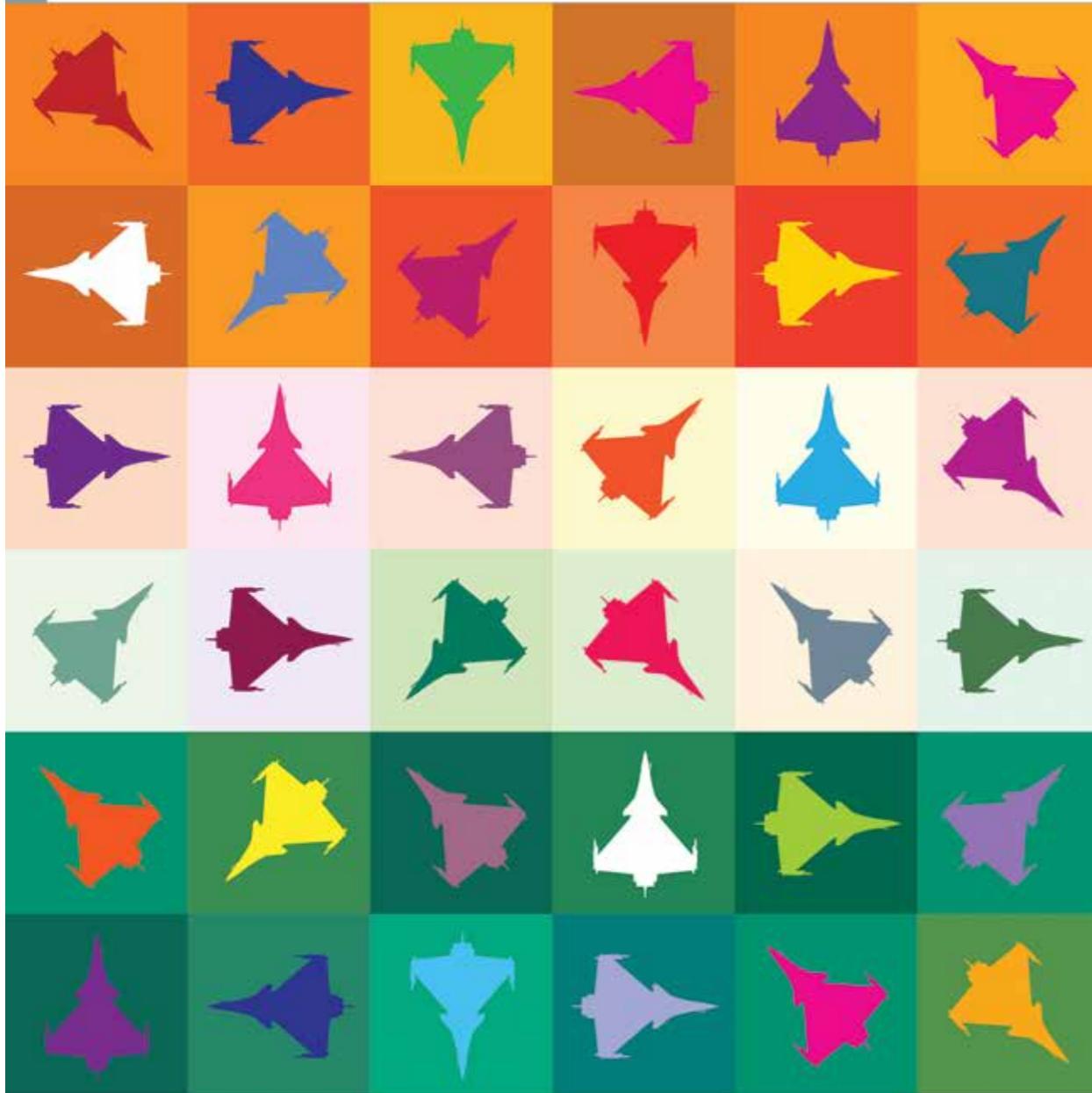


DEDICATED

AERO INDIA 2017  
14-18 FEBRUARY



[www.rafale.co.in](http://www.rafale.co.in)

OVER 60 YEARS. 6 AIRCRAFT TYPES. 1 NATION  
TOOFANI | MYSTERE IV | ALIZE | JAGUAR | MIRAGE 2000 | RAFALE

**RAFALE**  
INTERNATIONAL  
CASABLANCA • KHARTOUM • SAO PAULO • THIRUVARUR

AIR POWER

# AIR POWER

*Journal of Air Power and Space Studies*

Vol. 12 No. 1 • Spring 2017  
(January-March)



Vol. 12 No. 1 • Spring 2017 • (January-March)

Contributors

Mr Jayadeva Ranade • Air Marshal Dhiraj Kukreja  
• Group Captain Ashish Gupta • Prof Arun Mohanty  
• Air Vice Marshal Rajesh Isser • Ms Anu Sharma • Dr Amarjit Singh



CENTRE FOR AIR POWER STUDIES, NEW DELHI

# CONTENTS

|   |    |
|---|----|
| Editor's Note   | v  |
| 1. <b>CHINA'S RISE AND FUTURE TRENDS IN SINO-INDIAN RELATIONS</b>       | 1  |
| <i>Jayadeva Ranade</i>  |    |
| 2. <b>SOUTH CHINA SEA: AN AREA OF CLAIMS AND COUNTER-CLAIMS</b>         | 17 |
| <i>Dhiraj Kukreja</i>   |    |
| 3. <b>CYBER SPACE: RESHAPING THE CONTOURS OF INTERNATIONAL POLITICS</b> | 37 |
| <i>Ashish Gupta</i>   |    |
| 4. <b>TRENDS IN THE RUSSIAN ECONOMY</b>                                 | 57 |
| <i>Arun Mohanty</i>   |    |
| 5. <b>TRUST AND BIG DATA IN COORDINATING DISASTER RESPONSE</b>          | 71 |
| <i>Rajesh Isser</i>   |    |
| 6. <b>ANALYSIS OF IRAN-CHINA RELATIONS</b>                              | 97 |
| <i>Anu Sharma</i>   |    |

CONTENTS

---

|  |     |
|--|-----|
| <b>7. ANALYSIS OF THE AMERICAN ACTION PLAN FOR<br/>A NEW MIDDLE EAST</b> | 117 |
| <i>Amarjit Singh</i>   |     |
| Index  | 140 |



## EDITOR'S NOTE

The most talked about event in the last few months has been the inauguration of President Trump. An uncertain course of events is forecast, and the world, and the USA itself, are apprehensive that, both internally and externally, the existing order could undergo a major change. The direction of such change is still unknown but few believe that the status quo will be maintained. On the other hand, China continues on its way to become increasingly stronger and more influential in world affairs. We are also witnessing an increasing coming together of Russia, China and Pakistan. What the future holds is indeed uncertain, may be even uniquely novel, and our journal will continue to address issues that should be of interest to our readers.

China's meteoric rise is bound to impact its bilateral and multilateral relations. China began to flex its muscles in 2008 or so after the financial crisis in the belief that the USA's power was fallible. With increased economic and military power, the Chinese propensity grew towards assertiveness, brinkmanship, greater confidence, an aggressive approach and willingness to offer challenges. For India, the next few years will be crucial as they will determine the effect on our security and our place in the world. We are less important to China in its global calculus but we are not unimportant. China has not been reticent in attempting to rile India and its recent attempts to solve our border issues on its terms by asking us to give major concessions in the Tawang area are indicative of the trend. Similarly, the invitation by some Chinese authorities for us to join the China-Pakistan Economic Corridor (CPEC) has implications that we must eschew. Its assertions that the South of China Sea is its lake, the movement of its submarines in the Indian Ocean and similar activities, and its unqualified support for Pakistan in every way

will continue to concern us. In time, it is not unlikely that China will try and claim parts of India on the 'historical' basis which will be little more than an attempt at cartographic aggression. All these issues and many more are discussed by **Jayadeva Ranade** in the lead article in this issue.

The award by the Permanent Court of Arbitration unequivocally stating that China had no basis to claim the area within the '9-dash line' in the South of China Sea saw an outright rejection by China. The United Nations Convention on the Law of the Sea (UNCLOS), of which China is a member, clearly suggests that maritime rights are based on land and not convenient history lessons. Even a cursory look will show that China has no case. Many countries claim some island or the other in the area, particularly in the Spratly Islands, Paracel Islands and Scarborough Shoal. Many of these islands are mere small land masses, little more than rocks, but they command substantial Exclusive Economic Zones (EEZs). The Chinese claim, creation of islands and their militarisation represents a unilateral exercise of power. Other nations are also upgrading their defences. Could this entire brinkmanship lead to a conflict? Will the US reinforce military forces in the area and categorically assert its policy towards the region? These are important questions with no clear answers at present. **Air Mshl Dhiraj Kukreja** traces the history of the region and gives his views on what could transpire.

The internet is now a very important part of our lives and impacts the commercial, civil and military fields. However, it is not an unmixed blessing. It is a man-made global commons and susceptible to interference. Cyber space is gaining significance and cyber war is on the cards. How cyber war will pan out is uncertain but there have been instances in the past that indicate the possible debilitating impact of cyber war. All countries are becoming increasingly aware of the possible dangers and see the need for prior preparation. In the military sphere, cyber attacks represent the 'first day' weapons and could be used independently or in combination with elements of kinetic war. **Gp Capt Ashish Gupta** examines the frontierless world and the attempts being made to exercise sovereign rights over own part of cyber space.

Russia may have lost ground from the heyday of the Soviet Union but

it remains a major power, with great potential to rise again. Possibly the critical factor is the economy. **Professor Arun Mohanty** looks at the not so distant trends and what the future holds. Recent Russian history has been characterised by difficulties, crises, and economic downturn as a result of sanctions and fall in oil prices. The ill-advised policies of President Boris Yeltsin resulted in halving of the Gross Domestic Product (GDP) and near bankruptcy in 1998. President Putin started the reform process and, with the benefit of high oil prices, managed the economy well enough for the GDP to rise to become the 7th highest in the world. The financial crisis of 2008 heralded another downturn and a fresh approach was adopted. Stringent economic sanctions were to follow the annexation of Crimea. It now appears that the dangers have been averted. Russia is rich in resources, and oil prices have seen a rebound. Most importantly, the Russians are inured to hardships and have all along taken crises in their stride.

Our geographical area is prone to unfortunate occurrences and natural calamities that necessitate rapid rescue and provision of succour. With experience, we have learnt many lessons and it behoves us to adopt better systems and hone our efficiency. Debriefs and a rehash of what went right or wrong happens regularly. There have been many instances of the use of innovation, inventiveness, improvisation and the exercise of initiative. All eventualities cannot be forecast as each case is unique. **Air Vice Mshl Rajesh Isser** is a respected veteran in providing humanitarian assistance and disaster relief. He opines that in spite of the pulls and pressures, maintenance of records is an inescapable necessity. He recognises that people behave differently and psychological issues play a part. In a study that is well researched and, at times, theoretical, the author has explained what can and should be done to advantage. Some terms used like 'swift trust', 'crisis informatics' and 'swarm intelligence' are intriguing.

Both China and Iran have in the past suffered at the hands of the West. That factor by itself has created an affinity for each other and spawned mutually beneficial endeavours. To strengthen the relationship, Iran has oil that China needs, and Iran welcomes Chinese arms and defence cooperation. With sanctions being lifted as a result of the Iran nuclear deal, the bilateral

engagement is likely to increase substantially. Geopolitics also plays a part and so does the overriding presence of the US in the area. **Ms Anu Sharma** recounts the history since diplomatic relations were established between the two countries in 1971, and analyses the economic, political and diplomatic relations. The possible approach by China to have Iran as a member of the Shanghai Cooperation Organisation (SCO) is discussed and so are the implications for India.

The last article in this issue of the journal is by **Professor Amarjit Singh** of the University of Hawaii at Manoa, Honolulu, USA. The author tries to answer the question of what it is that the USA wants in the Middle East. The views expressed are uniquely personal. He opines that the USA has had a hidden agenda and argues as to why they supported the Islamic State of Iraq and Syria (ISIS), starting from the release of Al Baghdadi from Guantanamo in 2004. The article is well researched and very readable. It aims to explain the conundrum that is the Middle East and forecasts what a new map of the Middle East could look like. Some readers may not agree with his hypothesis but no one can ignore the scholarship and commitment of the author.

Happy reading.



# CHINA'S RISE AND FUTURE TRENDS IN SINO-INDIAN RELATIONS

JAYADEVA RANADE

History certainly has left a legacy – to a large extent as propagated by the Chinese – but the world has changed and it is necessary to look ahead while formulating strategies. There was perhaps a period of opportunity when both countries shook off the colonial yoke and became free around the same time, but today, China is India's biggest challenge in terms of territorial security, global aspirations and environmental resources like water. When we look at Sino-Indian relations today, we cannot miss the new dynamics that have come into play.

Important in this context is the emergence nearly at the same time of strong, new leaders in Asia. Xi Jinping in China, Narendra Modi in India and Shinzo Abe in Japan are all pragmatic leaders with track records of being decisive and a capacity to take bold decisions. Each has articulated an ambitious vision for his country, with economic development as the centrepiece. All of them are strongly nationalist and equally intent on securing their country's national interests and strategic space. Coincidentally, all of them began to outline the strategic perimeters of their national interests soon after assuming office. Their appearance on the international stage has injected an element of competition in the region along with the potential to crowd the Indo-Pacific region.

---

Mr **Jayadeva Ranade**, a former Additional Secretary in the Cabinet Secretariat, Government of India, is a member of the National Security Advisory Board (NSAB) and president of the recently established Centre for China Analysis and Strategy.

**Looking to the future, China has initiated a bold, grand gamble which is potentially changing current realities. If successful, it will not only mean Chinese influence and power sweeping across our eastern and northern frontiers and enveloping portions of our northwest i.e. Ladakh and northern Kashmir, but the extension of Chinese power throughout Europe.**

Looking to the future, China has initiated a bold, grand gamble which is potentially changing current realities. If successful, it will not only mean Chinese influence and power sweeping across our eastern and northern frontiers and enveloping portions of our northwest i.e. Ladakh and northern Kashmir, but the extension of Chinese power throughout Europe. India-China relations are presently at a critical stage. The decisions and events of the next 2-5 years are likely to mark a new phase in the relationship. The new factors feeding into this possibly volatile mix are varied. A few are listed in the succeeding paragraphs.

With the global economic downturn in 2007-08 and the slowdown in the US economy, the Chinese Communist Party (CCP) leadership undertook an appraisal of US strength to decide on its future foreign policy. Views were divided on whether to write off the US as the sole world power. One view was that the US is a power irreversibly on the decline, while the other, which was accepted by the CCP leadership, argued that the intrinsic strength and resilience of the US will ensure its return to the world stage as a stronger and more effective power. There was consensus, however, that the ability of the US to project power simultaneously in different theatres around the globe is presently constrained, thus, offering China a window of opportunity that would last at most between 5-10 years, to alter the status quo in Asia.

The official Chinese assessment was concisely summed up in mid-August 2014 by the state-owned *Global Times*, a subsidiary newspaper of the official CCP mouthpiece, the *People's Daily*. The paper observed, "The US military has the power to sustain the US dominance internationally, but it is unable to command every country or nation. In East Asia, the US doesn't

have the determination to be fully committed to things that are not in its core interests.”

With the rapid rise of China and its military and economic might, which today ranks second only to the US, its national self-confidence was boosted. Chinese analysts began arguing more strongly in favour of an assertive Chinese foreign policy. Significant are the arguments advanced by some of China’s prominent and influential Chinese academics close to the leadership of the CCP. Tsinghua University Professor Yan Xuetong, a former doctoral tutor of Xi Jinping, with reportedly close proximity to him, has recommended that: (i) as the probability of conflict with other countries increases, China’s foreign policy should directly confront rather than avoid the issue of conflict; (ii) China should try to develop rather than just maintain its “strategic opportunity period” because waiting for a strategic opportunity period is always passive; (iii) China should begin to shape rather than just integrate into international society because it now has the capacity to do so; and (iv) China should change its non-alignment approach and make efforts to establish a “community of common destiny.”

Xu Jin of the Beijing-based Chinese Academy of Social Sciences (CASS) and another influential Chinese scholar, has asserted that several dominant “myths” in Chinese foreign policy need to be debunked. Xu Jin listed these six “myths” as: (i) China should keep a low profile; (ii) China should not seek alliances; (iii) China should not seek leadership; (iv) China will not become a superpower; (v) the Sino-American relationship is the most important one; and (vi) China’s foreign policy should serve China’s economic development. He believes that all these six “myths” should be discarded as a ‘new era’ calls for new ideas.

