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Access Denial Strategy – the Indian Variant

To Shield the Shalmali Tree

In its life and death struggle with the divine wind, the fabled Shalmali tree severs its lush branches to leave itself skeletal, much like the Indian tree of State that has persistently denied itself a strategy whose purpose is to shield the State, while defining a willingness to confront and contend with the growing Chinese designs in the Eastern Oceanic spaces.¹

By
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‘They Have Broken, Over and Over Again, the First Principles of Strategy’²

On 01 November 1914, in the early stages of the First World War, a strange engagement occurred off the west coast of Chile. The battle of Coronel was destined to be lost before the first salvo was fired on account of blundering and amateurish operational planning on the part of the British Admiralty. The plan was in discord with their larger maritime strategy.

The British Empire for its war effort depended largely on the unimpeded flow of resources, man and material across the oceans from and to its near and far flung outposts of empire. Accordingly, the fundamentals of its global maritime strategy lay in ensuring that its Sea Lines of Communication (SLOC) were always under its control, giving it freedom of manoeuvre to strike at a challenging imperial power at points of its choice, endowing it with domination over the geography of conflict. To this end a vast support network of bases stretching from Hong Kong to Singapore to Aden and the British Indian Ocean Territories to the Falklands and to their Pacific possessions had been established; this was backed by a web of radio stations, coaling posts and transoceanic telegraph cables. All this was in addition to the primary colonial continental holdings. Implementation of this strategy demanded superior fire power, mobility, surveillance,

intelligence and an omnipresence that permitted rapid concentration and decisive action; all of which was woefully lacking in-theatre and, in my analysis, actually precipitated the events.

At the outbreak of the War in August 1914, Admiral Graf von Spee, Commander of the German naval squadron in the Far East, found his command in a very tenuous position. Germany exerted very little power in Asia and the Pacific, precariously holding on to a naval station at Tsingtao, China, with no guarantee of logistic support from the Fatherland. Spee's ships required large quantities of coal to operate, supply of which could not come from either German possessions or allies in the region. Due to the demands of re-coaling Spee felt compelled to either order his ships to operate individually as privateers or to stay together and attempt to disrupt and sever British sea lines of communications. Spee decided keeping his forces together could best achieve his mission to strike at British trade and bases in the vast area of the Pacific and the South Atlantic. His forces comprised of two modern and fast armoured cruisers the Scharnhorst and the Gueisenau along with three light cruisers

The British Commander in the South Atlantic in 1914, Rear Admiral Christopher Cradock was, reportedly, a fine seaman and an effective leader of men; but in contrast to von Spee's squadron, Cradock's two armoured cruisers and its consorts were old, slow, gunnery-wise inefficient and totally inadequate for the larger control assignment in the Pacific and South Atlantic Oceans or even for the engagement that awaited in the wings. To put matters in perspective the total weight of the British broadsides was 2,400 pounds – merely half that of von Spee's ships.

On the afternoon of November 1, around 100 miles offshore of Coronel, Chile, the two squadrons sighted each other, closed and engaged. In the event the British were handed a crushing and humiliating defeat losing their Admiral and his flagship, the Good Hope and the Monmouth the two armoured cruisers and the remaining consorts in rout. In the final analysis it was hollowness of the strategic posture its worthlessness in terms of the forces allocated and the poor leadership at the highest level which failed to perceive the chasm between strategic intent and operational plans that obtained³. Troop convoys and war material from Australia and New Zealand were held up until appropriate protection and escort could be guaranteed and the in theatre threat from von Spee's

surface raiding force neutralized. This was clearly a paradox since the strategic balance of maritime power remained heavily weighted in favour of the British both before and after the engagement. To some extent in the early stages of the war it may be said that German access denial strategy had worked; for in time the Royal Navy were able to bring to bear their superiority and in the absence of a network of support infrastructure the German squadron was hunted down and neutralized in the battle of the Falklands.

If at all there is a strategic lesson to be learned, then it is that, for an Access Denial Strategy to prevail, not only must in-theatre superiority be maintained; but also the means and routes to buttress and support in-theatre forces must be denied for the duration for which the strategy is in play. To this end the role of cross spectrum surveillance, ability to disrupt command and control networks and the presence and vigorous deployment of decisive denial forces will be critical for the success of such a strategy.

The Fears of Nations

Historically the growth, development, influence and expansion of Empires have been determined by three fundamentals: trade and economics, conquest and settlements and security. The quest for wealth was often catalysed by technology; vehicles such as development of sturdy ships spurred trade, migrations and colonization as exemplified by the Greek Empire, Sri Vijaya Empire, the Zheng He voyages and indeed the European establishment of global trading systems. As they expanded some expended their vigour and were assimilated by existing societies, such as the Greeks, the Sri Vijaya Empire and the impact of the Ming emperors, while others drew settlements and through superior military and weapon technologies established security perimeters to protect these trading dependencies. As these settlements expanded and extended into the hinterland, the demand for security also increased, seeking greater sanctuary from rival colonial powers or from hostile indigenous political entities. All the while the economic dividend of the venture fuelled and accelerated the engines of growth on the one hand while on the other the very burgeoning of scales stretched the enterprise to an extent when the ability to manipulate and dominate the resident elite to balance out numerical inferiority came increasingly under stress (the great convulsion in India of the sepoy uprising of 1857 is a case in point); it was the summation of these anxieties that led to the imposition of direct

rule and the institution of imperial control with its weighty baggage of administrative bureaucracy, security apparatus and law and order mechanisms. To this day the mass and sway (at times ponderous) of colonial rule remains a factor to persistently contend with.

The three phases of empire, from equitable trade through expansion to a security dominated imperial rule; described above is, admittedly, simplistic in form and motivation. Yet, it captures the essence of how dynamic societies, in their quest to make possible enhanced economic development through means that have a unidimensional focus, accumulated anxieties that in turn morphed into fears, qualms and suspicions. Contemporary China fits into this mould.

“The modern democratic world wanted to believe that the end of the Cold War did not just end one strategic and ideological conflict but all strategic and ideological conflicts. People and their leaders longed for a world transformed.”⁴ President George H W Bush on 11 September 1990, addressing the joint session of Congress introduced a re-invocation a ‘new world order’ to mark the post Cold War era. He suggested the coming of a modern day Utopia in which “the nations of the world, East and West, North and South, can prosper and live in harmony where the rule of law supplants the rule of the jungle; where nations recognize the shared responsibility for freedom and justice.”⁵ This, even at that point in history, was a self perpetuating delusion caused more by intellectual impoverishment and a US centric misplaced optimism rather than any significant analysis of the geopolitical situation that obtained.

After all, the invasion of Kuwait had just occurred and the first Iraq war was waiting in the wings; the break up of the Soviet Union and the ensuing instability had left Central Asia in fragile circumstances and a fractious mood; Africa was in a state of turmoil; clandestine efforts by Pakistan and other rogue states to obtain nuclear weapons was well known and yet given the ‘Nelson’s eye’; the war in the Balkans was in the offing; terrorism and tremors in the Islamic world was sending a ground swell being felt world wide; the US loss of global economic domination suggested a diminishing clout in the international arena weakening the web of cooperative security arrangements; the growing fanatic fervour of new found nationalism as opposed to the strange expectation of a ‘supra nationalism’ that would willingly submit to US right to police and arbitrate

and indeed lastly the emergence new power centres with there own gravitas. Utopia remained as far as never before.

On the contrary what has emerged is increased and vicious securing of spheres of power and economic influence as exemplified by China in Africa, the competition between autocracy and liberalism persists, an older religious struggle between radical Islam and secular cultures has erupted. As these life and death struggles are played out the first casualty in the post Cold War era is the still born hope of a benign and enlightened world order. The endemic instability world wide is characterized by the number of armed conflicts that have been engaged, and in some cases continue to be waged between the periods 1989 to 2010 which total 49.⁶ While the nature of these wars range from wars of liberation and freedom to insurgencies, civil wars, racial-ethnic-religious wars, proxy wars, interventions and wars motivated by the urge to corner economic resources; in all cases it was either the perpetuation of a dispensation, political ambitions or the fear of economic deprivation that was at work below the surface. If that were not enough to underscore the fragility, gravity and self-centeredness of the international system; in the same period the United States of America alone has militarily intervened in foreign countries on 11 occasions; more often than at any time in history.⁷

China, in the 18th century under the Qing dynasty enjoyed a golden age. It was a period of *shengshi*, an age of prosperity. Currently some Chinese nationalists say that, thanks to the Communist Party and its economic prowess, another *shengshi* has arrived.⁸ In 2010 China became the world's biggest manufacturer, a position that the US had held for most of the 20th century. By 2020, it has been forecast, that China could become the world's largest economy. Significant to political influence is its matching economic and military growth. Power, changes the very character of nations and its people and of their standing in the comity of nations. It transforms their outlook towards the world and places primacy to their beliefs and interests in the international milieu giving it new drive to shape global affairs in a manner that promoted their well being. This search for geopolitical space that the emergence of a new cognizable revisionist power precipitates, historically, has been the cause for global instability and tensions. Add to this that the principle of nationalism is inextricably linked, both in theory and practice, with the concept of war,⁹ then, we are faced with a situation when the military dimension of

power will potentially throw up conflictual circumstances that will have to be contended with. In this context the slogan of the 18th century Qing dynasty “the dream of a prosperous country and a strong army” today has new connotations.¹⁰

In the post Cold war era the fears and anxieties of nations are driven by four vital traumas. At the head of these four is the perpetuation of the State and its Dispensation, a factor that every nation lists as primary to their national interests. In second place is the fear and understanding that impedance to the nations ambitions of growth and development may come about due to internal or external stresses or a combination of the two; in all cases it was the duty of the State to ensure through polity, diplomacy or military power that these stresses are effectively countered or put down, if it is a matter of access to external resources then its denial becomes a matter that calls for the use of all dimensions of power in the quiver of the State. The third trauma is that the remaining interests that the State considers critical must be recognized and accepted by the International system; this distress places the system on the horns of a dilemma particularly so when interests overlap when there is a real potential for friction and conflict. Lastly, is a conundrum faced by all major powers or those that aspire for such status, and that is, given a circumstance when the State deems it necessary for military power to be applied, it must do so with the confidence (at times misplaced) that they will prevail.

