

At the beginning of August 2011 the world saw the much publicized launch of China's first aircraft carrier from the Dalian Shipyard in north-eastern China to begin its sea trials. Over the months and years leading up to the voyage a number of public and less-public disclosures alluded to the ship's role as a fully functional carrier and the People's Liberation Army Navy's (PLAN) ambition to operate a fully independent carrier building program. In line with this, China's Defense Ministry on July 27 confirmed that the craft would serve as a 'scientific research & training' platform to develop this capability'. The unveiling of the warship comes at a time of increased tension in the South China Sea on top of wider worries in the region about China's overly assertive stance over the region's resources and the pace of its military modernization. Be that as it may this new addition to Chinese maritime capabilities, at present, is of minor strategic value. In short PLAN still lacks experience in carrier operation, best practices and many operational systems still require testing. Moreover the PLAN still needs carrier-capable aircraft to train its prospective naval air wings and to develop a credible carrier escort and support force, in addition to a host of other issues. In the meantime therefore the new carrier remains a political statement only. China's assistant chief of general staff, Lt. Gen. Qi Jianguo described the carrier as a symbol of a great nation. Furthermore retired Gen. Xu Guangyu emphasized 'China should at least be on the same level as other permanent members of the UN Security Council who have carriers'. The carrier and corresponding construction program are a matter of prestige and are perceived to benefit China's growing status in the world. Yet it is a prelude of things to come if Chinese maritime modernization continues at this speed. Many analysts have, in recent months, commented on China's ambitions to extend military control over an ever expanding region countering US predominance in the so-called Far Sea Defense. A more pressing goal is China's claims to appropriate territories in the South and East China Seas while trying to implement a corresponding anti-access strategy in this region. However putting military prestige and future strategies aside the most compelling reasons for Chinese maritime expansionism are for trade, resources and above all energy security. This paper will place recent developments in this context, and will proceed to set out what is at stake in the South China Sea (SCS).

The energy, security and foreign policy nexus

As China's economy has grown and integrated with the global market both have become interdependent. Therefore China's long-term development goals will only be possible with increasing and stable access to foreign trade, resources and energy. The latter has become a pressing issue as the country's dependence on international energy imports is rapidly increasing and might impose a limit on its growth if left unmet. This is especially important

given supply shortages as a result of the recent events in Libya and given the future prospect of supply disruptions from the Middle East. In the case of oil Chinese imports were estimated in 2010 by the International Energy Agency to grow from 4.3 million barrels a day (m/bd) day in 2009 to 12.8 m/bd in 2035 and will have risen from 53% to 84% of total demand. The issue of resource shortages will play an even more prominent role in international relations and will become an increasing source of conflict between major powers. Given the fact that some countries are more generously endowed with the distribution of strategic resources this opens up the possibility of using these tools for political gain. Historically economic diplomacy has contributed to the shifting balance of power in the world. Nations have more often been inclined to employ economic measures in pursuit of foreign policy objectives when 'the legitimacy of the power of existing structures of international cooperation decreases' (Peter van Bergeijk, et alia. "Economic Diplomacy" *The Hague Journal for Diplomacy* 6:1 2011 pp. 1-6). The result of the current realignment of geo-economic power will encourage nations to reassess their effectiveness of their energy, economic and foreign policies.