This self-confidence is reflected in China’s repeated demand for a “new type of big power relations” with the US, which actually implies acknowledgement by Washington DC of China’s status, and both countries jointly resolving tensions in regional and international ‘hotspots’. It is also from this time that China’s enhanced assertiveness in the South China Sea, the Indian Ocean, and with India, becomes noticeable.

**The new passports published by China depict its claimed territories, as do its actions in the South China Sea and East China Sea and the expanding claims over Arunachal Pradesh and Jammu and Kashmir (J&K). This directly impinges on India. Xi Jinping has set 2021, which is the centenary of the CCP, as the deadline for achieving the China Dream!**

With such thinking gaining wider acceptance, China's foreign policy has begun to acquire a sharper and more muscular edge that will impact India, Japan, Vietnam and other countries with which it has territorial disputes. Internal arguments advocating a tougher, uncompromising approach have gained ground in the debate on China's international security environment.

The 18th Party Congress which stressed the CCP's supremacy and domestic stability, installed Xi Jinping as the general secretary of the CCP. It additionally appointed orthodox Party apparatchiks to the downsized Politburo Standing Committee (PBSC) now comprising only seven members. It also, for the first time in over 30 years, simultaneously conferred all three top posts of Party chief, chairman of the Central Military Commission (CMC) and president of China on Xi Jinping. Xi Jinping has used ideology and nationalism to fuel the push for the supremacy of the CCP and its monopoly on power and stability.

The 18th Party Congress also approved the China Dream which envisages: making the Chinese people wealthy; making China a strong nation; and the rejuvenation of China. This muscular aspiration for China spelt out by Xi Jinping at the 18th Party Congress has been adopted by the entire Party and has already entered the lexicon of the CCP. Pertinent to India-China relations is the reference to rejuvenation of the great Chinese nation, which is a call for the redressing of past humiliations which include the 'unequal treaties' and the 'recovery' of claimed territories. It additionally implies the restoration to China of its self-perceived rightful international status. The new passports published by China depict its claimed territories, as do its actions in the South China Sea and East China Sea and the expanding claims over Arunachal Pradesh and Jammu and Kashmir (J&K). This directly impinges on India.

Xi Jinping has set 2021, which is the centenary of the CCP, as the deadline for achieving the China Dream!

In October 2013, Beijing organised an important Conference on Peripheral Diplomacy. The policy has obvious implications for India and Japan. China's policy of "Peripheral Diplomacy", for the first time in the history of the People's Republic of China (PRC), categorises countries neighbouring China as 'friend' and 'enemy'. It promises huge financial and other benefits -- including those flowing from the global influence and diplomatic clout it exercises -- to 'friends' who support China's

regional ambitions and warns of sustained periods of pressure and isolation to 'enemies' or countries that oppose China. Chinese commentators point out that the end objective of the policy of "Peripheral Diplomacy" is to use alternative strategies "to achieve global leadership". Among those identified as China's 'friends' are Nepal, Bangladesh, Pakistan, Sri Lanka and Turkey.

The policy signalled that Beijing would intensify efforts for economic engagement with India, including making investments, and accompany this with high-level visits. It additionally envisages a network of sub-regional, regional and "cooperative" security relationships. China already has an all-encompassing military relationship with Pakistan. The People's Liberation Army (PLA) has steadily upgraded ties with Nepal's army, and Sri Lanka and the Maldives have formally agreed to partner Beijing in the Maritime Silk Route. China and Bangladesh also signed a civil nuclear cooperation agreement many years ago, which has remained inactivated.

Noteworthy in the context of security arrangements is the precedent set by China and Ukraine on December 4, 2013. The security agreement concluded between the two countries states that "China promises...to provide security guarantees to Ukraine if Ukraine is attacked by nuclear weapons or threatened by such aggression".

**The policy signalled that Beijing would intensify efforts for economic engagement with India, including making investments, and accompany this with high-level visits. It additionally envisages a network of sub-regional, regional and "cooperative" security relationships.**

Around this time, in September 2013, Xi Jinping proposed China's One Belt, One Road (OBOR), which combines the twin initiatives of the Silk Road Economic Belt and 21st Century Maritime Silk Road. It is a grand concept that envisions China girdling the globe. Potentially covering 55 percent of the world Gross National Product (GNP), 70 percent of the global population, and 75 percent of known energy reserves, it is essentially a plan for a China-built land and sea transportation artery to link China's production centres with markets and natural resource centres around the world. At the same time, it will harness much of China's hitherto idle financial reserves and economic potential, manpower and infrastructure-technology reserves available in its mammoth State-owned Enterprises (SoEs) that are presently unutilised, to get the much needed returns. The OBOR has the potential to bend borders and alter the status quo in China's neighbourhood – as it already has begun to do in South Asia – and adversely impacts India directly. The initiative blends geopolitical and diplomatic objectives and has a strong domestic agenda.

Some international and Chinese banks have been identified as agencies for the OBOR and nearly 20 European countries are engaged in talks with China on the OBOR. However, despite China's offers of economic assistance, the European Union (EU), in May 2016, declined to give China Market Economy Status (MES) based on the 2001 terms of China's accession to the World Trade Organisation (WTO). There are differences on the terms offered by the Chinese, including over interest rates. Thailand, for example, complained in March 2016 that interest rates are too high, putting the Chinese-Thai rail project in jeopardy but the problems were later ironed out. Similar has been the case with Sri Lanka.

Beijing has tried to assuage the concerns harboured by some countries about China's real objectives. At the China Development Forum in March 2015, and again a month later, China's Vice Foreign Minister Zhang Yesui described China as fully integrated into the international system and reiterated that the OBOR is "not directed against any specific country or organisation" but intended to "complement" existing international and regional institutions. Chinese Foreign Minister Wang Yi, in his annual

address to the press on the sidelines of the Chinese Communist Party Central Committee - National People's Congress (CPPCC-NPC) sessions in March 2015 and 2016, asserted that the OBOR was not a "tool of geopolitics" and should not be viewed through an "outdated Cold War mentality". Separately, in March 2016, he again emphasised that China is a responsible emerging country and promotes periphery diplomacy with reciprocal benefits.

Problems of harsh terrain, political instability, and geopolitical threats, are likely to get accentuated by the inherent political turbulence in many of the regions that the OBOR traverses. The rising tide of Islamic extremism in Pakistan, Afghanistan and potentially in the coming years in the Central Asian Republics, will threaten stability in the Xinjiang Uyghur Autonomous Region and other Muslim areas in China. Safeguarding the China-Pakistan Economic Corridor's (CPEC's) 51 projects in Baluchistan -- among the world's most vulnerable and domestic insurgency-ridden territory -- will also be difficult. Chinese analysts have also pointed out to Beijing that the cooperation of countries like Russia, Japan and India -- all named as major powers in the region -- is essential if the OBOR is to succeed. Together, these cast serious doubts about the viability of the OBOR.

China is nevertheless pressing ahead with the approximately US\$ 1.4 trillion OBOR project. It has claimed it is willing to make a huge financial commitment upwards of US\$ 300 billion in infrastructure financing for the project in the coming years, though some multilateral and bilateral pledges may overlap. Underscoring China's commitment, the official *China Daily* reported on May 28, 2015, that Beijing plans to invest US\$ 900 billion. If China's OBOR succeeds, it will rival the US for global influence. The OBOR is planned to be completed over 35 years, in time for the 100th anniversary of the People's Republic of China in 2049!

The CPEC, which is the sixth leg of the OBOR and of great immediate significance for India, marks the initiation of a bold new policy. Announced during Chinese President Xi Jinping's well-publicised two-day (April 20-21, 2015) visit to Pakistan and with a value estimated by Pakistanis at US\$ 46 billion, the CPEC is a bold geoeconomic initiative which has begun to potentially bend borders with India and alter the strategic status quo in the

**By announcing the construction of several major civil and military infrastructure projects as part of the CPEC in Pakistan occupied Kashmir (PoK) and the areas of Gilgit and Baltistan, China has accorded *de facto* 'legitimacy' to Pakistan's illegal occupation of Kashmir, Gilgit and Baltistan as well as Pakistan's illegal cession in 1963 of the Shaksgam Valley in PoK to China.**

region. The CPEC sets the stage for China to wield preeminent economic, military and diplomatic influence in Pakistan. It is also signalled that in the pursuit of national interest, Beijing no longer feels the need to retain even the diplomatic façade of showing sensitivity to India's concerns and that, in the backdrop of warming Indo-US relations, it will use Pakistan to exert greater pressure on India. Equally clear is that China's leadership has determined that elevating its comprehensive relationship with Pakistan would best serve its strategic interests and that this objective will overshadow any other foreign policy

considerations, including that of ensuring a friendly, peaceful neighbourhood.

The agreement for Chinese companies to construct 51 Chinese-aided infrastructure, energy and military projects shows that Beijing's engagement with Pakistan is for the foreseeable long term. With power generation, transport, commerce, Research and Development (R&D) and the defence of Pakistan all getting increasingly tied to Chinese investment and interests, the CPEC seeks to bind Pakistan to China. Almost six months prior to Xi Jinping's visit to Islamabad, an influential senior Chinese academic, specialising in researching Afghanistan-Pakistan and who is occasionally called to brief the CCP Central Committee (CC) Politburo, said in a private conversation that "while we had earlier purchased the loyalty of the Pakistanis, now we will buy Pakistan!"

By announcing the construction of several major civil and military infrastructure projects as part of the CPEC in Pakistan occupied Kashmir (PoK) and the areas of Gilgit and Baltistan, China has accorded *de facto* 'legitimacy' to Pakistan's illegal occupation of Kashmir, Gilgit and Baltistan as well as Pakistan's illegal cession in 1963 of the Shaksgam Valley in PoK to

China. Beijing has, thus, dispelled decades of ambiguity to side with Pakistan on the Kashmir issue, ignoring India's concerns regarding sovereignty and territorial integrity. Within weeks of Xi Jinping's visit, senior Chinese leaders and officials began describing Pakistan as China's "ally" and "only friend". This enhanced relationship was publicised when Prof Yan Xuetong, director of the Institute for International Relations at Beijing's Tsinghua University and an influential Chinese strategic analyst close to Xi Jinping, told the *New York Times* on February 9, 2016, that "China has only one real ally, Pakistan." The CPEC has far-reaching implications.

Addressing India's concerns and reflecting China's attitude was Chinese Assistant Foreign Minister Liu Jianchao's condescending remark in mid-April 2015, that "the project between China and Pakistan does not concern the relevant dispute between India and Pakistan. I do not think the Indian side should be overconcerned about that". The comment is at obvious odds with Beijing's prickly reaction to India's offshore exploration efforts in Vietnamese waters and stand on the South China Sea dispute. Equally insensitive were suggestions by senior CCP officials and influential Chinese academics, just weeks after Prime Minister Modi's visit to Beijing, that India could join the CPEC and benefit!

In order to protect the sizeable Chinese investments in the PoK, Gilgit and Baltistan, Pakistan has begun integrating these areas more into Pakistan and the process has already begun to bend the borders and impact on India's territorial integrity. As a first step, Gilgit and Baltistan have been asked to send 'observers' to Pakistan's Federal Assembly before they are authorised to elect and send legislators. Presently, they have no representation in Pakistan's Federal Assembly, or Parliament. A senior 'government' official from Gilgit-Baltistan described this as intended to give "legal" cover to proposed Chinese investments since "China cannot afford to invest billions of dollars on a road that passes through a disputed territory claimed both by India and Pakistan." The move has other major implications as it will integrate this portion of Kashmir with Pakistan by giving it considerably enhanced legislative powers, control of its revenue and allowing it to be represented in Pakistan's federal Parliament by two

**Noteworthy is the fact that the area of the patrol, identified in the report as “the China-Pakistan border,” is the frontier region of Pakistan-occupied Kashmir — an area which is an integral part of India’s territory. China usually refers to the disputed area as “Pakistan-administered Kashmir”. China’s stance in reporting on developments relating to Kashmir has also become more critical.**

members for the first time—albeit as observers. Pakistani strategic analyst Ayesha Siddiqa interpreted the move as possibly demonstrating “Islamabad’s desire to end the Kashmir conflict by formally absorbing the territory it controls—and, by extension, recognising New Delhi’s claims to parts of the region it controls, such as the Kashmir Valley”. She said: “If we begin to absorb it, so can India. It legitimises their absorption of the valley.” This could, however, well be the thin end of the wedge as Pakistan appears to have got emboldened following the upgrading of its relationship with China, as evident

from the upsurge of restiveness and violence in Kashmir over the past year.

China too is assisting the process of Pakistan consolidating its hold over these territories. A report in the CCP’s official newspaper, *People’s Daily*, on July 21, 2016, in an apparent endorsement of Pakistan’s claim, published a report depicting soldiers from Pakistan and China under the caption: “A frontier defense regiment of the PLA (People’s Liberation Army) in Xinjiang, along with a border police force from Pakistan, carries out a joint patrol along the China-Pakistan border.” Noteworthy is the fact that the area of the patrol, identified in the report as “the China-Pakistan border,” is the frontier region of Pakistan-occupied Kashmir — an area which is an integral part of India’s territory. China usually refers to the disputed area as “Pakistan-administered Kashmir”. China’s stance in reporting on developments relating to Kashmir has also become more critical.

Notably, the responsibilities of the PLA’s West Zone, established in January 2016, include safeguarding the borders with Afghanistan, Pakistan, protecting Chinese investments and projects in the CPEC,

protecting China's land frontiers with India and focussing on "threats in Xinjiang and Tibet as well as Afghanistan and other states that host training bases for separatists and extremists". Instructions issued to the erstwhile Lanzhou Military Region in January 2015 confirmed that the West Zone's commitment in Afghanistan, Pakistan and the CPEC are long-term. The instructions directed that selected operational and border defence officers be trained in "informationization" and "joint operations command", that border defence colleges train officers in "border discussions" and the usage of mortars, and, specifically, that its "backbone personnel" be trained in the Pushto and Urdu languages.

Worrying too is the fact that the CPEC has a definite military content and provides for close military coordination between the Chinese and Pakistani armed forces. As part of the CPEC, a US\$ 44 million secure fibre optic underground cable is being established to link Kashgar, the headquarters of the PLA West Zone's South Xinjiang Military District, with the Pakistan Army General Headquarters (GHQ) at Rawalpindi. A number of PLA personnel are already deployed in the northern segment of the CPEC as engineers or to protect the Chinese working there. In early 2016, China informed Islamabad that it plans to raise a 10,000-strong 'private army' for deployment in Pakistan to protect Chinese workers and the sites of CPEC projects. This will be in addition to the Pakistan Army's special security division commanded by a major general, set up to guard CPEC construction sites and the Chinese labourers working there. Since 2010, reports have been seen in the Chinese media mentioning the possibility of China deploying special forces in the northern areas of Pakistan to protect China's investments and the various projects being built there.

**It said that the Ladakh region "has been part of Tibet since ancient times ..." and that "Ladakh was under the jurisdiction of the central government of China's Qing Dynasty until the 1830s." It added, "Although it is under Kashmir, Ladakh shares similarities with Tibet in terms of culture, religion, customs, and language, and it has long been dubbed 'Little Tibet'."**

This new China under Xi Jinping is expanding its influence and strategic space and trying to become the only big power in Asia. For India, this has direct implications.

China has already been steadily expanding its territorial claims over India – first, Arunachal Pradesh, and since 2010, the entire state of Jammu and Kashmir. On May 14, 2013, *Zhongguo Qingnian Bao (China Youth News)*, the influential high-circulation official mouthpiece of the Communist Youth League (CYL), published a lengthy article implicitly laying claim to Ladakh. It said that the Ladakh region “has been part of Tibet since ancient times ...” and that “Ladakh was under the jurisdiction of the central government of China’s Qing Dynasty until the 1830s.” It added, “Although it is under Kashmir, Ladakh shares similarities with Tibet in terms of culture, religion, customs, and language, and it has long been dubbed ‘Little Tibet.’” China has additionally expressed a willingness on two occasions since 2009 to mediate in J&K, and in 2010, a so-called Chinese Non-Governmental Organisation (NGO) invited Mirwaiz Umar Farooq of the Hurriyat Conference to China. Mirwaiz Umar Farooq had then stated that China has a role in the settlement of the Kashmir issue. More recently, on March 14, 2016, the Syed Ali Shah Geelani-led Hurriyat Conference described China as a reliable friend of the people of Kashmir and said it is extremely thankful to Beijing for its “unconditional support” and for not recognising the Himalayan state’s “illegal and forced occupation by India”.