It will not fail anybody’s notice that both India and China fall into this very same cast ensnared by the ‘four traumas’, with one very critical difference, and that is the cooperative stimulus along with an egalitarian tradition is strong in India’s case, while China has no belief in respecting either. Against this backdrop, when the politics of competitive resource access is put into the same cauldron as survival and development of State, to which is added the blunt character of military power, we have before us the recipe for friction and conflict.

China’s Narrative: A Hundred Battles¹¹ and Evolution of ‘Access Denial Strategy’

China published its sixth Defense White Paper in January 2008. Its contours were that of a self-confident China recognizing its own growing economic and military

prowess. Unwritten was Beijing's intention to improve her image the first step of which was to provide some clarity by the issuance of the White Paper. At the same time, the paramountcy of containment of the various social fissures that their development has precipitated was top of their agenda. Their appreciation of the security situation underscored the belief that the risk of world wide all-out war was relatively low in the foreseeable future, yet, the absence of such risk did not automatically imply a conviction that stability and peace pervades international relations. The paper critically points out that struggles for cornering strategic resources, dominating geographically vital areas and tenancing strategic locations have, in fact, intensified. Power as a natural currency for politics remains the preferred instrument. Under these circumstances the portents for friction are ever present and would therefore demand preparedness, modernization and orientation of a nature that would serve to neutralize the fall out of such friction.¹²

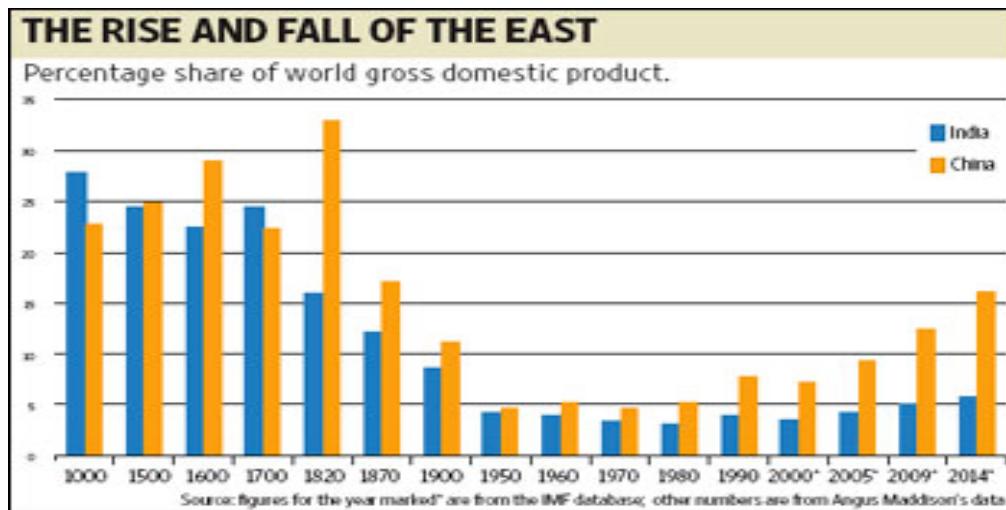
One of the clauses that is central to the White Paper is that "the influence of military-security factors on international relations is mounting." From the Chinese point of view (which we may study with an element of skepticism) is their abhorrence of hegemonistic tendency notwithstanding the levels of development that they may achieve. Examining the nature of the geopolitical scenario, the paper reiterates the defensive posture of China's national defense policy. But typical of their nuanced approach to such issues, they in the same breath, highlight the fact that they are in the process of implementing a military strategy of 'active defense', in which, material as well as doctrinal tenets would combine offensive operations with defensive maneuvers. This would demand that the PLA develop advanced assault capabilities. Of significance is the enhancement of mobility and strike capabilities in all three dimensions. Doctrines to back such capabilities involving sea-air-land integrated operations would be central to military strategy. Long range assault, regional reach and the development of 'Access Denial' and control strategies are central to military operations.¹³

During President Hu Jintao's review of the South China Fleet in Shanya in April 2008, he declared that the central problem arising from China's security goals was how to maintain the robust level of resource access and to put in place control features needed to sustain and nurture national development. To this end, the importance of protecting and securing maritime interests present a major challenge. He specifically focused on the

PLA's rapid reaction capability in its territorial seas, sea control capabilities in blue waters and power projection in waters of interest. In relation to extra regional naval forces, the PLA's strategy would center on an effective denial capability. To achieve these objectives, the development and implementation of Access Denial strategy and the 'Assassin's Mace'¹⁴ were key. The rapid expansion of the nuclear submarine fleet is all a part of this venture.

Among the multifarious factors that characterize and influence the development of nations an ever increasing role is being played by its maritime power. The realization of such power is at the heart of making effective use of the world's oceans. Higher the level of development of the economy greater will be the consequences assumed by the world oceans as an inexhaustible source of energy, raw materials, food and most critically as a medium for the movement of trade, materials, petroleum products and indeed of personnel; so also the portents for discord. Close to 90 per cent of global trade is borne by hulls out at sea. It is no secret that historically, and to this very day, maritime power is a key catalyst of economic growth. It will be noted from Table 1 that it was during periods of increased maritime activity that both China and India realized periods of significant growth. Therefore between the 7th and 14th centuries for India, when the Srivijaya Kingdom was at its zenith and for China, during the period of the Zheng He voyages (15th century), growth, commercial activity and seaborne inroads all saw a spike which is yet to be replicated. While it may be argued that societies of that day, being largely agrarian and critically influenced by demography and weather, made GDPs directly proportional to population; however it cannot be denied that it took maritime activity to convert surpluses of time and agricultural produce into imperial activity. It would be of significant interest that the two countries between the 9th and the 18th century, contributed to as much as 40 to 50 per cent of global GDP. Table 1 maps historically China and India's share of global GDP its fall and its current upward trend.

Table 1: Global Share of GDP, India and China, 1000-2014



Source: Figures collected from IMF database

The relative size of the two economies over the last century is indicated in Table 2 and 3. What would be apparent is the stagnation for the first fifty years (in India's case two decades more) caused first by the colonial nature of the economies and later by the skewed character of rigid centralized policies. The surge that lifted growth to its current levels is more on account of three factors: end of the cold war, globalization and economic reforms.

Table 2: Economic size India, China

GDP levels in billion 1990 PPP dollars					GDP, percent of world			
	1913	1950	1998	2010*	1913	1950	1998	2010*
India	204	222	1,703	4,046	7.5	4.2	5.0	5.4
China	241	240	3,873	9,872	8.9	4.5	11.5	13.2
World	2,704	5,336	33,726	74,430	100	100	100	100

*In current U.S dollars

Source: Maddison, A., D.S. Prasada Rao and William F. Shepherd, (eds) (2002), The Asian Economies in the Twentieth Century, Edward Elgar, UK and U.S.A. and CIA Fact book, 2011.

Table 3: India and China Per Capita GDP in 1990 \$US PP.

	1913	1950	1998	2010
India	673	619	1,760	3827
China	522	439	3,117	7,400
World	1,510	2,114	5,709	10252

Source: Maddison, A., D.S. Prasada Rao and William F. Shepherd, (eds) (2002), The Asian Economies in the Twentieth Century, Edward Elgar, UK and U.S.A. CIA Fact book, 2011

An examination of the tables above and the symbiotic relationship between periods of maritime activity and the impact on growth will make apparent this intricate linkage between sea power of the State and its development, though subjective, the hypothesis is a robust one. The importance of information technology, human development and soft power in the 21st century is a factor that cannot be lost sight of in making estimates of comprehensive national power of states.

The change in China from a closed centrally planned system to a more market oriented one from the late 1970s to 2010 must be seen as having been enabled, in good measure, by vigorous promotion of maritime power. So much so that by 2010 it is the world's largest exporter and its economy at \$9.8 trillion is only second to the USA and with an oil consumption of 8.2 million bbl/day she is the 3rd largest consumer in the world (2009 estimates). When we look at the growth pattern of India since liberalization, (which can be pegged to have started on 24th July 1991 with the Narsimha Rao government's package of industrial reforms along with a new open door policy on inward investment); we note a similar trend with respect to consumption patterns, energy demands, exports and trade. Indeed with one third of this growth being powered by trade to the East, the requirement to secure these interests become all the more vital. Already the 2010 figures make China our largest trading partner. Indeed security of this trend will be a key to development of India. At the same instant, in the race to garner limited resources for the development of two very large economies the scope for friction looms large.