Dependence on sea lines of communication

The 2011 US Department of Defense (DoD's) Annual Report indicates Beijing's regional energy strategy is geared to alleviate China's heavy dependence on sea lines of communication (SLOC) and in particular on the South China Sea and the Straits of Malacca and Hormuz. At present it has a limited ability to control the flow of commodities over the Indian Ocean and through these straits. In response China has invested heavily in bilateral relationships and in developing infrastructure to support its fleet in the countries of Pakistan, Bangladesh, Sri Lanka and Burma. Also China has multiple agreements to pipe oil and natural gas in from energy-rich Central Asian neighbors. The country is constructing a pipeline through Burma to bypassing the Strait of Malacca. In spite of these developments, new land pipelines will only slightly alleviate the growing need in the future for maritime based hydrocarbon transport. Also Central Asian oil can be too much of a good thing. Russia is on any given day the world's first or second largest oil producer, second largest oil exporter and second largest gas producer in the world. As Anatol Lieven describes Russia had long assumed China would be forced to depend on it for oil, yet China sought out resources from other sources. Russia has not become China's major energy provider unlike Europe with its heavy dependence on Russian to gas and oil. The Stockholm International Peace Research Institute (SIPRI) recently analyzed the Sino-Russian energy relationship and stated that Russia is only China's fifth largest supplier of oil, behind Saudi Arabia, Angola, Iran and Oman. Also there has been historically little meaningful natural gas cooperation between both primarily due to failure to reach agreement on a gas pipeline. The report makes clear that the country only supplies 4% of China's liquefied gas. Half of China's LNG imports come from Australia. Also Chinese analysts remain wary over a pricing

conflict with Russia, problems in Chinese upstream investment, and doubts about the 'willingness and ability' to make necessary investments to guarantee supply increases. According to Jane's Intelligence Review 95% of Chinese seaborne oil imports come from Africa and the Middle East. Therefore if China's sea-lanes become more vulnerable the consequence will be a rise in Russian and Central Asian influence.

Resource diplomacy

Concerns about supply stability, cost and resource distribution have led to a wider emphasis on resource diplomacy. Due to the interconnectedness of these issues there is a rise in their implementation as instruments of foreign policy. Also as a result of the projected future rise in the global demand for energy resources supply might become constrained. A meaningful example might be borrowed from China's strategic use of its rare earth elements. At the moment China provides 97% of the world's rare earth elements (REEs). This creates the use of REEs as a diplomatic bargaining tool much like Russia has used oil and gas supplies to pressure European countries. China has indicated it will not use REEs in such a manner yet last year it suspended exports to Japan after a territorial row regarding claims to the Senkaku Islands and accompanying exclusive economic zone (EEZ) in the East China Sea which reached a climax in 2010 as consequence of a fishing boat collision. China might not have control over the sea lanes that provide its oil, gas and resource supplies but it can use its REEs as means of political leverage while it retains a monopoly over the market. REEs such as lanthanum and cerium are vital for the petroleum refining industry and are used as fluid catalytic cracking units. If REEs export quotas are reduced this will impact on the price of gasoline production. Paradoxically REEs are a fundamental component for many green technologies needed to break out of oil-cycle fuel dependence.

Regional energy issues

The Eurasia group estimates Southeast Asia's gas demand will increase by 18% over the next four years and during this time some five South Asian countries will have started to import LNG.