China has on separate occasions laid claim to Kashmir. An official Chinese map published in 1954 -- still used in Chinese school textbooks -- depicts territories taken by ‘imperialist’ powers and which China has said it would “recover”. Ladakh is part of these territories, along with Arunachal Pradesh and the Andaman Islands. On March 1, 1992, *Shijie Zhishi (World Affairs)* published a map showing India without the state of J&K and depicting Kashmir as part of China. There have been other such claims. From August 2010, China designated the entire state of J&K as ‘disputed’ and began to issue ‘stapled visas’ to residents of the state.

China’s unchanged position on the border and Arunachal Pradesh was amply clarified by China’s Foreign Minister Wang Yi during his visit to

India in June 2014. In reply to a question by a journalist, he replied that the issue of stapled visas by China was a “unilateral” and “flexible” gesture of “goodwill” but if India does not want it, Beijing can stop. In other words, the status of Arunachal Pradesh and J&K remain unchanged. Later, Chinese President Xi Jinping said the border issue could be settled by the next generation. Viewed together with the incursions by PLA troops in April 2013 and September 2014 and the PLA’s military exercises across India’s borders, the signals clearly show that the tough stance adopted by Xi Jinping on the border issue will not change.

**With regard to the NSG and India’s requests at the UN Sanctions Committee, China did not alter its stance despite Modi speaking in person directly to Xi Jinping. China’s stance is also not in accordance with its stated position regarding the need to combat terrorism.**

After his visit to Pakistan and announcement of the CPEC and subsequent meeting with Indian Prime Minister Modi in China, Xi Jinping and the Chinese leaders have declined to substantively discuss the border issue. Meetings between the special representatives have yielded negligible results and discussions regarding the border have been perfunctory. Revealing was the statement by a retired but influential Chinese general to a delegation that had travelled to get a feedback on Modi’s visit to China. At the conclusion of the Track-II discussions, the general said: “India must ease tensions with Pakistan, resolve the Kashmir issue and then look to improved relations with China!” A larger delegation of Indian think-tanks that travelled to China some months later and met Chinese Foreign Ministry officials and Chinese think-tanks were delivered the same message.

China has, at the same time, become increasingly tough on other bilateral issues and more supportive of Pakistan. It continues to closely collude with Pakistan to oppose India’s admission to an enlarged UN Security Council, staunchly opposes India’s entry to the Nuclear Suppliers Group (NSG), and continues to block India’s requests at the UN Sanctions Committee regarding internationally recognised terrorists like Masood Azhar of the Jaish-e-Mohammed (JeM), Hafez Saeed of the Jamaat-ud-Dawa (JUD) and Zaki-

**That China's military leadership accords importance to the West Zone is discernible in the appointment of Gen Zhao Zongqi, till recently Jinan MR commander, as commander of the new West Zone. His credentials indicate he was handpicked for this post. Gen Zhao Zongqi is fluent in Arabic and has experience of Tibet.**

ur-Rahman of the Lashkar-e-Tayyeba (LeT). With regard to the NSG and India's requests at the UN Sanctions Committee, China did not alter its stance despite Modi speaking in person directly to Xi Jinping. China's stance is also not in accordance with its stated position regarding the need to combat terrorism. Another area of close Sino-Pak collusion and collaboration is Afghanistan where China is extending full support to Pakistan's ambition of controlling Afghanistan through the Taliban. Inescapable in this context is the high degree of convergence in the Chinese and US policies of support to Pakistan.

The extensive reorganisation and restructuring of the PLA undertaken by China is of direct relevance for India. Of particular interest for India is the recently established West Zone, which merges the erstwhile Lanzhou and Chengdu Military Regions (MRs). Comprising more than half of China's land area, 22 percent of its population and more than one-third of its land-based military, the newly constituted West Zone represents a strengthened military formation. The merger of the Lanzhou and Chengdu MRs will improve joint planning, coordination and operations. Incorporation of the Qinghai region in the West Zone will facilitate the rapid induction and deployment of high altitude acclimatised and trained troops into Tibet and across Ladakh. Establishment of the West Zone also reveals China's increased and abiding military interest in the region. It will additionally facilitate focus on "threats in Xinjiang and Tibet as well as Afghanistan and other states that host training bases for separatists and extremists". Its operational jurisdiction includes Afghanistan, Pakistan, the CPEC, borders with India and areas which have become sanctuaries for terrorists. Along with China's domestic security laws enacted last year, personnel of the PLA West Zone can now be deployed in the CPEC and Gwadar port. China handing over two warships to Pakistan on January 15,

2016, for the protection of Gwadar port, with two more to follow, points to the importance of Gwadar port for China. It is likely that Djibouti will come under its jurisdiction. If that happens, the West Zone can be expected to have adequate air force and maritime assets which will allow Chinese surveillance of the Arabian Sea.

That China's military leadership accords importance to the West Zone is discernible in the appointment of Gen Zhao Zongqi, till recently Jinan MR commander, as commander of the new West Zone. His credentials indicate he was handpicked for this post. Gen Zhao Zongqi is fluent in Arabic and has experience of Tibet. He is a war hero, having participated in the Sino-Vietnam War in 1979 when he is reported to have often disguised himself as a Vietnamese to gather information. He served over 20 years in Tibet as deputy chief of staff (1984-99) and chief of staff (1999-2004) of the Tibet Military District (TMD). Born in 1955, Gen Zhao Zongqi has foreign service experience and was posted in Tanzania as defence attaché.

In conclusion, while China is in overdrive to establish itself as the sole power in Asia, it will require India's cooperation if it is to succeed. India too has changed its policy, especially since the Modi government's coming to power. Along the borders, the clear directions are to stand firm and push back attempts at intrusion by Chinese personnel. India is also directly raising issues of concern with China's leaders, consolidating relations to expand its strategic space and is striving to create a balance in the Asia-Pacific. There are other areas too that have the potential to retard China's ambitions. Modi's implied support to the people of Baluchistan in their fight for self-determination can jeopardise the CPEC in which China has made a huge investment. The effort to develop Chahbahar port in Iran will, once implemented, give India and other interested countries a secure and alternate route to Afghanistan and Central Asia. The Dalai Lama's presence in India and his visits to Arunachal Pradesh, etc. are additional irritants and reminders to China. The next few years will be testing times and crucial in determining whether India and China can coexist peacefully.

# SOUTH CHINA SEA: AN AREA OF CLAIMS AND COUNTER-CLAIMS

**DHIRAJ KUKREJA**

## **INTRODUCTION**

On July 12, 2016, the Permanent Court of Arbitration (PCA), in its sitting in The Hague in the Netherlands announced the verdict on the landmark case of arbitration between China and the Philippines over the ‘ownership’ of the South China Sea (SCS). The PCA, in its ruling, decided in favour of the Philippines, by rejecting China’s claim to the SCS, based on its “nine-dash line” map. It stated that the Chinese claim had “no legal basis” and additionally stated that Beijing’s “historic rights” do not comply with the UN Convention on the Law of the Sea (UNCLOS) and that there is “no evidence that China had historically exercised exclusive control over the waters or their resources,” and that China’s maritime entitlements “exceed the geographic and substantive limits” under the UN Convention.<sup>1</sup>

The PCA comprehensively rejected China’s claim that only issues consistent with the UNCLOS were valid. Under UNCLOS, which came into force in 1982, and which China ratified in 1996, maritime rights derive from land, not history. Countries may claim an Exclusive Economic Zone (EEZ) up to 200 nautical miles (nm) of their coasts, or around islands. Based on

---

Air Marshal **Dhiraj Kukreja** is a former AOC-in-C of the Training Command. He holds a post graduate degree in national security strategy from the National Defence University in the USA.

1. Permanent Court of Arbitration (2016), “PCA Case No 2013-19 in the Matter of the South China Sea Arbitration”, July 12, 2016, <https://pca-cpa.org/wp-content/uploads/sites/175/2016/07/PH-CN-20160712-Award.pdf>.

this, the court ruled that the nine-dash line of China had no valid standing to claim historic rights within it.

Fig 1



Source: *The Economist*

It was on January 22, 2013, that the Philippines had filed its suit against China in the International Court, after all avenues for it were closed. The Philippines, for 17 years, had exhausted all possibilities through political and diplomatic channels in an attempt to defend its legitimate maritime rights, to be only repeatedly thwarted in its attempts. It was only after using up all options did it choose to seek justice through international law. Other nations in the Southeast Asian region too have issues of sovereignty with China, but none has so far dared to approach any international body for resolution. The Philippines, with the other affected nations in the region, views China as an imperial bully. Hence, its action can be seen as an indication of anxiety on the part of a small nation.

China, on the other hand, had made attempts to forestall the ruling of the PCA going against it, with an aggressive and protracted media campaign, while also offering bilateral talks with the Philippines. It referred to an agreement with the Philippines, signed in 1995, wherein both countries had agreed to settle the issue and disputes arising from it, through negotiations. Even before the case came to culmination, China had openly declared that it would not “accept, recognise or execute” the verdict. It also refused to participate in the proceedings of the arbitration stating that it had been unilaterally initiated by the Philippines, knowing well that under the UNCLOS it was not mandatory for all parties involved to participate in the process. The court, therefore, had only to satisfy itself that the claim being arbitrated was well established, in fact and law, before reaching a conclusion. China was also aware that there existed a gap between the verdict of the court, and its implementation; the gap being that the court did not carry any authority or capacity to enforce the writ! Hence, the course of action adopted by China!

**China was also aware that there existed a gap between the verdict of the court, and its implementation; the gap being that the court did not carry any authority or capacity to enforce the writ! Hence, the course of action adopted by China!**

### **GENESIS OF THE DISPUTE**

The Philippines brought its case to the PCA in 2013, as mentioned, after China grabbed control of a reef, called Scarborough Shoal, located about 350 km due northwest of Manila. The case had wider significance though, because of the location of the SCS itself. About a third of world trade passes through its sea-lanes, including most of China’s oil imports. The SCS has sizeable, untapped reserves of oil and gas; it also has a considerable area that is a rich fishing ground, thus, leading to multiple, overlapping maritime claims from Vietnam, the Philippines, Malaysia, Brunei, and Taiwan.

The genesis of the current dispute in the SCS dates back to 1946 when China laid claim to the entire sea area by drawing the now famous nine-dash line. The International Court of Justice, in a ruling in a case between Burkina

**The main areas of contention are the Spratly Islands, Paracel Islands, and Scarborough Shoal, all of which are claimed by several nations. Among these, the most contested are the Spratly Islands with China, Taiwan, Vietnam, the Philippines, Malaysia, and Brunei claiming sovereignty over them.**

Faso and Mali, had ruled in 1986, "Maps merely constitute information which varies in accuracy from case to case; of themselves and by virtue solely of their existence, they cannot constitute a territorial title, that is, a document endowed by international law with intrinsic legal force for the purpose of establishing territorial rights."<sup>2</sup> Based on this ruling, the Philippines had claimed that a state could not enlarge its rights under international law by its own unilateral acts or a domestic legislation. Yet, this is what China did when it drew the nine-dash line in the map of the SCS, claiming it as based on historical rights.

China has made the present day claims not under the UNCLOS, and despite the irrelevance of historical facts and its own ancient maps made by the Chinese authorities or foreigners; the maps of the ancient Philippines, made by its authorities or foreigners, in contrast, present a differing perspective. Since the start of the Song Dynasty in 960 AD until the end of the Zing Dynasty in 1912, or for almost a millennium, the southernmost territory of China has always been Hainan Island, based on all official and unofficial maps of China.<sup>3</sup> Scarborough Shoal, the area of contention between the Philippines and China, lies more than 500 nm from Hainan Island, at the southern end of the SCS! Likewise, all maps of the Philippines, from 1636 to 1940, a period of 304 years, have consistently shown Scarborough Shoal, whether named or unnamed, as a part of the Philippines<sup>4</sup>.

The real imbroglio erupted during the past couple of decades, with frequent disputes and minor confrontations erupting between the littoral

---

2. Case concerning the frontier dispute -Burkina Faso/Republic Of Mali, Judgment of December 22, 1986, <http://www.icj-cij.org/docket/index.php?sum=359&p1=3&p2=3&case=69&p3=5>

3. "Historical Truths and Lies: Scarborough Shoal in Ancient Maps", 18<sup>th</sup> Sapru House Lecture delivered by Senior Associate Justice Antonio T. Carpio, on August 6, 2015.

4. Ibid.

states. The main areas of contention are the Spratly Islands, Paracel Islands, and Scarborough Shoal, all of which are claimed by several nations. Among these, the most contested are the Spratly Islands with China, Taiwan, Vietnam, the Philippines, Malaysia, and Brunei claiming sovereignty over them.

In 1974, China wrested control of the Paracels from Vietnam, which sprouted the conflict between the two nations that simmers even till date. In 2012, China displayed an aggressive stance by restricting access to the Scarborough Shoal to the Philippines, although today, after the unfavourable verdict from the court, China has permitted access to the waters of the shoal to Philippines fishing boats.

While the land boundaries of the countries in Southeast Asia were demarcated by the European nations as a part of their colonies, as far back as the 16th century, the end of World War II in 1945 brought some significant changes in the region. The process of decolonisation created numerous new sovereign states with frontiers based on the earlier divisions made by the colonial powers. Although the land borders were whimsical and erratic, they were generally accepted, with differences being settled relatively amicably, through negotiations. This was not a surprising development, as the ethos of the region tends to avoid physical confrontation as such, unless it becomes unavoidable or a conflict is forced upon the disputing nations.

After gaining independence from the colonial powers, the new nations did not pay much heed to the issue of sovereignty of the sea, or the exploitation of the seabed resources, as most of them were busy in resolving their internal affairs and did not possess the necessary wherewithal. It was only in the late 20th century, after four to five decades since gaining independence, that realisation dawned on these nations of the unequal use of the resources from the sea by other nations. This also coincided with the arousing of national interests in terms of their requirement for reserves to fulfil their own developmental needs.

Once the appreciation set in, the nations wanted parity in the system of distribution of the seabed resources; the situation, however, was made more complex with the definition of the Exclusive Economic Zone (EEZ)

**There is clear understanding today of the need to exploit undersea natural resources to further the development of a nation. China's belligerent claims of sovereignty over waters that are not its own, raised the stakes in the Southeast Asian region, an area that has so far been spared aggressive confrontations between the regional nations.**

and the increasing awareness of the fishing and exploration rights. The demands for protection of sovereign rights, equality in distribution of the resources, and enforcing their will, were further frustrated, as most of the nations did not possess the capabilities to do so.

The fundamental issue revolves around sovereignty and control, both evoking emotional responses. There is clear understanding today of the need to exploit undersea natural resources to further the development of a nation. China's belligerent claims of sovereignty over waters that are not its own, raised the stakes in the Southeast Asian region, an area that has so far been spared aggressive confrontations between

the regional nations. The stage was, thus, set for hardline politics.

## **CLAIMS AND COUNTER-CLAIMS**

In the past few years, Chinese foreign policy has been driven by populist nationalism and has been constantly assertive with the official narration of the 'century of humiliation'. There is a prevalent sense of victimisation in the nation's stance in all its dealings with other nations, both bilateral and multilateral. While working to expand its role in the Pacific region, China has taken steps to protect its strategic trade routes, resources, and markets from foreign interdiction. In part, this has meant trying to cement its long-standing claims to the SCS, claims that other nations are now disputing. This approach could lead to the adoption of a stubborn position in asserting its claims over disputed areas.

The contested waters of the SCS are a geopolitical flashpoint, but for now, they exist in a period of comparative calm. Following the July 2016 ruling by the tribunal, countries with territorial claims in the waters have

struck a conciliatory tone, most prominently over the Scarborough Shoal, which is a barely submerged coral atoll that has become a touchstone for affairs between China and the Philippines, the traditional adversaries in the South China Sea. The shoal is emblematic of deeper issues at stake, namely, the nature of maritime boundaries and bilateral concerns over fishing rights and exploitation of strategic territory. There is another area where tensions had flared up in 2014.

The shoal known as the Ayungin Shoal in the Philippines, Ren'ai Reef in China, and the Second Thomas Shoal in the West, is home to the BRP *Sierra Madre*, a former US tank landing vessel, which ran aground on the shoal as a Philippines Navy ship, about 15 years ago. Manila has stationed a handful of its marines aboard the rusting ship, which is believed to be part of its strategy in the larger geopolitics of the South China Sea. The reef, which is within the disputed Spratly Islands, lies inside Manila's 200 nm EEZ, but is contested by China in its entirety. On March 9, 2014, China's coast guard vessels stopped two Philippines boats carrying supplies to their troops stationed in the shoal since 1999, claiming that the Philippines was trying to build structures on the reef in an attempt to fortify its claim.