The analogy of the rise of Japan and the concern that it caused to orthodox western strategists in the 1970s and 80s makes for an interesting study; not so much for the security chinks that it exposed but more for the cultural and civilizational anxieties

that it evoked which overshadowed the fact that they were competitors in the global economy, not partners. The fear was not that Japan's growing clout served to undermine the west's dominance in the economic sphere and was challenging the status quo in terms of the ideals of free markets, control of technology and free enterprise at a time when the cold war was at its most frigid, but more that the fundamental source of conflict would neither be ideological nor economic, but rather, cultural. The rise of Japan seemed improbable and yet ominous. That an alien culture was producing superior results to those of the West was the rub. The whole construct was ridden with racial overtones with one saving feature, and that was, there were no security complications. Today we know, not only was the rise of Japan benign it benefited processes and gave fillip to applied technologies.

The reasons many countries view China with trepidation today are similar on the surface to their reaction to the rise of Japan and yet rooted in very different forces. China, too, uses a competing economic model, albeit with a difference (the very phrase used is an oxymoron) – “state capitalism” – that challenges the economic ideology of the West. In many ways, China also behaves in a mercantilist fashion. It keeps its currency controlled so its exports can out-compete those from other countries, and it corners natural resources for its insatiable growth by methods that are reminiscent of colonial dealings, not that the west did not indulge in more vicious practices. Worst of all, the political ideology behind China's economic ascent completely counters western ideals about democracy and human rights. China is not just competing with the U.S. in world markets, but offering an entirely different economic and political system, one that at times seems better at creating growth and jobs, even as it restricts ‘much’ cherished civil liberties. China is succeeding based on ideas that are anathema to those of the likes of the father of modern economics, Adam Smith, and his theories of the ‘invisible hand’ and the self regulating nature of the ideal economy.¹⁵

The concerns with China go well beyond the cultural and economics for it openly seeks to influence and eventually dominate international political and security institutions to the exclusion of other nations. Thus far this had been the select domain of the USA, France and Britain; not so, any more. Progressively, China is using its economic clout to offer an alternative to the U.S. led political and economic system. In other words, China

appears to be challenging not just today's economic orthodoxy and order, but the world's political and security framework as well.

From the Indian point of view the potential source of friction is neither cultural nor is it economic. Civilizational, encounters between the two giants of the Asian continent have, through history, given space to accommodate each others aspirations. First it was the outstanding formative influence of Hinduism, Mahayana Buddhism and Confucianism; their assimilation defined the distinctive character of the South East Asian civilization¹⁶ which brought to flourish the Sri Vijaya commercial Empire from 7th to the 13th century. Subsequent colonization of the region by China and India in no way impeded the expansion and amalgamation of religious, cultural and political institutions. The Empire also served as the trading bridge between India and China.¹⁷

India's preoccupation with China is therefore neither one that is fermented by an impending clash of beliefs, values or any portents of a collision due to social action, nor one that may be caused by a compression of economic space; it is more by the latter's manifest urge to use her Comprehensive National Power to challenge and change the existing global political, economic and security structures without bringing about a change within her own 'biological morphology'.

Map 1: China's claims of Territorial Sea along with the UNCLOS approved EEZs of the Littoral States. Shaded circles indicate the disputed Islands. Source: www.bbc.co.uk



It is not as if these structures are not due for an overhaul but it is the knuckle duster methods that she has chosen to employ and the reluctance to participate in cooperative security arrangements that provide the potential cause for discord. The case of her claims on the South China Sea as a territorial sea (see Map 1); her proliferatory carousing with rogue states such as North Korea and Pakistan are cases, amongst others, that do not inspire confidence in change occurring without turbulence. We also note with some foreboding, the emergence of China from out of its, largely, defensive maritime perimeters as defined by the first and second island chain strategies into the Indian Ocean region as a major stakeholder.

Map 2: The Coming Third Island Chain



Source: Author

To this end, it has through diplomacy and economic inducements established bases in Sittwe, Hambantota, Gwadar and Marao in the Maldives. The geographic and strategic significance of these posts were apparent in the past and are equally vital today, whether for purposes of control, regulating, providing havens or assuring security to their energy lines. Sittwe and Gwadar also provide the front end for piping energy into China. These long term strategic investments by China maybe seen as the coming of the ‘Third Island Chain’ (see Map 2).

In a recent article by Richard Behar, he draws our attention to the “parasitic relationship” between China and the sub Saharan nations. He says “The region is now the scene of one of the most sweeping, bare knuckled and ingenious resource grabs the world

has ever seen¹⁸.” These are strategic moves which are more than likely to cause friction between powers and demand an approach that embraces cooperation to which, to this day, China has been extremely coy about whether it is operations in Myanmar, Africa or indeed the South China Sea.

China in a departure from the Western model of first identifying ends then conceptualizing methods and finally generating means to achieve ends; follows the comprehensive national power route where it sees the effect of an event on its own endowment and its ability to control the event as primary. Therefore in articulating its strategic objectives in order of precedence it has unambiguously identified three canons, the first of which is internal and external stability to its own gauge; the second is to sustain the current levels of its economic growth and lastly to achieve regional preeminence. A conflict of interest in the implementation of these three would propel the superior dynamic to prevail.

Gone is the ‘power bashfulness’ that marked the Deng era, in its place is a cockiness that is discernible by the contemporary conviction that “the world needs China more than China the world”. Lt Gen Qi Jiangua, the Asst Chief of General Staff’s comments on the building of an aircraft carrier (refurbishment of the derelict Varyag) is revealing, he stated “It would have been better for us if we had acted sooner in understanding the ocean and mapping out our blue water capability earlier. We are now facing heavy pressure in the oceans whether the South China Sea, the East China Sea or the Taiwan Straits.”¹⁹

To China, two events of the 1990s have had a seminal impact on the shaping of their military strategy. The first of these is the Gulf War of 1991. China took home not lessons or answers but, a reason for strategic preemption. In the words of General Liu Jingsong “allowing a modern military opponent unfettered access to land, sea and air territories in which to build up and employ forces, as well as regional bases and logistic hubs to sustain them, was a recipe for defeat. He pointed out that the very assembly and positioning of coalition forces constitute “first firing” and justified action to postpone or even deter actual war.”²⁰

The second event was during the Taiwan Strait crisis of 1995-1996, which to the Chinese was a humiliating experience of their sovereignty being violated when the US

deployed two carrier groups in the Straits with impunity. These two events were the primary causes for them to formulate and enable their 'Access Denial' strategy. China has never publicly acknowledged this stratagem; however force planning and structuring that we are currently witness to, whether it is the ASAT programme, the missile modernization, the nuclear submarine build and replacement agenda or the thrust on 'informatisation' and cyber warfare; should leave none in doubt of the course which their force planners have charted. At the heart of the matter lie three vulnerabilities:²¹

- Vulnerability of the economic powerhouses located along the east coast and the communication lines by land, air and sea that bring in resources to fuel the economy and transport finished products.
- Vulnerability of Taiwan, in their perspective, and therefore the need for its denial as a base for foreign powers. This accent highlights China's continued sensitivity to sovereignty issues.
- Vulnerability of the sea spaces, so dramatically demonstrated by the crisis of 1995-1996 and consequently the need to deny the theatre to any interventionary power.

Seen in this frame of reference General Liu Jinsong's words carry new meaning, for if the first salvo is the build up; then it is not from the precincts of pre-emption that a strike emerges but as a reactive and a defensive strategy. This rationale gives form to the 'Access Denial Strategy'. When projected in consonance with the Third Island Chain, one cannot but note that 'Access Denial' would apply not just to the region of purpose, but also to the points of origin and to the Sea Lines of Communication (SLOC) along which energy, trade and resources are moved. The waters and littorals of the Indian Ocean and specifically the Eastern Pacific Ocean and the Bay of Bengal (together here after termed as the Eastern Ocean) will now become the region where this strategy will be played out.

The development of 'Access Denial' capabilities has shown impressive growth over the last decade and a half, not just in terms of material progress but also in terms of doctrinal foundations and operational precepts. China's three modernizations, as mentioned earlier, along with their investments in cyber warfare, anti air, anti ship weaponry and anti carrier hardware in addition to the thrust on nuclear submarine, both

strategic and nuclear powered attack submarines, a carrier group centered on the Liaoning (ex Varyag) aircraft carrier with its suite of SU30s all make for a force that is increasingly lethal in effectiveness and enhanced in reach. Operating from infrastructure that they have cultivated from Sittwe and Aan in Myanmar to Hambantotta in Sri Lanka, Maroa in the Maldives and Gwadar in Pakistan (collectively the so called string of pearls) would give teeth to the long range access denial within the coming Third Island Chain.

Specific operational deployments may include one carrier group operating in the Eastern Ocean; a Jin class Ballistic Missile Nuclear Submarine (SSBN) on deterrent patrol; two Nuclear powered Submarines (SSN) on SLOC patrol with cooperating surface group and maritime patrol aircrafts; long range maritime strike air crafts operating from Aan or Gwadar; one amphibious brigade standby with transports on hand at one of the 'string of pearls.' Also one regiment of ASAT missiles along with cyber warfare teams to manipulate, black out, control and wage information warfare that will seek to paralyze operations in the Indian Ocean or Eastern Ocean.

In the absence of a security oriented cooperative impulse, the problem with such sweeping strategies (specifically the coming 'Third Island Chain' superimposed on a long range Access Denial Strategy), is its blindness to recognize that, as historically never before, we are in fact dealing with a sea space that, in Mahan's words, is the busiest of all the "vast commons." The reluctance for collaboration makes the potential for friction high.