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Written by Henry Philippons

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Singapore might have a significant role to play in the near future as an LNG hub in the region. If these plans are successful it is set to become the second gas price maker after Japan. It has been suggested that Singapore would implement gas-on-gas pricing instead of pricing linked to oil indexation. Chinese interference or disruption will have a severe impact on these plans. The Japanese example highlights China's assertive posture in the South and East China seas. In these areas a number of countries have competing claims to numerous islands and reefs, most notably: the Scarborough Shoal, the Paracel Islands, the Spratly Islands and the previously mentioned Senkaku Islands. China has in the past pressured foreign energy companies, such as Exxon Mobil and BP, to halt efforts to explore the resources in the region off the coast of Vietnam. The proven reserves have been estimated at 7.5 billion barrels of oil (Bbl) and 145.5 trillion cubic feet of gas (Tcf). The US Geological Survey has estimated the total sum including undiscovered resources at 28 Bbl and 266 Tcf. These regions therefore are of great strategic value not only for securing the SLOC but as well as for securing the recourse beneath them. In the future transportation costs by either pipeline or shipping will undoubtedly rise and as resources become scarcer and as demand rises commodity prices will also increase. China therefore understands the convenience of such enormous untapped resources on its doorstep. In an effort to stake its claims, China has in recent years been harrying other nations' ships in these waters. In May three Chinese ships cut the cables of a survey ship belonging to the Vietnam Oil & Gas Group. Two months later an Indian warship was confronted by a Chinese vessel shortly after it left a Vietnamese port 45 nautical miles off the coast which is still considered within Vietnam's EEZ. India and Vietnam have sought to increase naval cooperation with one another. Even one of China's allies, Burma has rapidly been getting closer to India and increasing its willingness to engage with the West in order to offset the influence of its northern neighbor. Moreover Burma surprised its neighbor not long ago when it decided by to cancel the construction of the Myitsone hydro-electric dam project which, if ever constructed, would send most of its electricity to China. There have been numerous incidents between China and other claimants over the region's resources. This has forced neighboring countries to consolidate ties as for example India and Vietnam have in seeking to increase naval cooperation. China maintains it will resolve territorial and diplomatic issues on a bilateral basis only. The problem is that as other countries are less hesitant to draw in third parties this inevitably widens any potential conflict if resolutions via multilateral negotiation mechanisms remain unavailable. Some neighbors have proposed lessening the emphasis on sovereignty and have offered to jointly explore resources in the region. Yet it seems China has opted for a two pronged approach towards both its weaker and stronger neighbors. The Chinese government remains firm on the indivisible-ness of the SCS which is has designated a 'core interest.' However China has in the past entered into talks with Japan on joint gas exploration in East China Sea. Also Assistant Chief of General Staff Lt. General Qi Jianguo recently commented that their new 'carrier would pose no threat to other nations'. However the news of the carrier and corresponding naval enlargement is small comfort to China's neighbors as they recognize these assets can be used to secure and consolidate China's influence in the region. Infuriated by what is sees as infringement in its sphere of influence, China's foreign minister Yang responded at the July ASEAN Forum, to US assertions over the right of freedom of navigation in the region, that 'China is a big country and other countries are small countries, and that's just a fact.

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It remains extremely unlikely China would go to war over resource issues alone as hostilities would be a severe obstacle for the prosperity of the co-dependent economies of China, US and others across the region and the world. China further needs sustained economic growth to fuel its military buildup. A major threat for the Chinese Communist Party is the fear that regional and global powers may work to boycott or blunt China's economic success. Prosperity has somewhat elevated domestic unrest making continued growth a necessity. Surrounding nations however have no such intentions. For most ASEAN countries China has replaced the US and Japan as their largest trading partner and any economic sanctions would severely damage the growth of all involved. Both ASEAN members and the US therefore prefer a multilateral dialogue instead. Negotiations held during the most recent ASEAN meeting seemed promising as ministers reached agreement on a set of guidelines towards final implementation of a binding code of conduct for handling disputes in the South China Sea. However the agreement failed to include a timeline for completion or enforcement mechanisms. Neither did it address the main cause of tension, the exploration of oil and gas. Chinese academic, Gong Jianhua, last year said China's 'territorial sovereignty, strategic resources and trade routes comprise its core interests, and like any other country China will never compromise them'. At the aforementioned ASEAN meeting Hillary Clinton made clear that 'The United States has a national interest in freedom of navigation, the maintenance of peace and stability, and respect for international law in the South China Sea' echoing statements made by outgoing US Defense Secretary Gates at the Shangri-La dialogue summit in Singapore a month earlier. According to Chinese analysts lack of resources and lack of trust can lead to future wars. Of these two causes the access and control of resources will be most fundamental. Yet in the case of energy security in the SCS both trust and resource-access appear equally important. Trust is decidedly lacking with all parties concerned. China will not rely on the US Navy to patrol and police the high seas and mediate rivalries with other powers. It will therefore increasingly try to protect and assume control over its SLOC.