According to the Philippines, China itself illegally occupies seven landmasses in the Spratly chain as well as the Scarborough Shoal. The islands' various claimants have moved to fortify their positions in any way they can, including by taking recourse to international law. The Philippines adopted a legal strategy, which is based on negating China's claims in the SCS, and includes that the landmasses in question count as islands. While it is not attempting to expand its own territorial claims, it has conspicuously avoided engaging in new construction or repairs to its own extensive facilities in the area. It has also asked the UN to simply uphold the 200-nm EEZ, as defined

**According to the Philippines, China itself illegally occupies seven landmasses in the Spratly chain as well as the Scarborough Shoal. The islands' various claimants have moved to fortify their positions in any way they can, including by taking recourse to international law.**

by the terms of the UNCLOS, upon which it claims the impingement of China's nine-dash line. Rather than constantly trading frequent accusations, alleging wilful misinterpretations of the legal doctrines outlining what constitutes an island, reef, shoal, or rock, the Philippines, in 2013, initiated legal proceedings against China, for violating the UNCLOS.

For the Philippines, the SCS is a lifeline to international markets. Itself a fragmented archipelagic nation, it relies on sea-lanes to maintain a steady flow of imports and to support its nascent manufacturing sector. Additionally, a majority of its coastal population depends heavily on fishing to make ends meet. As depleted waters push Chinese fishing vessels farther from China's shores, they have begun to compete directly with Philippines vessels. If the Philippines loses any more ground in its dispute over the heavily trafficked waterway, its already weak geopolitical position will be shaken even further.

Other countries with stakes in the SCS have been watching the Philippines' case against China, and the aftermath, with interest. Vietnam, for instance, reacted cautiously, and sent an unpublished statement to the tribunal for it to endorse its jurisdiction and consider Vietnam's rights in the matter as well. Malaysia and Indonesia, both South China Sea claimants, have assumed the role of observers alongside Thailand and Japan, the latter being in conflict with China over the Senkaku Islands in the East China Sea.

Taiwan, neither a signatory to the UNCLOS, nor even a member of the UN, is another claimant in the SCS, more specifically, in the Spratly Island chain that is under the Philippines' scrutiny. Ironically, Taiwan's stance in the SCS is in alignment with that of China, and its territorial claims are also nearly identical.

## **THE VERDICT AND CHINA'S REACTIONS**

The award of the PCA in July 2016, in the case between the Republic of Philippines vs the People's Republic of China, broadly announced the following rulings in response to the 15 submissions submitted by the Philippines.

- There was no legal basis for China to claim 'historic' rights to resources within the sea areas falling within the 'nine-dash line'.

- None of the Spratly Islands, where China has been concentrating its efforts on reclaiming land, can be termed as islands in international law. Being rocky outcrops, hence, they, neither individually nor collectively, can generate extended maritime zones.
- China's building on rocks that are visible only at low tide, had infringed upon the Philippines' sovereign rights as the Philippines has an EEZ in that sea area. Further, the court ruled that China's blocking of the Philippines' fishing and oil exploration activities was a violation of its obligations under the UNCLOS.
- China's large-scale land reclamation, the construction of artificial islands and airfields upon them and the indiscriminate fishing activities by Chinese fishermen, had caused severe damage to the fragile eco-system.

China had repeatedly stated that "it would neither accept nor participate in the arbitration unilaterally initiated by the Philippines." It lived up to its word; China landed two non-military aircraft at two new airstrips in the Spratly Islands on July 13, 2016, the day after the announcement of the verdict. It had also stated that it would not "accept, recognise, or execute the verdict." As a member of the UNCLOS, and the international comity of nations, it is expected to obey the rulings of the court, but there is no mechanism of enforcement.

Notwithstanding the lack of any mechanism to enforce the verdict, China continues to smart under the adverse reaction and its humiliation. The verbal duels with the Philippines and USA, led many nations to nervously watch the developments—whether the angry rhetoric would be matched with threatening behaviour by China's armed forces. Chinese officials had two opportunities to allay the fears and soothe the tensions, but passed them both up. The first came just prior to the verdict, when President Duterte of the Philippines offered a dialogue; China, however, demanded that the talks be without any reference to the tribunal's ruling. When the Philippines did not agree, the Chinese officials even threatened a confrontation.<sup>5</sup> The second opportunity that China failed to grab came during a visit to Beijing by America's naval chief, Adm John Richardson. During discussions, his

---

5. "My Nationalism, and Don't you Forget it", *The Economist*, July 23, 2016.

**The air force began sorties of combat air patrol by bombers and fighters; there is also talk of establishing an Air Defence Identification Zone (ADIZ) in the SCS, similar to the one it has declared over the East China Sea.**

Chinese counterpart, Adm Wu Shengli said, “We will never stop our construction on the Nansha (Spratly) islands half way, no matter what country or person applies pressure.”<sup>6</sup>

Aggressiveness through words continued to be the order of the day, combined with some hostile actions. The maritime authority of Hainan, the island province off Guangdong, announced the closure of an area in the SCS for three days while some naval exercises took place. The air force began sorties of combat air patrol by bombers and fighters; there is also talk

of establishing an Air Defence Identification Zone (ADIZ) in the SCS, similar to the one China has declared over the East China Sea. While all these are worrying possibilities, there also appeared indications that China might be cautious in its approach and not act provocatively.

China does not wish to be termed as a rogue nation, but rather as a responsible global power. While it has not signalled any retreat from its stance, China has extended an olive branch to President Duterte. It has engaged in talks with an ex-president and the current president of the Philippines, offering bilateral cooperation. It has said that China wishes to convert the SCS into a sea of peace and friendship, and as a display of its intentions, China has recently permitted passage of Philippines fishing boats in the Spratly area.

#### **OTHER REACTIONS AND ACTIONS**

On being defeated, the Nationalists fled the Chinese mainland to Taiwan in 1949. The Kuomintang brought with them territorial claims of all of China, including a then unimportant group of islands in the South China Sea. Today, Taiwan claims sovereignty over a wide swath of this sea defined by its own “eleven-dash line” nearly identical to China’s “nine-dash line”, thus, making an outline of its own claims in the area. Taiwan’s military

---

6. Ibid.

also maintains a presence on Taiping (also known as Itu aba), the largest of the contested Spratly Islands, and on Pratas Island in the northern South China Sea. Ironically, the identical claims put forward by China and Taiwan has brought them into a sort of alignment! Taiwan quickly reacted to the verdict, which undermined its claims, and dispatched a warship to the area. Surprisingly, China has not reacted to the naval exercises recently conducted by the Taiwan Navy and Coast Guard, off Taiping, in November 2016. Strategists surmise that China is largely content for Taiwan to push its claims on the island, because it views

Taiwan as a breakaway province, to be taken back, by force one day, if necessary!

There was an extent of uncertainty in the immediate reaction of the Philippines in the wake of the ruling; yet, the Philippines, as the winning party in the dispute, displayed maturity and restraint. It appeared that the Philippines did not want to rock the boat any further and antagonise China to lead to a military confrontation. While President Duterte did not voice any immediate reaction to the ruling, Philippines Foreign Secretary Perfecto Yasay urged “all concerned to exercise restraint and sobriety.” China reciprocated to this subdued reaction from the Philippines by posting police officers to protect the Philippines Embassy in Beijing from protestors. Former Philippines President Fidel Ramos met Chinese officials in Hong Kong as the special envoy for President Duterte, to discuss ways of resolving the imbroglio through cooperation; one of the proposals was the possibility of jointly developing fishing farms in the disputed waters, including around Scarborough Shoal.

President Duterte, however, cannot choose to remain silent for too long. The Chinese are holding out hope that the Philippines, under his leadership,

**ASEAN itself appears divided over how hard to pursue the matter with China, with nations like, Cambodia firmly in the China camp. It needs to be borne in mind that most of the Southeast Asian nations are beneficiaries of Chinese investments, and, hence, would not like to take any stance against China that may appear harsh.**

can eventually be drawn out of, what they see as a US coalition, designed to encircle China. To a certain extent, they have not been disappointed. President Duterte's undiplomatic outbursts against President Obama could be an indication! An effective arrangement to manage the dispute demonstrates China's willingness to negotiate, encouraging other SCS claimants too, to rethink their approach.

It was opined that following the adverse ruling on China, Vietnam and Malaysia may also seek legal recourse for similar relief from China's claims. These nations, instead, have put out measured statements, supporting peaceful settlement of the disputes. The ten-country grouping, Association of Southeast Asian Nations (ASEAN), had in June 2016, put out a strong statement on China's stand on its claims, only to retract it within a few hours! The organisation has four nations that are in dispute with China, yet chose to remain silent on the ruling by the PCA. During the subsequent meeting of ASEAN in Laos in September 2016, President Obama sought to keep up the pressure on China over the contentious issue. However, ASEAN itself appears divided over how hard to pursue the matter with China, with nations like Cambodia firmly in the China camp. It needs to be borne in mind that most of the Southeast Asian nations are beneficiaries of Chinese investments, and, hence, would not like to take any stance against China that may appear harsh.

China and the other claimant nations, all appear willing to seize the opportunity to move some stagnant agendas forward, at least for now. Their gestures include an agreement between China and ASEAN to finalise a framework for the Code of Conduct in the South China Sea before mid-2017, and a host of accommodating trilateral arrangements among China and the Philippines and Vietnam. Some regional joint development proposals, too, have reemerged. The possibility of jointly developing fishing farms in the disputed waters, including around Scarborough Shoal, was put forth to the Philippines ex-president during his meeting with Chinese officials in Hong Kong. President Xi Jinping of China, told Vietnamese Prime Minister, Nguyen Xuan Phuc that both countries should actively push forward with joint exploration of waters beyond the Gulf of Tonkin. In addition, China

and Japan appear ready to resume a long-stalled dialogue on natural gas exploration in the East China Sea.

Taken individually, these proposals may appear commonplace, but seen collectively in the context of the dispute in the SCS, they assume significance. Joint development is a well-trodden path in Southeast Asia. Mutually agreed joint development mechanisms have a proven record of easing maritime tensions in the face of overlapping claims elsewhere. Therefore, many, including the claimant governments of Southeast Asia, perceive it as a potential option to calm the ruffled waters in the SCS. There are, however, hurdles even in initiation of the process. Domestic sentiment in the Philippines is a prime factor, which is augmented by suspicions about China's strategic intent, coupled with its unceasing territorial expansion and escalation of maritime tensions. Many wonder if this is a pragmatic policy or a stalling strategy being adopted by China!

It is unlikely that China will ever ease its assertive behaviour in the SCS. Rather, the new maritime status quo, after the court ruling, may allow it to rethink what strategies best fit its interests, even if those strategies take years to develop and result in even greater maritime disruption. China's imperatives, as of now, would be to avoid outright military confrontation with any of the participating nations, to avoid further riling its ASEAN neighbours, and to evade interference from any extra-regional player.

### **INDIA'S ROLE IN THE SCS**

The SCS is of important maritime interest to India; 55 per cent of its seaborne trade by volume passes through the sea-lanes of the SCS; India is engaged in oil exploration in the EEZ of Vietnam and has signed an energy agreement with Brunei too. India has good relations with all the ASEAN nations, especially those involved in the dispute with China, while always maintaining a principled stand over issues of sovereignty, advocating that all disputes be resolved peacefully, without any threat of use of force or coercion. As an example, it has cited its own maritime dispute with Bangladesh being resolved peacefully in 2014, using the UNCLOS, hence, giving it the moral right to demand a similar arbitration in the SCS discord.

**The evolving Indian position is the result of a number of factors, primary of which is the US involvement in the region. The USA has been forced to adopt a robust posture in the Asia-Pacific expanse due to the exponential rise of China as an economic and military power.**

While the best course of action for India would be not to get overly involved in the issue of the SCS with China, it has been getting itself entangled in the issue for geostrategic and economic compulsions. In a joint statement after the sitting of the India-Philippines Joint Commission on Bilateral Affairs, India referred to the SCS as the 'West Philippines Sea'; China was not amused. Similarly, in the months preceding the judgement of the PCA, when there were hints of China wanting to restrict freedom of navigation and flight in the region, reports emanated of India being not averse to joint naval patrols with the USA; the reports, however, were immediately denied by both nations. Notwithstanding, India has recommenced its oil exploration off the Vietnam coast, which had been suspended for some time; it has also sent its navy to the area, purportedly on goodwill missions, but in reality as a signal to all concerned of its reach to distant places.

The evolving Indian position is the result of a number of factors, primary of which is the US involvement in the region. The USA has been forced to adopt a robust posture in the Asia-Pacific expanse due to the exponential rise of China as an economic and military power. While China boasts of having resolved most of its land frontier issues with its neighbours, its maritime disputes continue to fester and are concentrated in the East China and South China Seas. For a nation that, for most of its history, had a continental mindset, China's maritime strategy and increasing capabilities that could overwhelm the smaller nations of the region, have forced the USA's hand to provide confidence in the Asia-Pacific.

President Obama, however, as per a news report in early 2016, rejected a confrontational approach as proposed by Adm Harris, the head of the US Pacific Command (PACOM). Echoing the president's thinking, the Chief of US Navy, Adm John Richardson, in a security conference held in June 2016 in

Washington DC, said, "Cooperation with China would be great...competition is fine but conflict is the thing we want to avoid."<sup>7</sup>

If the USA and China, not wanting to rile each other, head towards a mutually acceptable compromise that may not be favourable or acceptable to the disputants, India too would be left in the lurch. It is for this reason that India should be proactive, and coordinate its 'Look East-Act East' policies to bolster the dissuasive military capabilities of the ASEAN nations, especially the main contestants of the SCS row.

Some maritime strategists and Indian naval officials also seem to favour a forward strategy, which should extend eastward for extensive cooperation with Japan, Vietnam, and the Philippines. In consonance with this policy, and as a security provider for the vital interests of the nations within the region, the Indian Navy's forays have increased. Besides these independent outings, the Indian Navy has also participated in exercises with the navies of the USA, Japan, and Australia; ironically, the Rim of the Pacific (RIMPAC) exercises conducted in April 2016, had the Chinese Navy too participating, despite the prevalent tensions in the SCS.

On the pretext of international cooperation in tackling piracy off the Horn of Africa and thereabouts, China has steadily built its naval presence in the Indian Ocean, much to India's consternation. Earlier in the year, China admitted to its first overseas military base in the Indian Ocean rim nation of Djibouti, located on the Horn of Africa, representing a transformative moment in its quest for supremacy at sea. With the regular movement of Chinese submarines into India's maritime backyard, right under the nose of its Andaman and Nicobar Command (A&NC), India has now to confront a new threat. China's growing interest in the Indian Ocean draws strength from its insistent drive for dominance in the adjacent SCS, where it has

**With the regular movement of Chinese submarines into India's maritime backyard, right under the nose of its Andaman and Nicobar Command (A&NC), India has now to confront a new threat.**

---

7. Bharat Karnad, "Narrowing the Seas: Security Ramification of the SCS Verdict", *SP's MAI*, vol 6, issue 16, August 16-31, 2016.

aggressively pushed to extend its frontiers by the construction of military facilities, runways, and even missile sites, on the disputed islands. China, thus, is diligently chipping away at India's natural geographic advantage. The strategic risk for India in the long term is that China, in partnership with its all-weather friend and close ally, Pakistan, could encircle it on land and at sea. With its economic corridor through Pakistan-occupied Kashmir (PoK) to the port of Gwadar, where it shall have naval facilities and, hence, easy access to the Indian Ocean, China is very close to achieving its aim. After covertly transferring nuclear weapons, missile and, most recently, drone technologies to Pakistan, China has publicised a deal to double the size of that country's submarine force, by selling eight submarines to it. It is, thus, adding to its naval force in the Indian Ocean.

India, as an aspiring regional power, needs to get its act together with the ASEAN nations and Japan, and evolve a common strategy to contain China in the SCS, within an Asian security framework. India and Vietnam are both concerned about China's assertive behaviour in the Asia-Pacific region, and are building on their relationship. It is with the other ASEAN nations that India needs to bolster its relations. Any further delay or failure to do so, could create a systemic risk to strategic stability in the region, besides opening the path for China to consolidate its strategic foothold in the Indian Ocean.

### **FUTURE OPTIONS FOR CHINA**

The differences between China and its neighbours around the South China Sea widened perceptibly after the PCA ruling. This was primarily because of the hasty reaction that China resorted to, and the strong unilateral position that it adopted, which has made it difficult for it to withdraw. In fact, China had committed a diplomatic faux pas in 2013, when the Philippines filed its case in the PCA. It embarked on an extraordinary global diplomatic effort to discredit the Philippines' claim as well as the arbitration court itself, resulting in the focus of the world on the judgement rather than on tensions. In addition to the initial gaffe, it faulted in another three of its actions. First, it made the mistake of refusing to participate in the arbitration process, even though it is a signatory to UNCLOS. Second, it stated that it would not abide by the

ruling even before the judgement was issued. Lastly, it displayed intimidating behaviour when it started building artificial islands in the disputed areas while the arbitration process was ongoing, thus, getting the world's attention to the region, which could well have been avoided.