The Indian Access Denial Strategy

It is now necessary to understand that with this shift in global economic and geopolitical power, the first imperative is to bring about coherence between security dynamics, strategic space and growth. It begins by defining the geographical contours within which the strategy to 'deny maritime access' to China's military power or other extra regional powers (should such an eventuality arise) will operate and the requirements to provide the necessary security structures so as to enable and bring to fruition policy. The broad parameters in this definition must factor in the areas from where the mechanics of trade originate, the energy lines run, the sea lines of communication pass, the narrows contained therein which China would endeavor to secure and the geographic location of

potential allies. In this context the sea space between the 30 degree East Meridian and the 130 degree East Meridian extending to the Antarctic continent provides the theatre within which the 'Denial' strategy will function. This sea space includes the Indian Ocean and the Eastern Ocean (IOEO) as defined earlier.

The IOEO hydrospace, bound by landmasses on all sides except the 130 East Meridian, has some unique features. Its weather is dominated by the monsoons and tropical systems, the hydrology of this Ocean make it difficult for underwater surveillance operations between the 30 degrees north south parallels. Widespread clouding impairs domain transparency. Small ship operations, other than in the littoral seas, are particularly inhibited during the 6 month monsoon period. Density of traffic through the narrow passages and straits makes surveillance without identification incoherent. This Oceanic body is dominated by ten important choke points. From west to east these may be identified as follows:

- The Cape of Good Hope: The Cape of Good Hope is a way point across which transoceanic shipping traffic plies to and from the Atlantic Ocean and the Indian Ocean. The International transport Forum in 2010 reported that between 3-4 million containers (twenty-foot equivalent unit) transit the strait annually. This sea line of communication is critical for China and for trade between the BRIC nations
- The Strait of Babel Mandeb: The Strait of Babel Mandeb is a strategically important strait that separates the Arabian Peninsula from Eastern Africa. At its narrowest it is 17 miles wide and provides the oceanic link between the Mediterranean and the Indian Ocean. Through this strait passes 3.3 million barrels of oil/day (global demand 43mbl/day in 2006).
- The Strait of Hormuz: The Strait of Hormuz is a key energy corridor shipping 40% of seaborne oil traded globally. At its narrowest the navigable channel is 2 miles wide. Through these narrows pours 16.5-17mbl/day of oil; it is forecast that by 2020 the figures are likely to be 30-34mbl/day. 50% of China's energy imports is sourced from this region.

- Dondra Head: Provides the passage which connects the sea lines of communication (SLOC) from the 9 degree channel to East Asia provides a deep water route for a third of global traffic while it provides considerable sea space to the south it remains a critical passage for commerce particularly so for very large container carriers discharging at Colombo for onward carry to the sub continent.
- 6 Degree Channel: The 6 degree channel is the primary route that feeds into the Strait of Malacca. It stretches for 90 miles south of the Great Nicobar Island and its deepest channel runs within 60 nautical miles from Indira Point. Between 200 and 220 ships transit this Channel everyday of which more than 15 % are oil tankers bound for East Asia, 10 % of which is to China.
- The Malacca Straits: At the heart of the Eastern Ocean lie the Malacca Straits which links the Indian Ocean with the Pacific Ocean. Being the most commercially viable sea route with considerable depths, it offers the most cost efficient SLOC, connecting the energy and mineral rich African continent and the oil rich regions of the Persian Gulf and the Middle East with the Eastern Ocean. At its narrowest it is 1.5 nautical miles in width.
- The Sunda Strait: The Sunda Strait has north east – south west orientation with a maximum width of 15 nautical miles. It is very deep at its western end and narrows to the east as soundings decrease to 20 metres. While it can accommodate very large crude carriers and very large container carriers it is not easy to navigate due to strong tidal flow and the presence of both natural and man made obstacles. Ships whose draught inhibits movement in the Malacca Straits generally choose the Sunda Strait. It is admirably suitable for fast passages underwater or on the surface.
- Lombok Straits: The Lombok Straits is an alternate passage to the Malacca and Sunda Straits. While it provides stealth, the strong cross currents inhibit passage of commercial traffic; it also involves a diversion of close to 1500 nautical miles. Its virtue lies in its discretion it provides for the transit of nuclear powered submarines.

- Makassar Straits: The Makassar Straits is a natural route for ships transiting the Sunda or the Lombok to and from ports in the Celebes Sea, Sulu Sea and the South China Sea.
- The Luzon Strait provides the Pacific passage into the South China Sea.

In essence the ocean space of interest the IOEO, with its ten choke points/passages, provides the strategic context in general to global trade passing through these waters and in particular to the engines that power China's development.

Contemporary Challenges

The primary hazard that the absence of theory precipitates in strategic thought is the chasm that emerges between the maintenance of forces and its use; resulting in the operational perspective prevailing. This in turn puts nations in a persistent tail chase to understand and contend with contemporary challenges. Particularly so in India's context where the strategic approach has, by design at times and by default at others, been given short shrift. There is an awkward laxity in all this for it abdicates the responsibility to fashion the future.

In order to seek strategic, economic, political and security leverage in today's international arena which is dominated by the quest for economic power, an oceanic vision is the first essential and the idea must be backed by the development of a strategic military posture that characterizes our resolve to fulfill the quest. The inspiration may take the form of a policy declaration in relation to a geographic region or entity such as the 'Look East Policy', the 'India Africa Forum Summit' declaration or the Antarctic Treaty. Policy provides a study and a frame work that has wide-ranging application that not only merits closer scrutiny, but will remain in the spotlight for purposes of force planning to develop a strategic posture in support of policy. An analysis of the current state of international relations and the developments in the region will demand continuity in growth, development and modernization of regional militaries. National power as a function of economic development and strategic postures will remain an abiding factor in any calculus of a nations standing. This continuity in military strategy will most affect China, India and Japan. While the littorals of the IOEO may well develop denial

capabilities with their focus on individual interests in these waters, their effectiveness can only be assured through co operative engagements with like minded nations whose combined presence in the region would serve individual as well as collective interest.

Within such a co operative group it is reasonable to assume that individual friction would be subsumed to the larger denial objectives, the expansion of the ASEAN and the creation of the ASEAN Regional Forum (ARF) are suggestive of the littoral's aspirations to counter balance the looming presence of China in their grouping. Indeed, the India Africa Forum Summit (IAFS) is yet to articulate a security perspective, but clearly this is the course to steer and no diplomatic effort must be spared to widen and deepen the scope of the Forum. USA's presence will dominate activities in the region in the immediate and mid term future. Flash points such as territorial claims both in the maritime and continental domain will remain a source of friction that would necessarily demand military capabilities and a strategic orientation that serves to assure restraint. Where American interests differ with the three major players the latter will demand a role in order to assure its own interests. The eventuality of a US drawback from the region, while of a low probability, remains a contingency that will leave a vacuum which has the potential for friction between China, India and Japan.

Since the declaration of India's Look East Policy, the ASEAN-India relationship has grown in leaps and bounds from the limited sectoral partnership in 1992 to a full dialogue venture in 1995 and subsequently to a summit level collaboration in the first ASEAN-India summit held in 2002. This reflects a new found mutuality between the two entities. The 10 original ASEAN countries include Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. The current membership of the original ASEAN grouping plus 6 is symptomatic of the shifting center of gravity of geopolitics to the East, and from a security angle, the inclusion of India, USA, Russia, Japan and South Korea in addition to China (which was the avatar of ASEAN plus 1) provides the context for security checks and balances in the Eastern Ocean. The world has recognized that East Asia, is the home of 'disruptive innovation,' a term coined by Clayton Christensen from the Harvard Business School, to describe the radical change in the manner in which new products are conceived, produced and delivered, and also about frugality and the thriftiness that makes business enterprises

profitable. This has been the prime mover for the shift in the economic center of gravity. India and China along with ASEAN are set to become the world's largest economic bloc. The grouping is expected to account for about 27 per cent of Global GDP and will very quickly overtake the EU and USA economies. Table 1 in this new perspective would clearly suggest an encore of the Sino-Indian role in global economics. This is the very same direction that the IAFS must be driven along.

Cooperation covers the entire gamut of international activities from economic through political to security considerations. The ASEAN Regional Forum provides a critical stage for promoting stable relationships between major powers and is a useful complement to bilateral activity which is accepted to be at the heart of the security construct in the 'Eastern Ocean.' The buoyancy of the Indo-ASEAN relationship is backed by surging trade figures which in 2007 was USD 15.06 Billion, and is slated to hit USD 60 Billion in the current year. With such burgeoning stakes in the region, the reason to establish strong and stable security ties now becomes a core issue. A tacit understanding in this is the measures put in place to counterpoise a situation when the activities of the grouping could be engulfed by the Chinese viewpoint. It also gives impetus to the idea that China's aspirations in the region must not in any way come in conflict with those of the littorals and even if it does, to be able to search for and find balance in relations.

Notwithstanding the above, contemporary challenges in the IOEO in context of Policy are dominated by three currents. While there are several regional and sub regional issues whose influence on the region cannot be denied it is these three that will have the greatest impact on the success or otherwise of our policy.

