *HSRB*, 26 March 1999. In this interview Hun Sen states that he used the Ph.D. as a political tool to persuade more conservative members of his party to move toward capitalism. Also see "Singapore Company Presents Prime Minister Hun Sen with the Chinese Edition of *Cambodia: 130 Years*," *HSRB*, 15 March 1999.

21. While serving as a United Nations Military Observer in Cambodia in 1993, my patrol area included Hun Sen's childhood village and the surrounding area.

22. Ri Liang, "Promoting the Healthy Development of Chinese Language Education," *HSRB*, 27 December 1999.

23. *HSRB*, 6 September 1999.

24. *HSRB*, 29 May 1999. The protests outside the US Embassy, the media coverage of which was dwarfed by what was happening in Beijing, came very close to disaster when Cambodian police opened fire with AK-47 rifles over the heads of the demonstrators.

25. *HSRB*, 26 March 1998 and 22 December 1999. The Overseas Chinese University advertisements specified that the preferential rate was for "Cambodians and Indonesians." The basic Cambodian education system ends with middle school, and entrance to high school is by competitive examination. Only two Chinese-language schools in Cambodia offer the equivalent of a high school education. The remainder stop at the sixth or ninth grades.

26. *HSRB*, 21 February 2000.

27. Wu Meijiao, "Reflections on Chinese School," *HSRB*, 21 October 1999. A factor driving this trend is the terribly poor quality of Cambodia's public schools.

28. The publisher is a Chinese Cambodian who formerly served as a high-level official under Prince Sihanouk. A 1999 FBIS report that this paper has a distribution of only 100 copies is wrong by a factor of 30. Virtually all Cambodia's urban Chinese and ethnic Chinese investors from China, Taiwan, Hong Kong, Singapore, and other ASEAN countries read the paper daily. The last time Cambodia had a Chinese-language newspaper was 1967, when there were five.

29. *HSRB*, 5 June 1998. Also see "Hun Sen Explains Why TV Bayon Will Transmit in Chinese," Phnom Penh National Radio of Cambodia, 29 January 1998, FBIS reference BK3001010498.

30. Chang Qing, "Opinion: Happy to See the Opening of Cambodian Chinese Teachers Training," *HSRB*, 19 March 1999.

31. W. E. Willmott, *The Political Structure of the Chinese Community in Cambodia* (New York: Humanities Press, 1970), pp. 29-30. Willmott uses the French term *congrégation* for a Chinese word which, depending on the context, could be translated as association or guild.

32. *HSRB*, 1 February 2000.

33. *HSRB*, 28 December 1999.

34. *HSRB*, 28 September 1998 and 1 October 1999.

35. *HSRB*, 21 February 2000.

36. Were Vietnam to provide similar support to the Vietnamese minority in Cambodia, whose numbers are comparable to the Chinese, there would be riots leading to mob violence. It is not uncommon for a Vietnamese accused of a crime to be instantly beaten to death by a mob in the middle of Phnom Penh.

37. *HSRB*, 1 June 1998.

38. A small sample of Chea's activities include the municipal government hosting a millennium song and dance festival consisting of performances by Chinese schools and, when China suffered severe floods in August 1998, Chea presented \$1000 to the Chinese Embassy for flood relief on behalf of the Chaozhao (Teochiu) Association of Cambodia. His two daughters also contributed an additional \$200 each. The per capita income in Cambodia is \$270, and the rate of malnutrition in children is worse than in North Korea, according to the World Food Program.

39. *HSRB*, 15 July 1998.

40. *The Cambodia Daily*, 10 February 1999; Reuters (Phnom Penh), 7 January 2000. Final investment figures for 1999 not available.

41. A sampling of the type of Chinese enterprises active in Cambodia can be seen in a list of recipients of loans awarded in April 1999 by the China Import-Export Bank as part of the \$220 million aid package described earlier. Unfortunately it is not possible to definitively determine whether each company is fully state-owned, partially owned, or private, but from the names it is fairly clear which have a government affiliation:

- . A \$2 million loan in support of a \$4.9 million multi-product agricultural development program in Koh Kong Province by China's Guangxi Province, Beihai City Overseas Development Corporation.
- . A \$2.5 million loan in support of a \$4.4 million multi-product agricultural development program in Kampong Speu Province by China Overseas International Technical Economic Cooperation Company.
- . A \$2.4 million loan to China's Qunken Group for a 7,500-hectare industrial park.
- . A \$975,000 loan in support of a \$5 million joint venture between Tianjin Pharmaceuticals and Cambodia Medicines Limited.
- . A \$975,000 loan in support of a \$1.97 million investment in plastic products by China Light Industrial Machine Corporation.
- . A \$500,000 loan in support of a \$1 million investment by China Jilin Textiles Corporation.
- . An unspecified portion of \$18.3 million in low-interest loans for a joint-venture sugar refinery in Kampong Cham City between a Cambodian company and China Overseas Engineering Corporation.
- . A \$4.8 million grant aid for a Chinese well-digging team to dig an additional 500 wells.