Reserves and consumption

In his most recent book Jeremy Rifkin astutely observes 'fossil fuels, coal, oil and natural gas require a significant military investment to secure their access and continual geopolitical management to assure their availability. They also require centralized, top-down command and control systems and massive concentrations of capital (to move them from underground to end users)' and again one of the end-user communities is the military that secures them. China will have to face an inconvenient truth about its current economic and military growth rate. As fossil fuel production will peak during the middle of the 21st century, this will coincide with the projected completion of China's full-scale blue water naval capability. Additionally through various channels the PLAN has revealed its intentions to deploy up to four carriers by the

mid-2020s. Analysts have estimated this figure could be as high as six. If global competition for oil increases then China's economy and military machinery would need to be able to compete for this strained resource. To offset the risk of shortages China has continued to increase its strategic petroleum reserves which now cover only 21 days of demand. By 2020 it will have expanded to a capacity of approximately 500 million barrels and is expected to have duration of 90 days. China's head of the National Energy Administration has in the past commented that the government encourages oil firms and industry to use spare storage capacity to increase the size of commercial stockpiles. This could put estimates of total strategic capacities even higher.

Yet if Chinese naval development mirrors the American example it will most likely also be confronted with the rising costs of petroleum use. As Fred C. Beach has described, US focus on carrier aviation will continue for the foreseeable future. China has also opted to fully develop this capability to extend its strategic reach across the region. The deployment of these costly capabilities will lead to the People's Liberation Army Navy's (PLAN) need for oil. The fully burdened fuel cost of carrier operations in the future will not only be attributed to the carrier air wing, its maintenance and training but dependent on the most expensive form of delivery by in-flight refueling essential for overseas tactical operations. At present China's fleet of H-6U tankers is small and ineffective. This implies that China will still have problems extending its strategic reach, but also that any effort to make more use of the H-6Us will come at a price as these converted bombers have poor transferable fuel capacity while any future improvements remain dependent on the development of a larger indigenous craft or renewed efforts to acquire tankers from Russia. For the time being China will increasingly be left to rely on the strained use of the H-6Us adding to costs. In the future with the advent of multiple carrier battle groups, the PLAN will need much more oil and even more so if we take into account the extra cost for support and escort-ships needed to sustain operational carrier battle groups. The protection of China's SLOC will remain the driving force behind naval modernization. Carriers will be needed to secure offshore defense and out of area missions, especially in the Indian Ocean where land based aviation, even with advances in aerial refueling, will be insufficient.

Extending reach further afield

Finally there has been little attention paid to the relationship between energy security and China's ambitions of expanding north and westwards. Extending reach into the Pacific is mostly it seems a strategic move to counter the US presence in the Asia Pacific region. However there are any number of potential developments which could involve China in the region. First due to the effect of climate change on Arctic ice new opportunities have arisen for shipping oil and for

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LNG tankers across these waters. China increasingly has sought access to and inclusion in international issues regarding the Arctic in an effort to influence the emerging political and legal framework of this new environment. Moreover it is estimated by the US geological survey that 25% of the world's undiscovered hydrocarbon resources may be found there. Additionally, there are only a limited number of countries presently with the technology and capability to operate in the Arctic and China has already started developing these as well. There is also a lingering fear that more competition for global resources might lead to the militarization of the Arctic region. Another important issue is the Keystone XL pipeline. As it stands China would happily step in to support a pipeline if the deal between Canada and the US ultimately falls through. Once oil is transported to the West coast of North America, it can easily be shipped to China. China's fleet modernization would help protect these regions and supply lines.

In summary, China is making the transition from a continental power to a maritime one by increasingly shifting its focus towards naval modernization in an effort to balance and diversify access to a multitude of resources. Asia is seeing a rise in 'zero-sum competition' over access to and control of resources which is being accompanied by so called energy nationalism. China is opting to secure supply lines of energy and other commodities through the SLOC which at present it has little control over. Also China does not trust the US to secure the global commons. At present China has little ability to influence the South China Sea region and is unable to respond to any large scale threats. Due to its assertive posture vis-a-vis other countries in the region, China has created a sense of insecurity, fueling an atmosphere of distrust, animosity, and to resource nationalism in the Asia-Pacific. These developments have in turn contributed to a sense of insecurity for China and have inevitably legitimized calls to modernize and expand the PLAN's capabilities.

Contributor Henry Philippens holds an MA from the War Studies Department at King's College, London. He is presently a trainee at the North Atlantic Treaty Organization. The views expressed in this article are exclusively those of the author alone.