- **The Challenge of a Rising China:** Towards the end of 2003 and early 2004 senior leaders of the Communist Party of China studied the rise of great powers in history noting the destructive inventory of conflicts that proved to be the engines of supremacy from the 15th century onwards. This brought them to the central theme of their examination: could China dominate without recourse to arms? Unfortunately, in its relationship with India it has shown no propensity to establish co operative stabilizing arrangements nor has it taken any measures to

resolve long standing boundary disputes (it must be said that nor have they put in place measures that aggressively vitiate the situation). Its collusion with reprobate states further pushes relationships downhill, the nuclear tie up both in the weapon and civilian field with Pakistan along with possible doctrinal links and in March 2010, the failure to issue a condemnation when North Korea sank a South Korean warship does not suggest a pacific approach to relations. It's disputes with Japan and its forceful reassertion of claims to the Spratly and Paracel islands and to sovereignty over virtually the entire South China Sea are very serious ulcers in current relationships in the Eastern Ocean. This conundrum continues to push affected parties and like minded states into countervailing arrangements. As, no doubt, the history lesson would have told Chinese leadership that the relationship that determines regional conflict or otherwise is the stability of relationship between powers that have the greatest impact (in every sense of the word) on the region. Strategic pundits have condemned the Sino Indian relationship to be one of rivalry as both powers grow and develop at a rate close to 10%. It will take all, statesmen like virtues to ensure that the emergence remains marked by understanding rather than friction. Powers can coexist peacefully only when their rise is seen as one that does not hinder the other. There are many ways of building trust in Asia but we have one advantage. We have both been a part of the 20th century's disasters in power play, the lessons of which should serve us well in arriving at solutions bereft of idealism at the center of which is mutuality. Unfortunately, the reluctance to put in place measures that recognize the imperatives for collaborative institutional security does not augur well for the prospects of stability.

- **The Hyper Power:** The overwhelming ascendancy of the single hyper power and its penchant to resort to military force seen against the backdrop of the intricate economic relations that the US and China currently enjoy poses an ironic dilemma. Is the American posture in the Eastern and Indian Ocean intrinsically antagonistic and would it break out into a hot conflict given the strategic links that USA enjoys with Japan, South Korea, Taiwan and the other

littorals of this region? The noises that currently emanate would seem to suggest that the war of words is just a few turns away from a conflictual situation. The impact of instability in this region will be to adversely affect India's economic and developmental aspirations in addition to the hazards of being drawn into an unintended clash.

- **The Mixed Blessings of Globalization, Rise of Nationalism and Non State Actors:** Impact of globalization and the inability of the State to reconcile with the stresses that it places on the very concept of sovereignty which in turn makes historical sores take centre stage, when their resolution ought to be the focus. Nationalism and Ideology which was the underlying force that sparked off the wars of the 20th century has today become the source of China's confidence, to an extent, when the words of Chairman Deng who started the reforms in the early 80's "Coolly observe, calmly deal with things, hold your position, hide your capabilities, bide your time, never try to take the lead, accomplish things where possible"²² which became the essence of Deng Xiaoping's 24 character strategy, now has a hollow ring about it, particularly so, since there is a growing perception within that the arrival of the 'Middle Kingdom'²³ is nigh (!). According to Yuan Peng of the China Institute of Contemporary International Relations "many Chinese scholars suggest that the Government give up the illusion of US partnership and face squarely the profound and inevitable strategic competition."²⁴ It is also apparent that the surge of nationalism that sweeps China has led it to formulate an affordable military strategy of asymmetric weapons (the 'Access Denial' and 'Assassin's Mace' strategies are part of such a concept). These unorthodox strategies have set into motion three areas of rapid modernization in the military establishment; firstly the most active land based ballistic and cruise missile program in the world, secondly an enlarged nuclear attack and nuclear ballistic missile submarine fleet, and lastly concentration on what China calls "informatisation," an active and passive method of waging information warfare. All this has brought it to what the historian Herbert Butterfield termed "the absolute predicament and irreducible

dilemma” that is, if you do not arm you leave yourself open to attack, if you do, you threaten the other country.²⁵ Technology, in the meantime and the very trends that have brought about the breaking down of age old barriers have placed disproportionate destructive power in the hands of groups that may choose to work outside the international system. Again, China’s intriguing involvement with maverick nations such as Pakistan and North Korea does not in anyway enthuse confidence for the prospects of a stable future. Of particular interest is Pakistan’s quest for power and parity with India as a part of the larger protracted clash that has been integral to relations since independence in 1947. Armed conflicts that have occurred over Kashmir, the erstwhile East Pakistan, Kargil, the failed insurgency in Punjab and the ongoing insurgency in Kashmir are more symptomatic of this search for a strategy that would bring about parity. In an earlier section, the relationship between purpose and means was discussed at some length. There can be no more a perversion of means replacing purpose than in the case of Pakistan. Today, bordering on being a failed state, it continues to nurture some of the most virulent terrorist groups that have plagued the region and uses them as a part of state policy. The country with its strategic military links with China represents a very dangerous condition.

The direction in which the Sino Pak alliance is headed is a vexed question. If it is the image of China that is going to predominate, then collusion with Pakistan on military and nuclear matters must witness a dilution and yet if the intention is to keep the Indian establishment on the boil, then for China to set aside an enthusiastic collusive partner would be tantamount to Janus shutting down his second face. After all in the nuclear arena, for China to maintain a no first use policy while at the same time nurturing a first use capability in the form of Pakistan targeting only India provides them with the proverbial ace in a strategic hole. Doctrinal links enable the acquisitory process to equip the alliance partner with weapons and capabilities that China maybe loathe to possess. The transfer of the NASR, Babur and RAAD missiles and the coming on line of Pakistan’s Plutonium facilities in double quick time are symptomatic of the impact of China’s collusive strategy.

In this calculus what would be a dampener for Sino Pak complicity, is the worsening political situation in Pakistan, which presents some nightmare possibilities for all parties involved including China. The possibility of terrorists obtaining nuclear weapons is more today than just a probability. There is a growing global realization of the dangers of a state teetering on failure holding on to a vast expanding arsenal, both conventional and nuclear. In the worst case the world looks at a dysfunctional military theocracy sitting on a stockpile of deadly conventional and nuclear weapons with an avowed policy of vengeance against all things great, small, un Islamic and Indian. This scenario, while in the extreme, does point to an urgent need to remove the malaise that is the cause of the situation and to ensure that the arsenal both conventional and nuclear is not placed in a position of compromise. The state of Pakistan polity, strategic military partnership with China and the involvement of the establishment in sponsoring terrorist groups and activities are now well established.²⁶ Pakistan's future is today poised on a razor's edge. Stability of the nation and particularly of their nuclear arsenal is held to ransom by the internal politics of the nation. Such a situation has dangerous ramifications that affect global security and therefore the future is more than likely to be marked by steps initiated to control and reign in the state of affairs. Whether this means to stabilize internal politics through division of the state or by neutralizing the terrorist elements and giving the nation back to its people is a moot question.

Of these three dominant currents what direction China's rise will take and whether it wears a largely benign or malignant mantle is a matter of conjecture that will be influenced by both internal as well as external factors (as deliberated earlier). With the coming of the Third Island Chain; the maturing of the long range access strategy and the cultivation of the string of pearls, what is of significant relevance is that the potential for a collision is a reality and the only consideration that could deter it, is the ability of India to attain a strategic posture in the Eastern Ocean that serves to stabilize. On the 'globalization-nationalism' non state actor conundrum, clearly plural societies with decentralized control are more likely to transform, adjust, adapt and tweak their systems,

than monolithic centrally controlled States such as China which are intrinsically brittle in form; as cracks begin to show, the fallout on the region can only be traumatic.

It is only India's relationship with the USA that is, to some extent, within the hands of our policy makers and therefore it would be in order to examine this in some detail. Since Independence, Indo American relations have seen dizzy highs and plummeting lows. It began with the Roosevelt, Truman and Eisenhower administrations (1940s and 50s) pumping in massive funds to build infrastructure without giving too much thought to building a strategic relationship other than to woo India from 'falling' into the Soviet camp. Very substantial foreign aid programmes (amongst the largest during that period) were launched in support of democratic institutions,²⁷ this included the period post Sino Indian hostilities of 1962 when a vast amount of grant military aid was also forthcoming. Briefly during the Kennedy administration, a vision emerged of an India allied with the US against 'the Communist threat'²⁸ which was not to be. By the 1971 war, relations had touched rock bottom and remained there through Pokhran 1, the break up of the Soviet Union and into the 1990s. The period was marked by a state of knee jerk 'drift and sanction' and in the absence of a strategic locus left the relationship rudderless. There were neither points of convergence that were sought to be enlarged nor was there a will to make an assessment on both sides as to how the global scenario actually stacked up, given the events of the 1980s and the 90s and how an engagement fitted in. The awkward irony was that these were the two largest democracies and yet remained on different pages at a time when the world was undergoing strategic compression. It was only after the 1998 nuclear tests that the two countries awoke to the realities that an engagement was suggested. The consequence was the inking of the 'Next Step in Strategic Partnership' an agreement that identified and formalised areas of bilateral cooperation in January 2004 which included civil nuclear enterprises, civil space programmes, missile defense and high technology deals. Of critical importance was the opening of technology doors which culminated in the watershed Indo-US nuclear agreement of 18 July 2005. The larger significance of this deal was the arrival of India on the global stage as an equal and an acceptance of its potential to play an influencing role in the rarified environ of the club of nations that sought to control and oversee world order (the impending G8 +5).