(*HSRB*, 20 April 1999.)

One discernible pattern to official or semi-official Chinese investment in Cambodia is the fact that many of the entities come from Guangxi, Yunnan, Henan, and Hebei provinces. For example, Guangxi entities active in Cambodia include the Guangxi External Trade Cooperation Office, Beihai City External Trade Cooperation Office, Beihai City Overseas Development Corporation, Guangxi Electricity Industry Bureau, Guangxi Hydroelectric Engineering Bureau, Guangxi Haining Company, Guangxi Overseas Construction and Engineering Company, China Guangxi Xiangzhen Enterprise, and the Guangxi International Economic and Technical Cooperation Company. (*HSRB*, 23 April 1998; 6 May 1998; 25 July 1998; 22 September 1999.) The preponderance of official firms from Guangxi, one of China's poorest provinces, could have ominous implications given the recent decision by China's National People's Congress to investigate Vice Chairman Cheng Kejie, the former Communist Party (CCP) chairman of Guangxi from 1990 until 1998, for economic crimes. (Associated Press, 4 March 2000.) Cheng was the boss of former Guangxi CCP vice chairman Xu Bingsong, who was sentenced to life in prison in August 1999 for taking bribes and influence-peddling.

42. *HSRB*, 9 and 11 March 1999. The US House of Representatives Select Committee on US National Security and Military/Commercial Concerns with the People's Republic of China (the "Cox Report") describes Wang as one of China's well-connected "princelings" directly involved in illegal activities in the United States (Cox Report, 3 January 1999, p. 22).

43. *HSRB*, 24 April 1998.

Official delegations or state-run enterprises (of varying levels of ownership) whose visits to Cambodia to explore trade and investment opportunities were reported in the press since 1998 include:

- . Shanghai conglomerate Huaihai visited in March 1998.
- . Guangxi External Trade Cooperation Office, Beihai City External Trade Cooperation Office, Guangxi Electricity Industry Bureau, and Guangxi Hydroelectric Engineering Bureau visited in April 1998.
- . Zhuhai City, Zhuhai Industrial Council, and Shantou City visited in June 1998.
- . Guangzhou City visited in June 1998.
- . Mr. Wang Jun, Chairman of CITIC, visited in March 1999.
- . Henan Province Economics and Trade Council, Henan Department of Agriculture, and Henan International Economic Cooperation Company visited in March 1999.
- . Xumao City, Henan Province, visited in March 1999.
- . Yangquan City International Economic and Technical Cooperation Company visited in March 1999.
- . Deputy Minister of Economics and Trade Sun Guangxiang visited in April 1999.
- . Hainan Province Deputy Governor visited in June 1999.
- . Kunming City Economics and Trade Council and External Economics and Trade Office visited in August

1999.

- . Zhentou Group (Shijiazhuang City, Hebei Province) visited in August 1999.
- . Hubei Province Deputy Governor visited in August 1999 hosted by China Wuhan Hubei Beidou Group.
- . Cangzhou City (Hebei Province) External Development Office visited in January 2000.
- . Boutou City (Hebei Province) Industrial Department and Environmental Protection Science Development Corporation visited in January 2000.
- . China Trade Promotion Council visited in January 2000.
- . The Governor of Zhejiang Province visited in March 2000.

(*HSRB*, 27 March 1998; 23 April 1998; 11, 12, and 13 June 1998; 9, 11, 12, and 24 March 1999; 20 April 1999; 25 June 1999; 17, 19, and 26 August 1999; 5 October 1999; 7 and 13 January 2000; *NCNA*, 23 March 2000.)

State-run enterprises or those with partial government ownership active in Cambodia since 1998 include:

- . Zhongya (China Asia) Group established a manufacturing zone in Phnom Penh in April 1998.
- . Guangxi Haining Company agreed to invest \$40 million in agribusiness in April 1998.
- . Hainan Province International Economic and Technical Cooperation Company constructed a primary school and was constructing an agricultural college with Chinese Embassy funding in June 1998.
- . Jilin Province International Economic and Technical Cooperation Company provided technical assistance to painting lines on roads in Phnom Penh in July 1998.
- . Yunnan Province International Economic and Technical Cooperation Company was conducting an unspecified project in September 1998 and building a school with Chinese Embassy funding in March 2000.
- . Future Group Holdings coordinated installing cement factory equipment in November 1998.
- . Yunnan Provincial Government signed a letter of intent to invest in agribusiness in December 1998.
- . China International Water and Electric Company signed a project agreement with Phnom Penh in March 1999.
- . Yangquan City, Shanxi Province established a representative office in Phnom Penh in March 1999.
- . Yuanwang Group signed a \$50 million cement manufacturing joint venture in May 1999.
- . China Favor (Henan Province) Cambodia Development Zone Company investigated in agribusiness,

August 1999.