What, therefore, are the options open to China? At this point, it appears that China probably understands the risks and repercussions of claiming the entire South China Sea, or pressing its claims based on the nine-dash line, and, hence, is playing soft. Yet, to avoid a loss of face, it is also unlikely that it will ever ease its assertive behaviour in the SCS. The new maritime status quo, coupled with the PCA ruling, may force China to rethink its strategies to serve its interests, even if those strategies take years to develop and result in even greater maritime disruption. At present, its imperatives appear to be to avoid outright military confrontation, circumvent further interference from international players, and refrain from antagonising all of its ASEAN neighbours at once.

With the current unpredictability of the situation in the SCS, bordering on a deadlock, the question that arises is whether an emerging US-Japan-India-Australia quadrangular combine will deter China. This is highly improbable, since the concept of compromise has always been alien to China; even dialogue, diplomacy, or appeasement may not work in resolving the imbroglio. In the past few years of reinventing itself, China has revealed its inherent belief that its smaller regional neighbours are only an extension of itself and, therefore, must adhere to the rules as China lays them down. There is no acknowledgement that such a situation is tantamount to the regional nations surrendering their sovereignty.

#### **THE ROLE OF THE USA IN DEFUSING THE SITUATION**

If China can somehow establish dominance over the SCS, then, it would constitute a formidable blow to US interests. Fortunately, the situation, as it exists today, at the time of writing this piece, does not appear to be heading that way, but it may not be so for long. This is chiefly due to two factors. First, there is a fear that risks hardening into a conclusion in the region that the SCS is going China's way, and that the US is reluctant or unwilling to take the actions needed to stem this trend. Second, China's militarisation

**The USA needs to follow a three-pronged strategy if it wishes to contain China in its own backyard. First, it needs to increase and extend US military presence in the region; second, the US needs to deepen its alliances and partnerships to encourage the other nations; and, lastly, it needs to maintain economic leadership by going ahead with the Trans-Pacific Partnership.**

of the islands it occupies or has reclaimed and built up already, poses a considerable military challenge.

Whether China manages to establish dominance or not, depends upon the countries in the Indo-Pacific, which have to resolve to prevent such an exigency. While China is very capable, it can be contained by a coalition of countries in the region and the US, largely because these countries, backed by the US will have the power to balance China.<sup>8</sup> Power in the contemporary world is largely a function of economic vitality, and China is already experiencing very serious and potentially grave challenges in that sphere, challenges

that could be very difficult for the Chinese government to address and resolve. China's growth rate has already slowed, and it is likely to drop further, leading to constraints on its rate of increase in expenditure on defence.

The role of the USA will be crucial in this effort. No country in the region wants to be left exposed as the balancer against China, and triggering its ire in the process. Thus, even as many countries in the region fear Chinese dominance, each has an incentive to be very cautious about provoking its wrath. US efforts in this regard have not been too convincing for the nations of the region; this fact has not been lost on China, which has observed the US' reluctance to get deeply involved on many occasions.

The USA needs to follow a three-pronged strategy if it wishes to contain China in its own backyard. First, it needs to increase and extend US military presence in the region; second, the US needs to deepen its alliances and partnerships to encourage the other nations; and, lastly, it needs to maintain economic leadership by going ahead with the Trans-Pacific Partnership

---

8. Ashley J. Tellis, "Balancing Without Containment: An American Strategy for Managing China", Carnegie Endowment for International Peace, 2014.

(TPP), not allowing China to economically lean on the nations of the region. This does not seem to be happening, especially given the utterances of President Donald Trump.

## CONCLUSION

The SCS challenge is not purely an Indo-Pacific issue, nor is it a localised problem between China and its regional neighbours. Restrictions threatened to be imposed by China, whether in the SCS or in the local air space, would have an adverse impact for global trade; therefore, the area must remain part of the global commons, and not be permitted to be converted into China's backwaters. Doubts, however, arise about the capability of any international body of nations to impose the rule of law. China, by its nature, displayed over the past decade or so, does not seem amenable to accept the PCA ruling, hence, is pushing the region towards a confrontation.

India's strategic objective in playing the role of an extra-regional power in Southeast Asia is based on twin objectives. First, its ambition to be a predominant power in the Indian Ocean, which is centered mainly on the Bay of Bengal and the Andaman Sea. Second, it stands within the broader objective to assume a greater strategic role in Southeast Asia and the Pacific Ocean. For the most part, this interest is driven by a need to counter China's growing influence in the region, as well as its aspirations to expand its own strategic space. Safeguarding maritime security and ensuring the freedom of navigation in the SCS, hence, are of importance to India, for which, stability in the SCS is a prerequisite.

Although India acts as an extra-regional actor in the South China Sea, its strategic relationship with Vietnam implicates India, to quite an extent, directly in the area. Vietnam is one of the littoral and offshore countries, which have shown the most grit in opposing China. The strategic gains from arming Vietnam with offshore patrol boats, the offer to sell it the Brahmos cruise missile, and now lately, with Vietnamese pilots to come to India for training

**Although India acts as an extra-regional actor in the South China Sea, its strategic relationship with Vietnam implicates India, to quite an extent, directly in the area.**

on the SU-30 MKI from next year, could be multiplied if the Philippines, Malaysia, and Indonesia also seek similar assistance. The dissuasion power of these small nations would be greatly enhanced to deter China from any misadventure.

US efforts should particularly focus on building up regional state capacity to resist the Chinese assertiveness. However, the success of any US strategy in the Asia-Pacific cannot come only from diplomacy and military means. Rather, economic steps are likely to be as important, if not more, given Asia's level of development and the region's broadly shared view of the centrality of economics.

It would be in China's interest to adopt a less aggressive stance and instead initiate bilateral dialogues with the Philippines and other ASEAN nations, to evolve a more purposeful Code of Conduct in the SCS. There are some indications of this in the recent statements of the Chinese Foreign Ministry and actions such as permitting Philippines fishing boats into the disputed waters of Scarborough Shoal. The concessions, however, could also be a ruse by China to buy time to expand its own strategic space. It hopes that adopting such a diplomatic track will help reduce external involvement, leading to international acknowledgement of its maritime interests. Notwithstanding the diplomatic initiative, China does possess the tactical advantage in the shoal with its upcoming strong military infrastructure in the islands, and consequent military presence to achieve full control, if it so desires.

Whether Chinese President Xi will manage to extricate himself from the corner that he has painted himself in, and how he does it, is to be seen. It is going to be a long wait!

# CYBER SPACE: RESHAPING THE CONTOURS OF INTERNATIONAL POLITICS

**ASHISH GUPTA**

The inherent uncertainty and complexity of international politics underpins the importance of focussing on contemporary and emerging issues which have a bearing upon international global collaboration and harmonisation of interests. International Relations (IR) are shaped by states' differing perceptions of each other<sup>1</sup> and are tied to states' overriding concerns to secure their vital interests. Although strategic narratives in IR and foreign policy do not accord a central role to science and technology, there is enough undeniable evidence to highlight the causative influence of technological innovations on responses and approaches between nations. The technological mismatch among nations, in terms of both level and structure of this mismatch, is manifesting in rearticulation of traditional IR narratives. The developments in technology, both centrally and peripherally, impact contemporary global affairs and the collective efficacy of the commitments of states for amicable and consensual resolution of disputes and differences. Various issues within the gamut of IR are embedded in technological infrastructures developed by nations to enhance their security and standing in the global world order, reminiscent of the Cold War era as well as reflective

---

Group Captain **Ashish Gupta** is a Senior Fellow at the Centre for Air Power Studies, New Delhi.

1. Alexander E. Wendt, "Anarchy is what States Make of It: The Social Construction of Power Politics", *International Organization*, vol. 46, no. 2, Spring 1992, pp. 391-425.

**For a nation, attainment of a respectable and dominant position in global political networks is largely linked to its technological prowess. It was technological superiority that expedited the colonialism of regions tied up with antiquated or obsolete technology.**

of current geopolitical arrangements. In order to elicit an insightful appreciation and a clearer understanding of the inherent implications, there is a need to impute new meaning to old concepts and use new concepts to convey old meanings; exegetically and contextually modified to suit an increasingly technocentric global environment.

The sequential technological revolutions facilitated the human evolutionary journey of becoming the most dominant species on planet earth.<sup>2</sup> At the onset of the so-called 'modernity', the rise of nations is largely attributable to wealth and power accrued through scientific and technological innovations and exploitation. For a nation, attainment of a respectable and dominant position in global political networks is largely linked to its technological prowess. It was technological superiority that expedited the colonialism of regions tied up with antiquated or obsolete technology. The exploratory sea voyages of the 15th and 16th centuries—initially by the Portuguese, and later by the Spanish, English, French, Dutch and others—turned out to be the precursors of a long and oppressive regime of colonialism and imperialism. This became possible due to assimilation and exploitation of superior technology for design and construction of naval ships and weapons. During these periods, technologies and scientific innovations served as tools of imperialism and foreign domination, and in both direct and subtle ways, changed the global demographic structure, geopolitical equity and the socio-economic divide.

The famous historian Edward Gibbon argued that in 18th century Europe, the development of the technical arts and their adaptation by rival European states, made military success a matter more of superior

---

2. Kevin Robins and Frank Webster, *Times of the Technoculture: From the Information Society to the Virtual Life* (London: Routledge, 1999), p. 9.

technology than military virtue.<sup>3</sup> This also helped to rid Europe of the scourge of nomad incursions that threatened the very existence of the European civilisation, since the superior 'rude valour' of the barbarians could not match the technological developments and military balance tipped in favour of static civilisation.<sup>4</sup> Lynn White has argued that as a means of understanding medieval history, the focus should remain on the dynamics of the technological changes shaping transnational and local interactions/engagements rather than on texts of that period.<sup>5</sup>

The technological developments, in the beginning of the 20th century, played a decisive role in the unfolding of political events across the globe that culminated in two World Wars and eventually led to the downfall of Western Europe as the centre of world power. In the run-up to the wars and during the wars themselves, both sides tried innovations in technologies. During World War I, to break the standoff, both sides used artillery barrages, chemical weapons, strategic bombing and even primitive tanks. World War II proved even more technologically transformative: a watershed in technology and human history. The list of technology innovations includes: microwave radar, jet propulsion, proximity fuses, guided missiles, acoustic torpedoes, and, of course, the atomic bomb.<sup>6</sup>

At the turn of the 20th century, a new and pervasive information revolution emerged worldwide, redefining the global political order and representing a profound political and societal 'paradigm shift'. Alvin Toffler, eloquently and compellingly wrote about the transformation of the

**The technological developments in the beginning of the 20th century, played a decisive role in the unfolding of political events across the globe that culminated in two World Wars and eventually led to the downfall of Western Europe as the centre of world power.**

---

3. Oliver Stuenkel, *Post-Western World: How Emerging Powers Are Remaking Global Order* (Cambridge: John Wiley & Sons, 2016), p. 56.

4. Lucian M. Ashworth, *A History of International Thought* (New York: Routledge, 2014), p. 55.

5. Lynn White Jr, *Medieval Technology and Social Change* (Oxford: Oxford University Press, 1962), p. 67.

6. Alex Roland, *War and Technology* (New York: Oxford University Press, 2016), pp. 78-83.

**The increasing sophistication and strategic penetration of ICT and the internet is reshaping the contours of the global political order and restructuring the global cultural ambience. This disruptive technology has brought about a paradigm shift in global commerce, unprecedented in magnitude, spatial extent and temporal scale.**

“infosphere” with the addition of a whole new strata of communication to the social system.<sup>7</sup> This transformed and evolving infosphere, combined with the phenomenon of an all pervasive digitisation, is redrawing the fundamental parameters of society, economy, and politics.<sup>8</sup> The new Information and Communication Technology (ICT) has shrunk geographical distances, increased the speed of communication and transformed the world into a global village. However, the rapid globalisation and integration, expedited through ICT, is paradoxically widening the economic and social gaps, placing the digitally endowed societies with unbridled access to ICT networks in

an advantaged socio-economic and political position. Besides, a number of private entities in the ICT sectors have amassed frightening amounts of power and influence and have leveraged this to subvert efforts to distribute ICT resources in just and equitable ways.

The positions occupied by the nations in the global power hierarchy are inherently based on relational determinants. In global politics, equations of power yield perceptible solutions when subdivided into separate thematic areas of comparable parameters.<sup>9</sup> This may entail who is empowered versus who is disempowered (instrumental power); who is constrained in a given situation versus who gets to write the rules (structural power); and, finally, how basic identities, interests, and issues themselves are reconstituted or transformed in particular historical contexts, in turn, redefining other relations of power (called meta-power).<sup>10</sup>

---

7. Alvin Toffler, *The Third Wave* (New York: Bantam Books, 1981), p. 172.

8. J N Rosenau, and J P Singh, eds., *Information Technologies and Global Politics: The Changing Scope of Power and Governance* (Albany: State University of New York Press, 2002), p. 143.

9. *Ibid.*, p. 6.

10. *Ibid.*

The ever-spreading tentacles of the internet have become so entwined in virtually every facet of social, economic and political activities that for a majority of the population, loss of cyber space tantamounts to a crisis of existential proportion. The increasing sophistication and strategic penetration of ICT and the internet is reshaping the contours of the global political order and restructuring the global cultural ambience. This disruptive technology has brought about a paradigm shift in global commerce, unprecedented in magnitude, spatial extent and temporal scale. As with any new paradigm shift, there are the naysayers as well as the enthusiasts. It turns out that the aphorism is true in the context of cyber space also, as some are hopeful of a brighter future shaped by the technological developments; others are worried due to the possible loss of jobs and concern about a “digital divide,” a chasm between those who are digitally affluent and those who are not, within and between countries.

The sustained technological developments contribute to the empowerment of a state, fuel its territorial aspirations and provide an impetus to broaden its global footprint. These can also exacerbate the imbalance between technologically advanced and less technologically advanced nations. At a deeper and less perceptible level, technology can alter the identity and influence of a nation, either through greater empowerment within the existing global political structure or buttressed by technology redefining the very nature of power. The role of nuclear weapons – implicitly of technology—in ending World War II, launching the Cold War as well as establishing a world order dominated by the two superpowers highlighted the importance of technological prowess for strategic gains. The national pride of the superpowers was riding on the success and achievement of milestones in the field of technology. During the period of the Cold War, there was an ongoing contest among the superpowers without any overt military confrontation. During the 1950s, the nuclear arms race became the pivot around which most of the acts of the superpowers (and their allies) against each other were undertaken. The nuclear race was further exacerbated when the US tested the first hydrogen bomb in 1952. Similarly, there was fierce and vicious competition during the early space race. The American psyche was

severely scarred in the aftermath of the successful launch of the Sputnik—the first artificial satellite—by the USSR. In order to restore American pride, President John F. Kennedy called for the US to commit itself to achieving the goal of landing a man on the moon and returning him to earth before the end of the decade. The landing of Apollo 11 on the moon on July 20, 1969, assuaged the American pride.

During the latter part of the 20th century, the world witnessed an information revolution, facilitated by the internet and supported by the ubiquity and affordability of electronic devices. Although this revolution is the product of a long evolutionary process of innovations and modifications, some of its characteristics suggest a sharp break from the past.<sup>11</sup> The information revolution is a pervasive feature today and has changed the contextual setting in which international relations are conducted.<sup>12</sup>

### **INFORMATION REVOLUTION: CHALLENGING THE WESTPHALIAN NOTION OF SOVEREIGN NATION-STATES**

The 'Peace of Westphalia' is a watershed in modern history, resulting in provincial readjustments, geographical arrangements and establishing territorial sovereignty demarcated by borders. Under the 'Peace of Westphalia', a series of peace treaties were signed in the year 1648 in Osnabrück and Münster in Germany, ending the Eighty Years' War between Spain and the Dutch Republic and Thirty Years' War in the Holy Roman Empire. In the later centuries, the concept of sovereignty, as enshrined in the treaty, became the basis of guiding principles for nation states. However, the fluidity of the geopolitical landscape, exacerbated by the political, strategic and economic compulsions, resulted in redrawing of national boundaries among many neighbouring nations. Nonetheless, the current world order ensures sovereign control of a nation over its territory.

But the internet shook the very foundation of sovereignty as propagated by the dominant Westphalian conceptions. The unhindered and unencumbered

---

11. Elizabeth C. Hanson, *The Information Revolution and World Politics* (Maryland: Rowman & Littlefield Publishers, 2008), p. 1.