Thus far a nuclear pariah that had endured the ignominy of sanctions, which in 1991 been forced to transfer gold to London to the Bank of England to prop up a wobbly credit rating and to generate funds to tide over her balance of payments problems²⁹ and for many years had carried the embarrassing sobriquet of a ‘basket case’,³⁰ it was, at the end of it all a realization of that long standing prophecy of the ‘natural alliance of the worlds two largest democracies’ albeit after tortuous and bizarre labour pangs. India today stands as a strong society that provides an oasis of stability amidst a clutch of disintegrating and failing states in a rough neighborhood that hosts two inimical nuclear armed nations with very close military and doctrinal links. Robust Indo-US relations that include economic, technological, military and security dimensions provide the means to bringing about balance and stability in the region. While it remains premature to translate these ties to intrusive presence and involvement, it is the maritime dimension, on account of its very nature, that opens up the maximum possibilities.

India has shown itself; through restraint, pluralistic and popular form of governance to be a responsible state that upholds the status quo yet invites change through democratic forces, and its rise, in the main, is not only welcomed but is seen as a harmonizing happening that could counterpoise China, afflicted by radical and, at times, abrasive policies and an unpredictable and some times paranoid leadership. The next step would logically be to establish an Indo-US strategic framework in the maritime domain, if we are to resourcefully contend with the challenges that the Eastern and Indian Oceans present.

Force Planning and Structures

In evolving a vision for maritime military forces, their planning, build up along with infrastructure and their actual use; of essence, is the understanding of the three dominant currents that influence and change the Eastern and Indian Oceans within which policy would have to operate. These have been discussed earlier. The point being made is that whatever force structures are developed these would cater for the dominant three challenges with the assumption that a lesser than challenge would automatically be taken care of. In the broadest of terms our vision would be ‘to create and deploy such forces which would establish and contribute to stability within these waters. While our focus

would be to concentrate on maritime forces, it would also be necessary to recognize that the other elements of national power that would be required to realize such a vision and contend with the shape that the challenges may take in the long term within these Oceans. This long term maybe identified as a period of half a century. When dealing with the problem of means, a balance is necessary between objectives that are identified with available resources and the vanity, as we have seen, is the natural accomplice of nationalism, and must be eschewed.

“The maritime strategy of a country can be defined as the overall approach of the nation to the oceans around it in order to maximize national gains. India’s maritime military strategy as defined identifies the country’s role in its maritime areas of interest, and outlines the national maritime objectives for clarity in execution of this role. Since most maritime activities take place outside the country’s sovereign jurisdiction they often need to be supported militarily, either directly or indirectly. The military dimension of India’s maritime strategy is termed as the maritime military strategy. India’s maritime military strategy outlines the guiding principles to provide the protective framework for the use of the oceans in all aspects for our national benefit”³¹. The problem with such a strategy (referred to in the document entitled “Freedom to Use the Seas; India’s Maritime Military Strategy”) is that it does not make any effort either to prognosticate the challenges that are likely to emerge or for that matter does not make assumptions of the resources that would be made available for contending with such challenges. While in a different section the maritime military strategy recognizes that the major task of the Indian Navy during the 21st century would be to use warships to support national foreign policy,³² it does not define in the broadest of terms what this foreign policy is nor does it make an assumption of what the salients of the policy could be. In the absence of these critical issues that have been identified above the document remains flawed and fails to distinguish and fill the strategic gap between “maintenance of forces” and “its use”. In yet another section it highlights that the ends of the strategy is deterrence without defining what is to be deterred and then very quickly degenerates to the operational level stating that the document “provides a foundation for the planning and conduct of operations.”³³

Force planning must be driven by three overarching considerations. In the first part clear understanding of what the articulated national policy is; in our study this is the Look East policy and the IAFS, in the second part what challenges (has been dealt with earlier) may arise in the short and long term to this policy and the nature of conflicts which conflicting interests may degenerate into. The last part must include an estimate of potential loss/harm that may occur to our national interests if forces were not developed to address the first two parts (this would have to be gamed).

Infrastructure and logistic planning to deploy in the IOEO must factor not just the expanse of this region but also the ability to reach and sustain operations between 3000 – 4000 nautical miles from Indian ports / bases that may be provided by like minded littorals. Ideally the potential for development of infrastructure for such long range operations towards the east lies in the Andaman and Nicobar islands which offers the necessary springboard into the Eastern Ocean and for the South Indian Ocean; forward operating bases in like minded East African littorals cultivated through the IAFS. Such focused development endows us with the Mahanian logic of being able to provide the very “unity of objectives directed upon the sea”. This advantage, as the strategist pointed out is one not enjoyed by those whose boundaries are continental. A major infrastructural center in the Andaman Sea must be accompanied by establishing base support facility arrangements in Indonesia (Djakarta), Vietnam and Japan in the Southern islands (Kyushu/Shikoku). To the west, the Indian Ocean littorals such as South Africa, Malagasy, Tanzania, Mauritius and Seychelles will have to be cultivated. Such infrastructural back up would serve the Policy admirably. It would also call for diplomacy of a nature that we have not thus far seen practiced.

The types of military maritime missions that the Navy may be tasked with in the IOEO may encompass the following:

- War fighting which includes Sea Control, Access Denial operations and littoral warfare.
- Strategic deterrence which would be a feature that would be persistent and consistent with our nuclear doctrine.
- Coercive maritime deployments: This may include deployments in Straits and along SLOCs.

- Co operative missions including intervention, peace enforcement and peace keeping.
- Diplomatic missions, policing and benign role.

Forces that would be required at all times to fulfill these missions in area would comprise of one carrier group on patrol at all times with an amphibious brigade group attached and with suitable fixed and airborne ASW and surveillance assets while the SSBN nuclear deterrent would be on a patrol at all times. Auxiliaries required to sustain forces would have to be attached or be taken up from trade. To summarize, forces will include the following:-

- 1 x deployed Carrier Group.
- 3 x LPDs – with a Brigade lift capability.
- 1 x Squadron SU 30s with ARR.
- 1 x Squadron Long Range Maritime Patrol aircraft (LRMP)
- Squadron of long range surveillance UAVs.
- 1 x Amph Div Stand by A&N Islands.
- 1 x SSBN on deterrent patrol under NCA control.
- Nuclear submarine force to deter aircraft carrier operations. Conventional submarine force for littoral operations and blockade purposes.
- Non lethal anti shipping devices.
- Appropriate forces for surveilling, seeding and monitoring of straits.
- Appropriate ‘marking group,’ ASAT batteries and cyber warfare teams.
- Forward submarine operating base and enhancement of air stations.
- Appropriate in theatre logistic support facilities.

Values that will underlie all military maritime deployment and action emerge from the translation of the vision into individual specific missions. Stability, to deny extra regional forces the ability to project power in the specified waters and deterrence lie at the core and must run as a common thread across the spectrum of deployment from small ship involvement in benign roles to that of war fighting. Clearly planners must address this on the merits of each case. However, values will necessarily include and account for the following:

- The need and reality to ensure nuclear deterrent stability at all times.
- The effect of globalization and the part that technology plays continuously in providing disproportionate disruptive and destructive power.
- The understanding that conventional forces are instruments of engagement, regulation, stability and for contending with crisis and contingencies. Control of escalation and its tempering as also the ability to raise the stakes of intervention or power projection would be an abiding feature.
- The impact that non state actors play, their ability to transact and deal in activities that could upset stability and the need to come to grips with such situations.

Concept of Access Denial

In our analysis of the battle of Coronel we had drawn the inference that for an Access Denial Strategy to prevail, not only must in-theatre superiority be maintained (in our case force structure for which has been discussed earlier); but also the means and routes to buttress and support opposing forces must be denied for the duration for which the strategy is in play. To this end the role of cross spectrum surveillance, ability to disrupt command and control networks and the presence, vigorous deployment of decisive denial forces and to get the first-salvo-in will be critical for the success of such a strategy.

Having also brought about a modicum of coherence between security dynamics, strategic space and growth; It would now be appropriate to define and derive objectives of the concept of Access Denial Strategy as applicable to the larger Indian Maritime Military Strategy.

“Access Denial Strategy seeks to **contest and deny** regional or extra regional countries the ability to unilaterally project military power to secure their interests either through aggression or through other destabilizing activities. The instrument to achieve denial is by **convincingly raising the cost of military intervention** through the

use or threat of use of methods that are asymmetrical in form and disruptive in substance. The strategy's first impulse is to avoid a hot conflict." The governing phrases have been put in bold since they will be central to formulation of strategy and for force planning.

To 'contest and deny' would first suggest a clear understanding of where the centre of gravity of power projection forces lay. In china's case it is the triumvirate of the Aircraft Carrier; security of the narrows and of the 'string of pearls' that would be needed to assure sustenance of forces (on which is founded the integrity of the Third Island Chain); and safety of hulls that convey resources and energy vital to fuel growth. Use of aggressive means is clear enough, but prying open faults that could destabilize and therefore distract the main exertions, are not at all patent. In India's case both internal as well as external stresses obtain that could be leveraged in order to subvert and undermine the primary thrust to contest and deny the ability to project power; more importantly China not only has the will and capability to exploit these opportunities but also has a willing ally in Pakistan. 'To raise the cost of military intervention' is a matter that resides in the mind of political leadership, yet there will always be a threshold the verge of which is marked by diminishing benefits of intervention or power projection. It will be noted that it was a similar calculus (albeit in reverse) that must have come to play in the 1995 Taiwan Strait crisis (discussed elsewhere in this paper) that inhibited and forced China to reconcile to humiliation in the face of a possible debilitating confrontation. Also the logic of weakening out-of-region motivation clutches in, diluting the efforts of the intervener. Lastly the threat of 'use of force' must not only be credible but also the 'value exchange' in terms of losses must weigh against the power projecting force. At the heart of Access Denial in the Indian context must remain deterrence.