- . Sanfeng Company, Zhongduan Group of Xingtai City, Hebei Province, invested in agribusiness in August 1999.
- . Xiangtan City, Hunan Province, held a trade fair in Phnom Penh in October 1999.
- . Hebei Province Electric Company completed plans to build a Phnom Penh electric plant in November 1999.
- . Hubei Province Number Five People's Hospital opened a branch hospital in Phnom Penh in January 2000.

(*HSRB*, 23 and 24 April 1998; 30 May 1998; 2 June 1998; 4 July 1998; 7 November 1998; 10 and 12 December 1998; 12 and 24 March 1999; 7 May 1999; 4 and 18 August 1999; 5 October 1999; 6 November 1999; 7 and 10 January 2000; 6 March 2000.)

The latter two lists are necessarily extensive in order to show the complexity of Chinese corporate activity in Cambodia and the relationship between the Chinese government and investment. It is apparent that many delegations visit that either result in no investment or just one or two investments. For our purposes here, however, the point is that the Chinese government is promoting investment as well as using Chinese firms to implement assistance projects.

44. The English title of this glossy, 32-page bilingual brochure is actually "Knotting the Tie Between Cambodia and China." I have taken the liberty of correcting the English.

45. The 1998 Report of the Investigation into Campaign Financing by the Senate Committee on Governmental Affairs ("The Thompson Report") includes 34 pages and 92 footnotes on Sioeng and his family, nearly all of whom fled the United States to avoid testifying. The minority opinion offers an additional 20 pages and 159 footnotes on Sioeng. For a somewhat sensationalized version of Sioeng and Theng's China connections, see Edward Timperlake and William Triplett, *Year of the Rat, How Bill Clinton Compromised U.S. Security for Chinese Cash* (Washington: Regnery Publishing, 1998), pp. 100-05.

46. *HSRB*, 21 July 1998.

47. Embassy protests: author's personal observations. Special session: *HSRB*, 1 March 2000.

48. *HSRB*, 1 March 2000.

49. *HSRB*, 2 March 2000.

50. Daily advertisements seek staff fluent in Khmer and Chinese, with English a plus. The Chinese method of advertising would be subject to legal action in many countries, e.g.: "Wanted for secretarial position: attractive Chinese-speaking Cambodian, female, age 21-25, able to use Microsoft Office in English and Chinese."

51. *HSRB*, 28 February 2000.

52. *HSRB*, 2 September 1998.

53. NCNA (Phnom Penh), 3 April 1999.

54. Internet, <http://cn.yahoo.com/headlines/000106/china/nanfang/20000106db0406sty-6.html>, my translation.
55. NCNA (Phnom Penh), 11 October 1999.
56. NCNA (Phnom Penh), 29 October 1999.
57. *Sereipheap Thmei*, 26 November 1999, FBIS reference BK0312080699. Khmer-language newspapers, in particular pro-opposition papers reporting anti-government stories, must be treated with caution.
58. *Atippadey*, 31 December 1999, translated in *The Mirror*, 2-8 January 2000. Also see Reuters (Phnom Penh), 1 November 1999.
59. *China Youth* (in Chinese), Internet, http://www.duoweinews.com/SinoNews/Mainland/Sun_Dec_12_07_36_27_1999.html.
60. In the fall of 1998 I met a group of 15 new sub-lieutenants (second lieutenants) at the Cambodian armed forces' English school in Phnom Penh who were studying English in preparation for training in China in 1999 in armor, field artillery, and several technical skills. I have no further information on whether or not they deployed, but the fact that China uses English to train foreign military personnel is noteworthy. The Cambodian school houses several language labs provided by the US IMET program in 1996.
61. *Asiaweek*, 24 March 2000.

Major Paul Marks is a political-military affairs officer in the Office of Contingency Planning and Peacekeeping, Bureau of Political Military Affairs, Department of State. He is a 1986 graduate of the US Military Academy and a 1988 graduate of the University of London, where he completed a master's degree in Chinese politics as a British George C. Marshall Scholar. He wrote this article while a student at the US Army Command and General Staff College, 1999-2000. His assignments as an intelligence officer include the 2d Infantry Division and 1st Special Forces Group (Airborne). A China Foreign Area Officer, he recently completed a three-year tour in Cambodia where he managed the security assistance, DOD humanitarian assistance, and interagency humanitarian demining programs for CINC, Pacific Command. His article "Security Assistance Training for Emerging Democracies: An Approach," appeared in the Winter 2000 edition of the *DISAM Journal*.

[Go to Autumn issue Table of Contents.](#)

[Go to Cumulative Article Index.](#)

[Go to Parameters home page.](#)

Reviewed 16 August 2000. Please send comments or corrections to usarmy.carlisle.awc.mbx.parameters@mail.mil