12. *Ibid.*

character of the internet transcended physical boundaries with impunity and hubris. The virtual space used by the internet and its operatives became so well entrenched in consciousness and life that it was even christened with an appropriate name: cyber space. There is a growing clamour to identify it as one of the 'Global Commons' at par with the High Seas; the Atmosphere; Antarctica and, Outer Space, outside of the political reach of any one nation state. Independence was the structural yarn used for weaving the fabric of the internet as we know it today. The agnostic nature of the used standards and protocols does not differentiate among creed, culture or countries. An attempt to block the internet traffic is treated as a technology hitch and the traffic is rerouted through seemingly infinite networks. "The Net interprets censorship as damage and routes around it."<sup>13</sup> There is a widely held view that it "is not a physical place—it defies measurement in any physical dimension or time-space continuum. It is a short-hand term that refers to the environment created by the confluence of cooperative networks of computers, information systems, and telecommunication infrastructures commonly referred to as the World Wide Web."<sup>14</sup>

In the real world, the notion of a 'frontierless' world is a utopian construct and it is simply matter of time for realisation to dawn that only good fences make good neighbours. Cyber space is no exception and border delineation efforts have already begun, albeit with ambiguity regarding the final outcome. The US is unwilling to give up its dominant role, acquired partly

**In the real world, the notion of a 'frontierless' world is a utopian construct and it is simply matter of time for realisation to dawn that only good fences make good neighbours. Cyber space is no exception and border delineation efforts have already begun, albeit with ambiguity regarding the final outcome.**

---

13. "John Gilmore's Maxim," <http://techpresident.com/networked-public-sphere>. Accessed on January 20, 2017.

14. Thomas C. Wingfield, "The Law of Information Conflict: National Security Law in Cyberspace," Aegis Research Corporation, 2000.

**Paradoxically, the Communist Party of China, while being wary of the implications of unrestricted online access to information to its legitimacy, has enthusiastically promoted the use of the internet as an inalienable part of its quest for global hegemony, economic growth and orchestration of its technical prowess.**

through the accrued advantages from the efforts during the development phase of the internet and partly from the location of critical infrastructure such as root name servers in the US and in countries closely allied with the US. Many nations have clamoured for years to get rid of US dominance and have sought a more assertive role for themselves on issues related to internet governance. However, the US has been thwarting any move it sees as an organised effort by other nations to wrest control of one centralised resource of the internet that was both “unilateral and centred in the US”.<sup>15</sup> China has its own home-grown Internet walled from the rest of the world. In less democratic states, the content

control over the internet and censorship has become the norm. Traditionally, institutionalised centres of power have resorted to censorship of information and after sieving the information through the mesh of their perceived values and interests, made it accessible to the masses. A similar kind of censorship is now being practised over the internet to block, filter or censor access to information, to disseminate misinformation or to create a system of mass surveillance.

In the case of China, it has an ambivalent attitude towards the internet. China views the internet as a fertile ecosystem that germinates, fosters, nurtures and engenders political dissent, detrimental social activities and societal unrest. During the Arab Spring in early 2011, China bolstered its censorship bureaucracy, reportedly creating a new office under the State Council Information Office to “regulate every corner of the nation’s vast Internet Community.”<sup>16</sup> China’s new internet czar is Lu Wei who took

---

15. M. L. Mueller, *Networks and States: The Global Politics of Internet Governance* (Cambridge: MIT Press, 2010), p. 75.

16. Scott J. Shackelford, *Managing Cyber Attacks in International Law, Business, and Relations: In Search of Cyber Peace* (New York: Cambridge University Press, 2014).

over the State Internet Information Office in 2013 and became the director of a powerful internet committee headed by President Xi Jinping in 2014.<sup>17</sup> While unrepentantly defending China's need for stronger internet content control, he issued new regulations restricting sharing on social media sites and increasing censorship of popular online video sites. In response to criticism of such controls, Lu Wei said, "The internet is like a car. If it has no brakes, it doesn't matter how fast the car is capable of traveling, once it gets on the highway, you can imagine what the end result will be."<sup>18</sup> Paradoxically, the Communist Party of China, while being wary of the implications of unrestricted online access to information to its legitimacy, has enthusiastically promoted the use of the internet as an inalienable part of its quest for global hegemony, economic growth and orchestration of its technical prowess. With an estimated 688 million people using the internet, China holds the distinction of having the world's largest number of internet users, outnumbering the entire US population two to one.<sup>18</sup>

All states, to varying degrees and for varying reasons, would like to exercise sovereign control to regulate what comes into their territory through the internet. The emergent virtual fences can be palpably felt in cyber space and a new "cybered Westphalian age" is emerging.<sup>19</sup> Every nation has a legitimate and compelling right to take measures to protect its national security, its economy and the lives of its people from the potentially coercive and corrosive effects of cyber space. This process is slow and is fraught with many complexities and ambiguities. However, in the near future, nations will be able to exercise sovereign control over internet content within their borders and will be able to regulate online activities in compliance with existing or future laws and legislations. Cyber space is inherently a man-made construct of systems of systems and has its genesis in the technology-enabled collaborative work of

---

17. Paul Mozur and Jane Perlez, "Gregarious and Direct: China's Web Doorkeeper," *New York Times*, December 2, 2014, [http://www.nytimes.com/2014/12/02/world/asia/gregarious-and-direct-chinas-web-doorkeeper.html?\\_r=0](http://www.nytimes.com/2014/12/02/world/asia/gregarious-and-direct-chinas-web-doorkeeper.html?_r=0). Accessed on January 20, 2017.

18. Euan McKirdy, "China's Online Users More Than Double Entire US Population," *CNN*, October 4, 2016, <http://edition.cnn.com/2015/02/03/world/china-internet-growth-2014/>. Accessed on January 20, 2017.

19. Maximilian Mayer, Mariana Carpes and Ruth Knoblich, *The Global Politics of Science and Technology - Vol. 1* (Berlin: Springer, 2014), p. 93.

**A new generation of cyber warriors, wielding cyber weapons, with specific military/intelligence objectives, will defend the national borders in cyber space. In so doing, they will deepen national borders.**

academics, government sponsored research labs and some non-governmental organisations. The technological feasibility and political desirability of constructing virtual national borders is strong and is now manifesting in efforts to govern the cyber space within the respective physical borders.

*Cyber Sovereignty and Cyber Forces Operating in the Cyber Domain*

The basic role of the armed forces of any nation is to protect its sovereignty and territorial integrity.

Historically, the military services tended to be divided by domain: the navy fights on the sea, the air force fights from the skies and the army fights on land. A nation's sovereignty extends to its land territory, internal water and territorial sea and air space over land territory and territorial sea. It also implies that in each domain, there is clear delineation of physical territory irrevocably associated with national sovereignty. Many nations now consider cyber space as a *mainstream domain* for military operations and have started developing capabilities and building capacities. For example, the establishment of the US Cyber Command in May 2010, is an overt assertion that the US directly exercises its sovereign rights over cyber space which it deems of utmost importance for its national security, economic vibrancy and democratic vitality. A new generation of cyber warriors, wielding cyber weapons, with specific military/intelligence objectives, will defend the national borders in cyber space. In so doing, they will deepen national borders. In effect, the notion of sovereignty in its Westphalian conception is being redefined in the context of cyber space and adopted with the specific purpose of protecting cyber space.

**THE STUXNET EFFECT**

The year 2009 was a defining year which marked the arrival of the first true cyber weapon, "Stuxnet". A complex computer worm was developed

with the specific objective to penetrate and compromise a specific uranium enrichment facility in the Iranian city of Natanz. It was introduced into the facility's computer system with a USB drive. It went after the computers that controlled the centrifuges used to enrich the uranium and destroyed about 20 percent of them. It is believed that the perpetrators used four zero-day security vulnerabilities to spread around Microsoft's Windows operating system. The scope, scale and level of success of Stuxnet changed the whole notion of national security in cyber space. The transformation of a cyber weapon from an instrument of mass annoyance to an instrument of destruction, with the arrival of Stuxnet on the scene, forced the world to seek order in the disorderly world of cyber space. The success of Stuxnet changed the perception about cyber espionage, with realisation that serious strategic harm could be inflicted by a determined adversary leveraging cyber weapons. The acts of cyber spying or cyber espionage or even cyber theft suddenly started appearing as minor irritants in comparison to the possession of devastating and deadly power which could be wielded with unscrupulous skills remotely. Stuxnet also discredited the fallacy that being disconnected from the internet is a guarantee of security. Borders in cyber space are no longer an abstract construct and need to be clearly defined and delineated. The lack of sovereign control over cyber space remains a troublesome and worrisome concern to many. Many nations are still caught in the dichotomous debate between controlling the contents and supporting the notion of freedom over the internet.

The process of erecting virtual fences to regulate the flow of information and to prevent acts detrimental to national interests in cyber space has already begun. A 'Westphalian age' in cyber space is slowly but surely emerging, a direct ramification of a nation's resolve to exercise sovereign control over cyber space affecting its national interests. Some nations like Russia and China have already initiated the process to have precincts in cyber space. The delineation of sovereign rights and boundaries in cyber space has commenced, as evident from the efforts of many states to exercise the right of sovereignty over their part of cyber space. These efforts are crystallising into a new paradigm, supported by new technologies, modified institutional structures and

**Initially, under the “Golden Shield” project, it was envisioned to build a comprehensive database-driven surveillance system capable of accessing every citizen’s record as well as linking national, regional, and local security together.**

manipulative psychological techniques. China is leading the way in its efforts to control the flow of information from outside as well as the information emanating and circulating within its borders. The internet made its appearance in China in the year 1994 primarily with an aim to bring in new technology to provide China with a competitive edge to bolster its economy. The event was analogous to the enactment of the ‘open door policy’ of 1979 to open the country to foreign trade and investment<sup>20</sup>. However, the open door policy also saw the influx of egalitarian ideas, and with the internet, came a multitude of diversified ideas including the concept of democracy. While the internet is indispensable in fuelling the Chinese economy, its reach and impact on the Chinese people is seen as a destabilising factor by the current political set-up. In order to balance between these two ends, the “Great Firewall of China” project, formally known as the “Golden Shield” project, was initiated, developed and operated. Initially, under the ‘Golden Shield’ project, it was envisioned to build a comprehensive database-driven surveillance system capable of accessing every citizen’s record as well as linking national, regional, and local security together. The booming numbers of internet users necessitated various modifications and adjustments to its initial avatar. China has also been working on the “Next Generation Internet (CNGI)” project for developing an indigenous version of the internet.

The justifications and rationale for erecting fences in cyber space—as safeguards against social prejudice, against flow of false or fabricated information, against cyber espionage and for protection of the right to privacy, etc.—cannot be termed as controversial, regressive or authoritative. Several democratic nations have put in place regulating mechanisms to

---

20. “The Great Firewall of China”, <http://cs.stanford.edu/people/eroberts/cs181/projects/2010-11/FreedomOfInformationChina/category/great-firewall-of-china/index.html>. Accessed on January 20, 2017.

prevent social disharmony, misuse or abuse of the personal information of their citizens and to protect their economic interests. States, as cybered entities with sovereign boundaries, will be able to defend themselves successfully against threats to their national interests.

India, as a tolerant, democratic and pluralistic society, has always stood for the right of freedom of expression. It has been reiterated at various forums that "India is committed to protecting, preserving and safeguarding freedom of expression and internet freedom and to strengthening them."<sup>21</sup> However, India has taken justifiable measures for removing content on the internet that endangers social harmony, public order or national interest. Section 69 A of "the Information Technology (IT) Act, 2008",<sup>22</sup> vests power with the government, if it feels necessary or expedient in the interest of the sovereignty and integrity of India, defence and security of the state or public order, to initiate actions to block access by the public to any information generated, transmitted, received, stored or hosted in any computer resource. Similarly, under many sections of the IT Act, various offences such as sending offensive messages through a communication service, generation of electronic mail for the purpose of causing annoyance or inconvenience, identity theft, cheating by impersonation by using the computer resource, violation of privacy, and cyber terrorism are punishable with imprisonment. In some cases, the act is punishable with imprisonment which may extend to imprisonment for life.

The dramatic success of Stuxnet in its ability to cause strategic harm has already firmed up the resolve, where there was already a loose consensus, to have borders in cyber space, with enforceable laws to protect the legitimate rights of countries and their citizens. The international efforts for the success

**In the realm of cyber warfare, the question of attributability and accountability is a piquant one. For one, in its present form, the internet does not offer a mechanism for verifiable identification of potential perpetrators.**

---

21. Sujay Mehdudia "Deputy NSA Questions US Control over Critical Net Resources", *The Hindu*, October 17, 2013.

22. The Information Technology Act, 2008.

of this, however, have to confront and overcome a myriad difficulties. In the realm of cyber warfare, the question of attributability and accountability is a piquant one. For one, in its present form, the internet does not offer a mechanism for verifiable identification of potential perpetrators. This has propelled individual states, wittingly or unwittingly, to adopt and use methods for controlling the web, without dwelling much on their authoritative, regressive and repressive nature. The clear delineation of cyber space under a formal agreement, with nation states exercising their right of sovereignty over part of the cyber sphere is not a distant possibility. The digital borders will provide security within their precincts against rogue intruders. The emergence of borders will also see the emergence of laws and rules applicable to cyber space which might bring order in the chaotic world of the internet.

#### *Technological Pluralism and International Relations Narratives*

Most of the developments in cyber space were conceived and executed outside the purview and supervision of government agencies and were not abided by any mandate of a government or constrained by a government decree. The collective development processes in cyber space were often fuelled by the technological breakthroughs or by the innovative adoption of spinoffs from earlier research and development efforts. Initially, these developments often had limited public acceptance and influence, and were deemed to be of minimal mass appeal, such that did not warrant regulatory oversight. As the new technology burgeoned and proliferated, the government agencies found themselves constrained in their capacity to put in place regulatory frameworks so as to prevent its abuse and misuse. Various companies and entrepreneurs became extremely wealthy and influential, dictating the terms on which their products could be used, with the commercial interests often trumping the national security concerns. The trans-global influence of such non-government companies in terms of information exchange, financial inter-connectedness and data sharing has facilitated the acquisition of power, the nature of which was once the sole purview of the state. It also signifies a shift in the approach towards

international politics, which is predominantly state-centric. The new technology and its ownership can expedite the shifting of the hierarchy of power in the international system, relegating the pre-existing actors to the margins.

When a private business entity, either as an individual or a corporation, becomes too powerful, it can influence the state to take a position to protect its commercial interest, instead of adhering to a position consistent with prevailing international norms. Some ICT companies, due to the power they wield, both within the country of their origin and outside, and the economic clout they have over financial markets, have the potential to impact the international order in a disruptive way. Some of the most powerful companies in the world today are ICT companies with market penetration across the globe. A large number of nations are peripherally or centrally dependent on the ICT infrastructure provided by these companies and their irrevocable dependence on these companies makes them vulnerable to these companies' malpractices and legitimate or illegitimate manipulations. The global commerce is witnessing a paradigm shift fuelled by "disruptive" technology that is radically changing the way organisations operate and the way business is conducted. On the superhighway of global information, the landscape of IR keeps changing which, in turn, impacts the states' policy formulation by focussing more on commercial factors, subordinating international commitments towards fostering harmonious and mutually beneficial relations.

In a multi-centric world of information networks, states are supported and supplemented by a consortium of ICT companies wielding enough influence and control to alter in varying degree, the states' obligations for international cooperation and assistance. The plurality of interests may prevent the development of effective state responses to the extent that the emergence of mutually collaborative strategies is stalled.

**A large number of nations are peripherally or centrally dependent on the ICT infrastructure provided by these companies and their irrevocable dependence on these companies makes them vulnerable to these companies' malpractices and legitimate or illegitimate manipulations.**

*Alleged Russian Hacking During the US Presidential Election: A Case of Pervasive Entwinement of Cyber Space and International Relations*

The 58th quadrennial US presidential election of 2016 was 'different' in more than one way than many previously held US presidential elections. In the past, much of the intense political drama—an intrinsic appendage of any democratic election—took place behind closed doors, but in 2016, every aspect of the presidential election was played out in the mainstream media or on the internet. The Republicans sprang a surprise by nominating as candidate Donald Trump, a shrewd and successful businessman who was politically naive and inexperienced. Pitted against a candidate far more experienced in politics, Donald Trump demonstrated an approach to campaigning for president that had no precedence in American political history. During the campaign, the stories of complex intrigues and political machinations featured incessantly on television, in the print media and on the internet.