The objectives of India's 'Access Denial Strategy may therefore be summarized as follows:

- To devise operational and material strategies to deter, threaten, (and should the need arise) strike and neutralize Chinese aircraft carriers that may menace our vital interests in the IOEO. Value-exchange in the engagement must be in our favour

- To deploy denial forces that effectively blockades the ‘string of pearls’ ports. Platforms of choice would be conventional submarines, maritime strike aircrafts both supported by long range surveillance efforts.
- To disrupt and disable operational networks through ASAT and active cyber action.
- To surveil and seed the straits and narrows (as identified earlier) with seabed sensors, surface and air scouts and through cooperative arrangements.
- To devise material and operational strategies that serve to disable energy and resources traffic through non lethal methods.
- To raise the cost of military intervention will suggest a strategic posture that by signaled disposition of forces, demonstration, marking and resolve declare our orientation, will and intent that the cost of intervention will far outweigh its benefits. All the while maintaining the primary value of conflict avoidance.

Leaving aside, for the moment, material aspects of generating capabilities; the most critical issue is one of timing, that is, what would be the enabling circumstances that would trigger India’s Access Denial Strategy. While the short answer may, with some justification, be ‘when national interests are threatened’ this does not in any way assist the planner in resolving the quandary with any clarity. Two considerations must, however, dominate. The first is that initial moves must be so calibrated that unequivocally the intervener is made aware that a threshold is being approached and that the next rung in the escalatory ladder is a ‘hot’ exchange. This may take the form of ‘marking’ or through hotline communications. The second is by initiating demonstrative action which may serve to disrupt and disable operational networks or even measures instituted in some other theatre where correlation of forces would suggest Indian superiority.

A maritime Access Denial strategy unlike a continental standpoint, abhors ‘Lakshman Rekhas’ for there are no readily definable geographic ‘redlines’, what is of greater import is context, circumstances and events; which brings us back to the original

dilemma of characterizing the conditions that would bring the strategy into play. In any event, we have in an earlier section noted China's security narrative and the challenge that a rising China poses; both advocate the centrality and compelling force of an aggressive drive to corner resources. It is this dynamic coupled with the absence of a cooperative impulse that provides the potential for conflict. Adopting a much more assertive posture, China is emboldened by new military advances and increased economic leverage. Also of significance is a growing sense of entitlement, rooted in a national identity that demands a pivotal role in the emerging strategic scenario. Rebutting the "integrationist" notion of peaceful incorporation into the world order as yielding to the West, China seeks today a new international order. In many publications the concept of "responsible stakeholder" is derided as a trick to get China to assist in preserving an 'unjust' status quoist international order. China is leaving no doubt that it is a revisionist power impatient to take centre stage. Under this order of things, we may define our 'red lines' as follows:

- Any large scale military attempt to change the status quo in our territorial configuration.
- Large scale military build up either at Hambantota, Gwadar or at Sittwe with the explicit purpose of threatening India.
- Aggressive deployments that disrupt our own energy and resource traffic or dislocate networks.
- Any attempt to provide large scale military support, covert or otherwise, to promote an internal war against the State.

In execution, our Access Denial Strategy will be implemented in three distinct phases. The First will involve selective Access Denial deployment, surveillance and marking in the IOEO; the Second will entail demonstration through cyber action and possible ASAT intervention; the third and last is hot action including blockades and SLOC severance. Phases I, II and III will be preceded by and concurrent with bilateral and multilateral diplomacy to and stabilize and defuse the situation keeping in perspective that conflict avoidance remains principal. Any one of the Phases may be brought in to play singly or sequentially as a part of an escalatory ladder. We have in an earlier section identified maritime forces required in order to enable this strategy in

addition to other missions that these forces may be tasked with. For obvious reasons details of ASAT batteries and cyber warfare teams along with NCA controlled strategic forces will remain discreet.

The next issue that requires our attention is what nature of technologies would have to be fielded so that the strategy becomes a reality and relevant for the middle term. In developing a technology plan two considerations will influence our approach; the first being an incremental approach to adapt and modernize existing knowledge tools, skills and hardware; while the second is to develop new technologies. Viewed in this perspective areas that would merit the notice of our scientific community are identified below:

- ASAT capability and deployment.
- Development of seabed sensors for tracking nuclear submarines.
- Development of non lethal devices to disable merchant ships.
- Building cyber warfare teams for both defensive and offensive tasks.
- Development of high speed networks with failsafe firewalls for command and control and information sharing.

Conclusion

While India may, with some justification, celebrate the ‘Gandhian Moment’ that Anna Hazare recently ushered in; the ultimate reality of the international system is the place that power, in all its dimensions, enjoys in the scheme of assuring stability in relations between nations. The strategy of Access Denial is one such defensive power tool which is available to a nation provided it nurtures and develops capabilities that serve to ‘contest and deny’ adversarial power projection. History has suggested that for the strategy to have impact not only must in-theatre force balance be tilted towards the rebuffer through asymmetry, but also, the first salvo must be his. After all during the first Iraq war the die was cast when US forces began to build up in the Arabian Peninsula, it was also the time when they were most vulnerable and if at all access was to be denied, that was the moment. The instant having been lost Iraq’s fate was a foregone conclusion unless it had chosen to sue for peace under any terms.

China takes the comprehensive national power approach; where it sees the effect of an event on its own endowment and its ability to control the occasion and its outcome as a primary virtue. In articulating its strategic objectives it has unambiguously identified three canons the first of which is internal and external stability; the second is to sustain the current levels of economic growth and lastly to achieve regional preeminence. Gone is the ‘power bashfulness’ that marked the Deng era, in its place is a cockiness that is discernible.’ In the absence of a security oriented cooperative impulse, the problem with such sweeping strategies specifically the coming ‘Third Island Chain’ superimposed on a long range power projection strategy is its blindness to recognize that, we are in fact dealing with a sea space that is the busiest of all the “vast commons”. The reluctance for collaboration makes the potential for friction high.

Contemporary challenges in the IOEO are dominated by three currents. What direction China’s rise will take is a matter of conjecture, of significance is that the potential for a collision is a reality and the only consideration that could deter it, is the ability of India to attain a strategic posture in the IOEO that serves to stabilize. On the globalization-nationalism-non state actor conundrum, clearly plural societies with decentralized control are more likely to transform, adjust, adapt and tweak their systems than monolithic centrally controlled States such as China which are intrinsically brittle in form, the fallout on the region caused by a transformation inconsistency can only be traumatic. The third current is India’s relationship with the USA; it is here that some control exists in the hands of our policy makers. India has shown itself; through restraint, pluralistic and popular form of governance to be a responsible State that upholds the status quo yet invites change through democratic forces. Its rise, in the main, is not only welcomed but is seen as a harmonizing happening that could counterpoise China. The next step would logically be to establish an Indo-US strategic framework in the maritime domain, if we are to resourcefully contend with the challenges that the IOEO presents.

Phased implementation of the Access Denial Strategy, from deployment through demonstration prior to a hot exchange is intrinsic to the scheme and essential to its mechanics if the interests of deterrence are to be served. The question of when or under what conditions the plan is to be brought to bear is a dodgy call for if Phase III is arrived at; it may well signify a point of no return. The paper has suggested four ‘red lines’ which

when breached may enable our Access Denial strategy; it is the second of these which will challenge decision makers to the extreme for if a military build up at Hambantota, Gwadar or Sittwe is threatening then at what stage of the mobilization should the strategy be called into play? The obvious answer is “at an early stage” at which time we must find the will and resolve to translate rapidly from Phase I to Phase II. A focused 50 year technology and infrastructure plan in support of and in harmony with our Access Denial Strategy must be placed on the anvil and resolutely hammered out.

In the ultimate analysis it is about national will and determination. Much like the Shalmali tree (referred to earlier) India has all the trappings of potential power with a benevolent approach; what it must not lack is the wisdom and strategy to shield and protect this growing Shalmali.



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The Admiral retired on 30 September 2009, after nearly 45 years in uniform. He is today settled with his wife in the Nilgiris and passes down his operational and strategic experience through articles and participation in seminars that deal with his primary areas of expertise. He has contributed to various professional journals and continues to support his Alma Mater in Kochi through his writings. He lectures at the Staff College, Higher Command College, the United Services Institute and the National Maritime Foundation. He is a member of the adjunct faculty of the National Institute of Advanced Studies and he has tenanted the Admiral Katari Chair of Excellence at the United Services Institute. Internationally, his participation in the Track II Ottawa Dialogue, the Bellagio Carnegie Endowment discussions and the papers he has presented there seek to provide a new paradigm for nuclear security on the sub-continent.

End Notes

¹ In the Mahabharat Bhishma tutoring Yudhishtira explains to him that in this world for he who is endowed

² Vice Admiral Sir David Beatty is said to have bitterly reflected on where the blame lay for the debacle in the battle of Coronel and the loss of Admiral Christopher Cradock, his ships and his men in the engagement "Poor old Kit Cradock has gone at Coronel. His death and the loss of the ships and the gallant lives in them can be laid to the door of the incompetency of the Admiralty. They have broken over and over again the first principles of strategy."

³ Regan, Geoffery. "Book of Naval Blunders" Carlton Publishing Group, 2001 London., p 163-165. Much of the blame for this blinkered policy rested with the First Lord of the Admiralty, Winston Churchill. Not content with his political role, Churchill constantly interfered with the working of naval planners often using his forceful personality to bulldoze professional opinion.

⁴ Kagan, Robert. 'The Return of History and the End of Dreams'. Alfred A. Knopf, New York, p3.

⁵ President Bush Sr started to take the initiative from Gorbachev during the run-up to the Gulf War, when he began to define the elements of the new world order as he saw it, and link the new order's success to the international community's response in Kuwait. Initial agreement by the Soviets to allow action against Saddam highlighted this linkage in the press. The Washington Post declared that this superpower cooperation demonstrates that the Soviet Union has joined the international community, and that in the new world order Saddam faces not just the U.S. but the international community itself. A *New York Times* editorial was the first to assert that at stake in the collective response to Saddam was "nothing less than the new world order which [Bush] and other leaders struggle to shape (Washington Post and NY Times of 02 Sep 1990). Bush notes that the "premise was that the United States henceforth would be obligated to lead the world community to an unprecedented degree, as demonstrated by the Iraqi crisis, and that we should attempt to pursue our national interests wherever possible, within a framework of concert with our friends and the international community". On March 6, 1991, President Bush addressed Congress in a speech often cited as the Bush administration's principal policy statement on the new world order in the Middle East, following the expulsion of Iraqi forces from Kuwait. The salient features of this speech include; "plan for maintaining a permanent U.S. naval presence in the Gulf, for providing funds for Middle East development, and for instituting safeguards against the spread of unconventional weapons. The centerpiece of his program, however, was the achievement of an Arab-Israeli treaty based on the territory-for-peace principle and the fulfillment of Palestinian rights." As a first step Bush announced his intention to reconvene the international peace conference in Madrid. A pivotal point came with Bush's September 11, 1990 "Toward a New World Order" speech to a joint session of Congress. Key points picked up in the press were:

- Commitment to U.S. strength, such that it can lead the world toward rule of law, rather than use of force. The Gulf crisis was seen as a reminder that the U.S. must continue to lead, and that military strength does matter, but that the resulting new world order should make military force less important in the future.
- Soviet-American partnership in cooperation toward making the world safe for democracy, making possible the goals of the UN for the first time since its inception. Some countered that this was unlikely, and that ideological tensions would remain, such that the two superpowers could be partners of convenience for specific and limited goals only. The inability of the USSR to project force abroad was another factor in skepticism toward such a partnership.
- Another caveat raised was that the new world order was based not on U.S.-Soviet cooperation, but really on Bush-Gorbachev cooperation, and that the personal diplomacy made the entire concept exceedingly fragile.
- Future cleavages were to be economic, not ideological, with the First and Second world cooperating to contain regional instability in the third World. Russia could become an ally against economic assaults from Asia, Islamic terrorism, and drugs..
- Soviet integration into world economic institutions, such as the G7, and establishment of ties with the European Community.
- Restoration of German sovereignty and Cambodia's acceptance of the UN Security Council's peace plan on the day previous to the speech were seen as signs of what to expect in the new world order

- The reemergence of Germany and Japan as members of the great powers, and concomitant reform of the UN Security Council was seen as necessary for great power cooperation and reinvigorated UN leadership
- Europe was seen as taking the lead on building their own world order, while the U.S. was relegated to the sidelines. The rationale for U.S. presence on the continent was vanishing, and the Gulf crisis was seen as incapable of rallying Europe. Instead Europe was discussing the European Community, the CSCE, and relations with the USSR. Gorbachev even proposed an all-European security council to replace the CSCE, in effect superseding the increasingly irrelevant NATO.
- A very few postulated a bi-polar new order of U.S. power and UN moral authority, the first as global policeman, the second as global judge and jury. The order would be collectivist in which decisions and responsibility would be shared.

⁶ The World at War <http://www.globalsecurity.org/military/world/war/index.html>. The United Nations defines "major wars" as military conflicts inflicting 1,000 battlefield deaths per year. In 1965, there were 10 major wars under way. The new millennium began with much of the world consumed in armed conflict or cultivating an uncertain peace. As of mid-2005, there were eight Major Wars under way [down from 15 at the end of 2003], with as many as two dozen "lesser" conflicts ongoing with varying degrees of intensity.

⁷ Occasions of US military intervention 1989 – 2010 :

1989 - Panama, 1991 – Iraq, 1992 - Somalia, 1994 – Haiti, 1995-96 – Bosnia, 1998 - Iraq, 1999 - Kosovo, 2001 – Afghanistan, 2003 – Iraq, 2009 – Pakistan (Drones), 2010 – Libya .

⁸ The Economist, June 25th – July 1st 2011, special report China.

⁹ Howard, Michael. The Lessons of History, Yale University Press New Haven and London, p39.

¹⁰ Peter Hays Gries, *China's New Nationalism. Pride, Politics and Diplomacy* Berkeley & London, University of California Press, 2004, p 105.

¹¹ In Sun Tzu's *Art of War*, Knowing the enemy and knowing oneself is the key to victory in a hundred battles. Sun Tzu, *Art of War*, Samuel B. Griffith (trans.) Oxford University Press, 1963. This Section is taken from a paper by the author entitled "Maritime Military Strategy in Support of the Nations Look East Policy – The Incoherent Shoals" submitted to the USI in June 2011 for publishing.

¹² Ma Cheng-Kun, *PLA News Analysis*, "Significance of 2008 China's National Defense White Paper" no. 15, pp. 49-60

¹³ Ibid

¹⁴ Ma Cheng-Kun PLA news analysis "China's security strategy" number 8 April 2008, Pgs 146-150. The assassin's mace program is a part of China's asymmetric war fighting strategy to develop capabilities designed to give a technologically inferior military advantages to overwhelm a technologically superior adversary. Their ASAT program, strategic hacking teams and cyber warfare, submarine programs are all a sub-set of the assassin's mace

¹⁵ Smith Adam , *The Wealth of Nations*.

¹⁶ Barraclough, Geoffrey. The Times Concise Atlas of World History, Times Books Ltd 1985 p26, 50-51.

¹⁷ See Britannica on line at www.brittanica.com Sri Vijaya Empire.

¹⁸ Richard Behar. <http://www.fastcompany.com/magazine/126/special-report-china-in-africa.html>.

¹⁹ BBC E-news 08 June 2011. Lt Gen Qi Jiangua speaking to the Hong Kong Commercial Daily.

²⁰ Lewis John Wilson and Litai Xue, The Quest for a Modern Air Force "Imagined Enemies China Prepares for Uncertain Wars. Stanford University Press 2006, p237. General Liu Jingsong, a member of the 15th CPC Central Committee, he was also the PLA Commander of the Shenyang and Lanzhou military regions and to him amongst others is attributed the opening of Equatorial Guinea 1995.

²¹ Lampton, David M. The Three Faces of Chinese Power. Might, Money and Minds. Berkeley, University of California Press 2008, p16, 40-41 and 50.

²² The 24 Character Strategy is attributed to Deng Xiaoping in the early 90's as quoted in the Pentagon's annual China report dated 17th August 2010

²³ The phrase Middle Kingdom was first applied to the XII dynasty of ancient Egypt (1991BC – 1778BC). As the Chinese name for China it first appears in 1000 BC when it designated the Chou empire, who unaware of earlier civilizations to their west, believed their empire occupied the middle of the earth, surrounded by barbarians. Since 1949, the official name for China is 'The Middle Glorious People's Republican Country.'

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- ²⁴ As quoted in The Economist Of Dec 4-10 2010 Special report p.9
- ²⁵ Butterfield, Herbert. The Whig Interpretation of History, Cambridge University Press, pp. 147-164, 1950
- ²⁶ David Cameron, Prime Minister of UK, NDTV interview of 29 July 2010.
- ²⁷ Goldsmith Arthur A. Policy Dialogue, Conditionality and agricultural developm. The Journal of Developing Areas 22 Jan 1988, pgs 179-198. US Aid programmes in the 50s and 60s emphasized the need for policy dialogue prior to the release of funds by the donor.
- ²⁸ Cohen Stephen P and Dasgupta Sunil. Arming without Aiming, Penguin Viking India 2010 p 164.
- ²⁹ Venkitaraman S. Business Line I-edition, 25 June 2001 also see Business Line of 11 June 2011 when the same author who was then RBI Chairman has underscored the distance that India has come indicated by the RBI's decision on 10 June 2011 to buy 200 tonnes of gold from the IMF which is half the total quantity of 400t that the IMF has decided to sell to raise funds for lending to poorer countries.
- ³⁰ The Phrase 'basket case' originated towards the end of World War I to signify a soldier who had undergone quadruple amputation and had to be transported in a basket. This term was then applied to an emotionally or mentally unstable person and later to anything that failed to function particularly to economies. From the American heritage dictionary of idioms, Anmer Christine. Houghton Mifflin Company 4th edition April 1997.
- ³¹ Integrated Headquarters, Ministry of Defence, India (Navy). Freedom to Use the Seas: India's maritime military strategy p.3.
- ³² Ibid p.11.
- ³³ Ibid pp 9-10 and pp 76-81.