The seismic political tremor caused by the surprise win of Donald Trump in the presidential election in November 2016 created ripples across the length and breadth of the US. When the Americans thought nothing could now surprise them, came the shocking revelation that the Russians, under direct orders from Russian President Vladimir Putin, had tried to influence the campaign. It was alleged that Russia tried to undermine public faith in the US democratic process, denigrate Democratic candidate Hillary Clinton and sabotage her prospects of electability and potential presidency. This speculative assertion gained traction as a possible Russian recourse to keep Donald Trump at the helm of the most powerful nation, owing to his stated policy to work with Russia and his pro-Kremlin rhetoric. Besides, it has been reported that Mr. Trump has business ties to Russia and Russian financial interests were closely linked with the successful presidential run of Mr. Trump

The whole Russian operation to influence the presidential campaign and to undercut Hillary Clinton's legitimacy was carefully orchestrated well in advance. On the eve of the Democratic National Convention on July 22, 2016, a collection of emails of the Democratic National Committee (DNC),

the governing body of the US Democratic Party, was published by WikiLeaks. The leaked collection included emails from key staff members of the DNC from January 2015 to May 2016, to chalk out a strategy to contain Bernie Sanders' popularity and to secure Hillary Clinton's candidacy as the Democratic presidential nominee.<sup>23</sup> WikiLeaks did not reveal the source of information; however, a hacker, using the moniker "Guccifer 2.0", claimed responsibility for the attack. According to leading US cyber security firms, the self-styled hacker Guccifer 2.0 is not a single operator but a loose group of Russian cyber criminals designated "Fancy Bear" and "Cozy Bear". The security firm ThreatConnect, after comprehensive investigation, reported that Guccifer 2.0 was using the Russia-based Elite VPN service to communicate with, and leak documents directly to, the media.<sup>24</sup> The rumour mills were abuzz with stories that the whole episode was orchestrated by the Kremlin, as part of its grand plan to facilitate Mr. Donald Trump's accession to the White House.<sup>25</sup> It has also been reported that "the Bill, Hillary and Chelsea Clinton Foundation" was breached by hackers suspected to have strong Russian connections.<sup>26</sup>

**According to leading US cyber security firms, the self-styled hacker Guccifer 2.0 is not a single operator but a loose group of Russian cyber criminals designated "Fancy Bear" and "Cozy Bear". The security firm ThreatConnect, after comprehensive investigation, reported that Guccifer 2.0 was using the Russia-based Elite VPN service to communicate with, and leak documents directly to, the media.**

Amid the growing clamour from Congressional Democrats for an investigation of possible Russian hacking in the US election, on December

23. US Office of Director of National Intelligence, "Assessing Russian Activities and Intentions in Recent US Elections," ICA 2017-01D, January 6, 2017, p. 2.

24. Threatconnect Research Team, Guccifer 2.0: "All Roads Lead to Russia," Threat Connect, July 26, 2016, <https://www.threatconnect.com/blog/guccifer-2-all-roads-lead-russia/>. Accessed on January 20, 2017.

25. Ellen Nakashima, "Is there a Russian Master Plan to Install Trump in the White House? Some Intelligence Officials are Skeptical," *The Washington Post*, July 27, 2016.

26. Michael Riley and Jordan Robertson, "Clinton Foundation Said to Be Breached by Russian Hackers," *Bloomberg*, June 23, 2016.

9, 2016, then President Obama ordered US intelligence to review evidence of Russian interference in the 2016 presidential election. It is ironical that the intelligence agencies that were entrusted with the responsibility of undertaking the investigation, now report to Donald Trump, considered to be the main beneficiary of the Russian meddling in the US election.<sup>27</sup> The outgoing president even warned that the US would retaliate for the Russian cyber attacks during the presidential election at a time and place of the US' choosing.<sup>28</sup> On December 29, 2016, the Obama Administration announced that as a retaliatory measure, there would be sweeping new sanctions against Russia that included the expulsion of 35 Russians.<sup>29</sup> In a statement, then President Obama said that he had issued an executive order that provides additional authority for responding to certain cyber activity that seeks to interfere with, or undermine, the US election processes and institutions, or those of US allies or partners.<sup>30</sup>

The Kremlin was quick to dismiss such allegations as baseless, unsubstantiated and amateurish and described them as part of a political witchhunt.<sup>31</sup> Speaking disparagingly of the US intelligence agencies, Russia termed these series of accusations as turning on a full-on witchhunt. Adding more twists and turns in the plot is the claim of the existence of a dossier which was compiled by former MI6 agent, Christopher Steele. It was alleged that Mr. Trump had potentially been compromised by the Russians during a 2013 trip to Moscow for the Miss Universe competition. Again, the Russian president dismissed the alleged links between Mr. Trump and Moscow

---

27. Spencer Ackerman and David Smith, "Barack Obama Orders 'Full Review' of Possible Russian Hacking in US Election," *The Guardian*, December 19, 2016, <https://www.theguardian.com/us-news/2016/dec/09/us-election-hacking-russia-barack-obama-review>. Accessed on January 20, 2017.

28. Julian Borger, "Barack Obama Promises Retaliation Against Russia over Hacking During US Election," *The Guardian*, December 16, 2016, <https://www.theguardian.com/us-news/2016/dec/16/obama-retaliation-russia-hacking-us-election>. Accessed on January 20, 2017.

29. Lauren Gambino, Sabrina Siddiqui and Shaun Walker, "Obama Expels 35 Russian Diplomats in Retaliation for US Election Hacking," *The Guardian*, December 30, 2016, <https://thevotingnews.com/obama-expels-35-russian-diplomats-as-part-of-sanctions-for-us-election-hacking-the-guardian/>. Accessed on January 20, 2017.

30. *Ibid.*

31. Hyacinth Mascarenhas, "Russia 'Tired' of US Election Hacking Claims, Slams Intelligence Report as 'Baseless and Amateurish'," *International Business Times*, January 10, 2017.

and said that claims made in the dossier about salacious behaviour by Mr. Trump were obviously fake.

The alleged Russian intrusions into the American political system by leveraging cyber space and their malafide manipulations to influence the outcome of the presidential election strained the relationship between the two nations. It is an open secret that state supported, enabled, sponsored, and aided cyber operations are perpetuated across national borders and lack of consciously agreed-upon behavioural guidelines in cyber space could have unsettling consequences for the international order. Besides, the allegation about Russia meddling in American internal affairs and democracy is reminiscent of the Cold War rhetoric. The nostalgic sentiments that some Russian officials continue to hold for the Cold War saw the US discomfiture over these developments as assertion of Russia's resurgent political might.

**Still, ICT is not considered a vital component of the global international order. It is time to focus on the efforts to embed ICT in the global socio-political-technical system for a truly trans-nationalised and globalised world of opportunity and equity.**

## CONCLUSION

The uneasy relationship between technology and power in IR appears more tumultuous when observed from the information age perspective. International relations, as a discipline, has theoretical explanations and practical suggestions on how to wield dominant political power, flaunt superior status and secure national interest. But, it lacks an expansive interpretation of the impact of technology. This is proving to be a limiting factor in understanding the impacts of technology on IR in more nuanced ways. Furthermore, in international relations, most of the theories are derived from empirical evidence from industrial technology and are woefully short in adequately factoring in the generative and causal effects of ICT. ICT expedites the flow of information and more shared information leads to more thrust and transparency, facilitating increased levels of interaction,

leading to outcomes that are mutually and synergistically beneficial. ICT also brings in an attitudinal change from adversarial to cooperative and collaborative among nations by debasing the reliance on 'hard power' and enhancing the role of 'soft power', and diffusing power to a larger number of actors in the international system.<sup>32</sup>

The modified norms of contemporary IR are more or less inconsistent with the traditional norms of states' behaviour due to the irrevocable diffusion of ICT into various IR processes, ranging from bilateral to global situations and transnational dimensions. The nature and degree of interdependence between countries witnessed a transformative shift in interest and expectations largely due to the information technological evolution.<sup>33</sup> Still, ICT is not considered a vital component of the global international order. It is time to focus on the efforts to embed ICT in the global socio-political-technical system for a truly trans-nationalised and globalised world of opportunity and equity.

---

32. Daniel R. McCarthy, *Power, Information Technology, and International Relations Theory* (Hampshire: Palgrave Macmillan, 2015), p. 23.

33. Mayer, n. 19, p. 116.

# TRENDS IN THE RUSSIAN ECONOMY

ARUN MOHANTY

The end of 2016 seems to be the end of a 'lost decade' for the Russian economy that had to struggle for survival from crisis to crisis during the past ten years. Russia lost half of its Gross Domestic Product (GDP), its industrial production declined by 57 percent, and agricultural production dropped by 45 percent as a result of the ill-conceived market reforms executed during Boris Yeltsin's presidency in the 1990s. The world's second largest industrial country lost some of its vital industrial sectors in those years, turning into a natural resource-dependent economy. The climax to those disastrous reforms came when the once mighty superpower plunged into the worst ever financial crisis in its history, declaring itself a sovereign bankrupt nation in August 1998. The rouble got devalued by 400 percent in a single day. President Yeltsin was forced to change his economic reform course by replacing a neo-liberal government, headed by the Gaidar-Chubais team, by the Primakov-Maslyukov team, a group that believed in market reforms through state regulation. So the ideology that the state has no business in business was finally abandoned in favour of state-regulated economic reforms. The Primakov-Maslyukov government, during its 11 months stay in power, drastically changed the course of the economic reforms by laying the foundation for a state-regulated economy on the basis of indicative planning that provided a new lease of life to the Russian economy.

---

Prof **Arun Mohanty** teaches at the Centre for Russian and Central Asian Studies, School of International Studies, Jawaharlal Nehru University, New Delhi.

**Once little-known, Vladimir Putin, after getting elected as president in May 2000, in his first policy statement said that it would take another 20 years for Russia to catch up with Portugal, Europe's poorest country, if Russia grew at the then low rate. He indicated his support for accelerating the economic growth rate.**

Yeltsin sacked Primakov's left-of-the-centre government after the latter became a serious contender for the post of president in the upcoming presidential election, paving the way for his hand-picked Prime Minister Vladimir Putin, tipped to succeed him as president in an operation known as 'Operation Successor' in modern Russian history.

Once little-known, Vladimir Putin, after getting elected as president in May 2000, in his first policy statement said that it would take another 20 years for Russia to catch up with Portugal, Europe's poorest country, if Russia grew at the then low rate. He indicated his support for accelerating the economic growth rate, a policy publicly opposed by his Prime Minister Mikhail Kasyanov who was virtually imposed on the president under the secret deal 'Operation Successor'. Vladimir Putin could not bring any change in the composition of the government that was thrust upon him by Yeltsin and his 'family', which consisted of mostly die-hard neo-liberals. However, the astute Vladimir Putin, manoeuvring between the neo-liberals in his government and close advisers with a Siloviki (secret service) background, somehow managed to continue the course of reform under strict state regulation for which the foundation was laid by Primakov. The Russian economy grew fast significantly under Putin. Economists attributed this to the low base, calling it recovery growth, a result of import substitution in the backdrop of an unprecedented financial crisis, leading to massive devaluation of the rouble. However, the economic growth continued year on year for a long period, convincing the economists that it was not only recovery growth. Putin set an ambitious target of doubling the size of the economy in 10 years. The economy really grew at an average annual rate of 7.5 percent in the subsequent years. This helped the Russian GDP to finally reach the size of 1991, the year when the USSR collapsed, paving the

way for neo-liberal market reforms that dealt a severe blow to the Russian economy in the next almost one decade. The Russian economy became the seventh largest in the world, with a GDP estimated at US\$ 2 trillion, climbing down from 18th position in terms of size of the GDP. The country could manage to collect more than US\$ 500 billion hard currency in its kitty thanks to the high energy prices. Russia got a fast-growing buoyant economy and had huge hard currency reserves as well as resources at its disposal, but it could not take advantage of this for undertaking structural reforms and diversification of the economy, suffering from the Douche disease.

**The Russian economy became the seventh largest in the world with a GDP estimated at US\$ 2 trillion, climbing down from 18th position in terms of size of the GDP .The country could manage to collect more than US\$ 500 billion hard currency in its kitty thanks to the high energy prices.**

During the period from 2001-08 the size of the Russian GDP grew by 160 percent, falling short of the GDP doubling target when the global financial crisis hit the Russian economy. Belying Putin's Finance Minister Aleksey Kudrin's prediction that the Russian economy was a safe haven which would not be affected by the global financial crisis, the Russian economy indeed became one of worst- hit in the world, with the GDP declining by almost 7 percent and industrial production by 11 percent in a single year as a result of the global financial crisis as well as low oil prices. Russia took almost three years to recover from the crisis in 2012 and was poised to embark on a positive growth trajectory.

In the meantime, Russia's long-term development strategy, drafted in 2008, covering the period up to 2020, had ambitious targets to increase the size of the middle class from the current 20 percent to 75 percent, increase the average salary to US\$ 30,000 in a month, and attain the level of the developed Western countries by creating an innovation-based economy, faced serious problems in its implementation as a result of the global financial crisis and low oil prices, the life-blood of the Russian economy. The strategy was then virtually buried.

**When finally the Russian economy entered a trajectory of steady growth in 2014, it was again hit by unexpected factors, this time by the Western sanctions in the wake of Crimea's reincorporation into Russia.**

When, finally, the Russian economy entered a trajectory of steady growth in 2014, it was again hit by unexpected factors, this time by the Western sanctions in the wake of Crimea's reincorporation into Russia. The Russian economy was pushed into a crisis zone during the period from 2014-16 as a result of banning of access to lending by Russian companies from foreign sources, and embargoes on Russian companies. The economy received a severe blow but survived. The Russian government and the population as a whole tightened their belts to confront the international sanctions. The Western countries had calculated that economic hardship resulting from the sanctions would bring angry Russians out onto the streets to wipe out Putin's government, but this boomeranged when thousands of 'people did pour into the streets but to condemn the punitive Western sanctions, supporting Putin's action of reincorporating Crimea into mother Russia. President Putin's popularity catapulted to an unprecedented level. The Russians who saw Western evil designs in the sanctions to punish their country, rallied strongly behind President Putin.

Finally, the year 2017 now brings good news for the Russian economy that looks all set for a steady growth trajectory, overcoming the long drawn out crisis stemming from the widespread international sanctions. The economy looks confident to register positive growth from the current year onwards. The most convincing argument in favour of the crisis having been relegated to the past is the dynamic growth in industry as well as agriculture. According to statistics available from GosStat, the official statistics body of Russia, almost all the branches of the Russian industry have registered confident recovery growth. According to economists, the growth can be a steady trend in the coming years, on the basis of import substitution<sup>1</sup>.

---

1. "Russian Industry Came Out of the Crisis", *Vzglyad*, January 6, 2017, <http://vzglyad.ru/economy/2017/1/6/852039.html>. Accessed on January 7, 2017

The latest micro-economic data provided by GosStat confirms that most of the branches in the Russian industry have come out of the negative growth zone. During the last 11 months of the outgoing year, compared to the same period in 2015, the food industry has registered 2.5 percent growth while the textile industry has grown at a rate of 5 percent, the leather and shoe industry by 6.3 percent, the wood industry by 3.2 percent, the chemical industry by 4.5 percent, rubber and plastic production by 5.9 percent. The most important news definitely is that the machine-building sector – the backbone of the Russian industry that was worst hit by the crisis – has displayed significant growth. The production index of the machine-building industry in the 11 months of 2016 is 103.6 percent compared to the same period in 2015.

**While the sanctions turned out to be a blessing in disguise by stimulating import substitution, the recent upward trend in oil prices in the range of US\$ 50 to 60 has contributed to economic recovery in no small way.**

The first month of 2016 when the Russian industry displayed confident growth was November that witnessed the production index at the level of 103.7 percent. According to experts, two factors that facilitated this encouraging trend were the long working days in November and the cold weather that helped in the rise of electricity production. This factor apparently ensured almost 1.1 percent of the industrial growth. Independent experts attribute the fact of recovery growth not to November but to the period from the beginning of 2016 if not from the end of 2015. The average monthly recovery growth rate constitutes 0.2-0.3 percent while the average annual recovery growth rate stood at 2.55-4.5 percent. Rise in business activity, that was a clear indication of recovery growth, which was evident in the positive zone in the entire half of 2016, was not observed in the last five years.

Further indication of recovery growth was the rise in consumption and investment by large and middle-scale enterprises. As a whole, the growth in investment in the entire economy registered 0.9 percent whereas consumption growth stood at 1.9 percent. In a nutshell, the second half of 2016 witnessed a lot of symptoms of growth. The sectors that witnessed dynamic growth

**The average monthly salary of the population in this period has grown up by 7.7 percent but if you convert that into real income in terms of purchasing capacity, the growth is barely half a percent.**

becoming drivers of GDP growth were agriculture, chemical industry and extraction industry which did not even notice the crisis. 2016 saw recovery growth in most affected sectors of the economy like the machine-building industry. Here recovery growth touched all most all the branches.

The double trouble for the Russian economy comprised the international sanctions in the aftermath of the Crimean reincorporation into Russia as well as the steep decline in oil prices, the main source of income for the Russian budget.

While the sanctions turned out to be a blessing in disguise by stimulating import substitution, the recent upward trend in oil prices in the range of US\$ 50 to 60 has contributed to economic recovery in no small way. Apart from this, the axiom that devaluation of the national currency exerts a favourable impact on the national economy has been proven wrong this time in the case of Russia. Surprisingly, the Russian rouble in the last couple of years, has not only shown resilience but even gained strength against the US dollar. The oil price rise, coupled with strengthening of the rouble has provided a strong boost to economic recovery through cheaper imports. This factor stimulating acceleration of economic recovery needs the adaptation of producers to shocks and new conditions.

Now the issue that agitates the minds of economists is: how long will this growth continue? Most experts agree that this growth trend would continue in 2017 and do not foresee any production decline in any of the sectors. Strong companies that withstood the effects of the shock would be drivers of recovery growth and would discover new avenues for development as a result of those who have been driven out of the market. Enterprises that did not perish, are not sitting idle and managed to learn how to survive in the new conditions. Certain limitations on financial resources helped this process, indicating gradual reduction of key interest rates of the Central Bank. The growth potential of the economy in the sense of market compulsions remained, and it has to be

utilised. The Russian market has the potential for growth but it needs enterprises that would implement a development strategy. Only effective business can implement this strategy. And, presently, this process has started. The situation in most affected enterprises is serious, but it can hope for government support, for example, the automobile sector.

However, there are some experts who believe that the current growth is the effect of the low base. They are of the opinion that such a growth can be accidental in a long drawn out economic crisis, and the possible 3.5 percent decline in oil production would spoil the industrial statistics in the first half of 2017 and that it is early to talk about growth in industrial production. In addition to this, the level of real income of the population is the real indicator of steady growth. In the first 11 months of 2016, the real income of the population has declined to the level of 94.2 percent compared to the same period of 2015. The average monthly salary of the population in this period has grown by 7.7 percent but if you convert that into real income in terms of purchasing capacity, the growth is barely half a percent.

The overall decline in domestic trade volume also indicates the fall in real income. In the first 11 months of 2016, total domestic trade had declined to 94 percent of the level of 2015. The external trade has also indicated a similar trend.

The prospects for income growth in the future are not very clear. Deputy Prime Minister Igor Shubalov's statement that the income of the population is not growing as hoped for, also confirms this conclusion. However, the real income of certain sections of the population is, no doubt, growing, say official statistics. And it is expected that there would be growth in the income of almost all sections of the population in 2017.

Stabilisation of the rouble might have prevented inflation from taking place but it has triggered the arrival of a huge mass of speculative money of the non-residents who are investing their euro and dollar deposits in rubles for higher interest. However, after some time, they might convert this rouble mass into hard currency, receiving exorbitantly high profits. This is a standard recipe for provoking a financial crisis in the country, as has already happened three times, and could take place for the fourth time.

The government has set the objective to take the economy to a trajectory of sustainable growth. The set of necessary structural reforms such as privatisation, liberalisation and competition for accelerating growth is well-known. The government and society do not seem to be ready for such serious changes.

Some economists believe that expectations for an oil price hike and further strengthening of the rouble might not come true. Some Russian economists are of the opinion that the Russian economic model can prove sustainable and successful in case the global economy has to pass through yet another cyclical crisis for one or two years. President Putin, in his state of the nation address, has set the objective of achieving a higher growth rate than the average global growth rate, and this could be easily achieved in the case of the abovementioned global crisis.

Political stability can be used for attracting more foreign investment as there is sort of guarantee in Russia for not changing the rules of the game for the next 6-7 years. It can really help the Russian economy in fulfilling the task of import substitution in a paradoxical manner.

Russia had lost a substantial part of the machine-building industry, particularly production of equipment for different sectors of the economy, during the years of the disastrous neo-liberal reforms. In the meantime, Russian companies started procuring such equipment in the global market, but it was not all that easy to orient it to the domestic producers. That is why it requires more efforts to attract global producers of equipment to invest in Russia, particularly in segments such as heavy machine building, oil equipment, and railway transport. There are not many such companies; some sectors are highly monopolised; that is why companies need concrete concessions. Now the paradoxical situation lies in the fact that Russia is one of major oil extracting countries in the world but it uses imported equipment for oil extraction and transportation. Russia has to develop this sector for the production of oil industry equipment, not only for the domestic market but also for export. Things look much better in agricultural machine-building over the years. Import substitution in this sector has emerged as a fact of life. It is necessary to prevent the return of a situation of imports growing faster than the GDP.

The transport machine-building sector that includes the automobile, aviation and wagon building sectors is the leader in the machine-building industry. The government's anti-crisis measures as a whole helped in achieving positive results for the economy. The state's anti-crisis programme that covered 199 major enterprises in different branches included, first of all, automobile, aviation wagon building and goods transportation, etc. The budget allocation for these sectors amounting to Roubles 300 billion was a major support for their development.

Special attention to these 199 major enterprises is not accidental. These enterprises constitute the backbone of infrastructure which is protected by any government, first and foremost. If the transport system is disrupted, the economy of any country would collapse in no time. Secondly, these enterprises constitute the system formation, on which depends a lot of production in different spheres as well as people. For example, a decline in the aviation industry would lead to a decline of production in many spheres. Thirdly, the social significance of the sector is very important as it employs almost one-fifth of the country's workforce. And its share in GDP constitutes more than 20 percent.

In the meantime, the rouble has become astonishingly a stable currency, hardly reacting to the fluctuations in international oil prices. The rouble has been strengthened by almost 15 percent in a single year; and inflation has reached the single digit figure. Western economists, predicting doomsday for the Russian economy, have been forced to acknowledge its positive dynamism<sup>2</sup>.

According to Moody's forecast, the Russian economy is expected to grow by 1.5 percent to 2 percent as a whole in 2017. The Russian Ministry

**International Monetary Fund (IMF) experts also paint a positive picture of the Russian economy, stating that it has succeeded in withstanding the double-shock stemming from the oil price decline and the international sanctions imposed on Russia in the aftermath of the Crimean re-incorporation into it.**

---

2. "Ruble, Oil and Stock Exchange Bring Cheers to Russia", *Vzglyad*, January 3, 2017, <http://vzglyad.ru/economy/2017/1/3/740262.html>. Accessed on January 4, 2017.

of Economic Affairs is careful in forecasting that economic growth would register 1 to 1.15 percent in 2017.

The Development Centre in the Higher School of Economics, a liberal think-tank, conducted a survey about the perspective of the Russian economy among Russian as well as foreign economists, in which 22 leading experts took part, and the consensus prediction was that the GDP decline in 2016 would be 0.7 percent, and economic growth in 2017 would touch 1.4 to 1.9 percent.

Experts draw attention to the fact that size of the GDP has not grown beyond the level of 2008, the pre-crisis year; which prompts them to talk about the 'lost decade.' The size of the Russian GDP in the year 2016 would be more than just 1.5 percent compared to the pre-crisis year of 2008. The Russian GDP growth between the years 2002 to 2008 was 158 percent.

However, all economists agree that the Russian economy would witness steady growth from 2017 onwards, primarily as a result of the import substitution policy.

International Monetary Fund (IMF) experts also paint a positive picture of the Russian economy, stating that it has succeeded in withstanding the double-shock stemming from the oil price decline and the international sanctions imposed on Russia in the aftermath of the Crimean reincorporation into it. They forecast a GDP decline of just 0.5 percent in 2016 and GDP growth of 1.5 percent in 2017, pushing the crisis to the past. The Russian economy has registered positive growth in both November and December of 2016 and the inflation rate is at the level of 5 percent which is likely to further reduce in 2017.

The oil and chemical industries, followed by metallurgy are the leaders, with their production achieving new records. Considering the positive trend in industrial production, experts believe that the industry would grow by 2.5 percent annually in the coming years. Now it is important not to disturb the complete adaption of the economy and its movement to the expansion zone. One thing that is evident is that the monthly 5 percent negative industrial growth of 2015 has become a thing of the past.

One more factor suggesting improvement of the economic situation is the rouble's stability, which has strengthened almost by 15 percent against the US

dollar, compared to the beginning of 2016, making the rouble a very strong currency. Considering the positive showing, international agencies are likely to increase Russia's sovereign rating.

As regards the sectoral growth, Russia's military industrial complex has established itself as the leader in the economic growth sphere, thanks to the serious efforts put in by the state to revamp the sector and increase the state defence order. Labour productivity in the military-industrial complex has grown three times which is a serious record. This kind of growth is explained primarily by the rise in the state defence order. During the period from 2011 to 2015, labour productivity in this sector grew by 1.7 times. In 2016, the military-industrial complex witnessed 15 percent growth.

This has helped Russia to occupy second place in the global arms market, with exports reaching US\$ 14.5 billion in 2015. The total portfolio orders for defence supplies in 2015 reached US\$ 56 billion. The military-industrial complex has displayed 20 percent growth as a whole in 2015, while the radio-electronic sector has registered 32 percent, the ship building industry 18 percent, rocket-space industry 9 percent and aviation industry 6 percent. The expenditure on research and development over the last several years has grown significantly. Here again, import substitution did wonders in the revamping of the industry and guaranting of sovereignty.

Russian President Vladimir Putin, in his address to the nation, has advised the military-industrial complex to move into conversion and diversification of production since the state purchase would most likely diminish starting from 2018.

Reduction in the state purchase would be explained by budgetary constraints and a lack of possibility to increase financing in the future. The state purchase of military hardware that amounted to only Roubles 300 billion in 2007 had reached Roubles 1.5 trillion in 2013 and had touched Roubles 1.8 trillion in 2015 which was less than the figure of 2014.

**This has helped Russia to occupy second place in the global arms market with exports reaching US\$ 14.5 billion in 2015. Total portfolio orders for defence supplies in 2015 reached US\$ 56 billion.**

**Russia has managed through its astute diplomacy to reach an agreement among all the oil-producing nations, including the Organisation of Petroleum Exporting Countries (OPEC) as well as non-OPEC countries for reducing the total global oil production in order to bring stability to global oil prices while indeed increasing its own production.**

The exchange rate of one US dollar fell from Roubles 80-85 to Roubles 61, which facilitated the inflation decline, making the rouble one of the strongest currencies in the world<sup>3</sup>. Here the rise in oil prices from \$30 to \$55 per barrel also came to the rescue of the Russian economy. The increase in oil prices after a long time could be possible because of the agreement to reduce production by the exporter-countries. This is again a victory for Russian diplomacy. There was widespread speculation that the US, being hand-in-glove with some nations of the Middle East, had led to lowering of oil prices as they increased their production in order to punish anti-American countries such as Russia, Iran and Venezuela, heavily dependent on oil exports. However, Russia has managed through its astute diplomacy to reach an agreement among

all the oil-producing nations, including the Organisation of Oil Producing Countries (OPEC) as well as non-OPEC countries for reducing the total global oil production in order to bring stability to global oil prices while indeed increasing its own production. This is, no doubt, a tremendous victory for Russian diplomacy and an indicator of its strong global player status.

In spite of financial constraints, the Russian budget deficit never crossed 3.7 percent of the GDP, which was acceptable in the backdrop of the trade balance in favour of Russia to the tune of US\$ 70 billion. One of the encouraging phenomena in the Russian economy has been the sharp reduction in capital flight which has declined five times in 11 months.

Agriculture has been one sector which brought good news for the economy by growing at an average annual rate of 4 percent. Growth in agricultural production, coupled with growth in the machine-building, light

---

3. "Rouble was Never so Stable and Strong", *Vzglyad*, January 9, 2017, <http://vzglyad.ru/economy/2017/1/9/852683.html>. Accessed on January 10, 2017

and processing industries, provided a boost to the GDP growth. Industrial production as a whole has grown by 0.9 percent, while certain industrial sectors have registered growth up to 20 percent.

Most economists agree that the import substitution policy has brought success to the ailing Russian economy by reducing imports from 49 percent to 39 percent of consumption. Serious efforts have been made in the pharma, chemical, and light industries, and heavy machine building and transport equipment sectors to increase production through import substitution. Some of the high-tech sectors in the Russian economy have become absolutely competitive in the international market, making Russia the leader in nuclear technology, space and rocket technology, aviation industry, etc.

Agriculture, over the years, has brought a lot of cheer for the Russian economy by maintaining a steady growth and making Russia a leading grain exporter. The grain production that reached 119 million tonnes, has enabled grain to replace oil as the major export item for Russia. Eighty percent of milk and meat products consumption in the country is now met through domestic production. This has helped in strengthening Russia's food security which was in the danger zone when Russia was importing 70 percent of its consumption from abroad during Yeltsin's disastrous reforms of the 1990s.

There are indications that the long-drawn out economic crisis is finally over, laying the foundation for sustainable growth of the Russian economy in the coming years. The government needs to consolidate the gains by further strengthening the import substitution policy and diversifying the economy.

The Western plan to dislodge Putin from the presidency by bringing hundreds of thousands of angry Russians onto the streets in protest against the economic hardships, stemming from the economic crisis, have absolutely

**There are indications that the long-drawn out economic crisis is finally over, laying the foundation for the sustainable growth of the Russian economy in the coming years. The government needs to consolidate the gains by further strengthening the import substitution policy and diversifying the economy.**

failed . Rather one can see an upsurge of unprecedented patriotism in the post-Soviet Russia. The people saw through the Western design in the sanctions by the Western countries for penalising Russia for its patriotic act of reincorporating Crimea into Russia. The crisis rather came as a blessing for President Putin's regime. By consolidating political stability and pursuing a policy of import substitution in the backdrop of the Western sanctions and embargoes, Russia looks poised to be solidly on the path of sustainable growth in the coming years.

# TRUST AND BIG DATA IN COORDINATING DISASTER RESPONSE

**RAJESH ISSER**

## INTRODUCTION

During the Uttarakhand disaster of 2013, a herculean multi-agency effort was mounted to rescue tens of thousands of survivors who were physically and mentally maimed, and relocate more than 100,000 pilgrims stuck in far-flung mountainous high-altitude areas. While the urgency of saving lives and limbs ensured coordination and collaboration among all the agencies, there were many things that could have been done better. More importantly, the case needs to be dissected in detail with data-based analysis to come out with the correct lessons-learnt. This is important because it has been accepted as one of the most difficult missions ever carried out, with a record number of helicopters, agencies and volunteers involved.

There was considerable innovation that took place on the ground in terms of adopting newer technology and incorporating big data. For example, the use of mobile-based Whatsapp (new and less used at that point in time) by helicopter pilots for self-regulation, traffic control and collision avoidance in narrow and remote valleys. Similarly, a missing persons bureau was hastily set up to take up the challenge of registering pilgrims coming back, file

---

Air Vice Marshal **Rajesh Isser**, AVSM VM, is Senior Officer-in Charge Administration, Headquarters Central Air Command, India.

**There was considerable innovation that took place on the ground in terms of adopting newer technology and incorporating big data. For example, the use of mobile-based Whatsapp (new and less used at that point in time) by helicopter pilots for self-regulation, traffic-control and collision-avoidance in narrow and remote valleys.**

missing reports and other inputs to laboriously track them meaningfully on computer-based programmes. This resulted in accurate analyses besides uniting many separated family members. While Indian disasters await genuine research of many such instances, this article tries to track two unique issues of handling *big data* and establishing *swift trust* among responders worldwide. It is based on articles and research carried out across the world.

Resilience to disaster includes capacities of cognition, communication, collective sense-making, improvisation, innovation and problem-solving of the community as a whole. A disaster response scene is dynamic and complex, with an acute need for timely and adaptive action. This calls for a balance between established structures and flexible thinking. The response can be thought of as a complex adaptive system that continuously meets these ever-changing and demanding situations<sup>1</sup>. Identification and detection of risks, assessments for the short and long terms, and communication of these to key nodes is a first step that requires a healthy mix of cognition and technology. The next step of self-organising by a complex adaptive system needs healthy dosages of swift trust that permeates across the physical and virtual domains. With multiple sensors, monitoring instruments and virtual connectivity rising exponentially, the challenge is to intelligently integrate and distribute analyses to the right people, at the right time, avoiding information overload.

## COGNITION, IMPROVISATION AND COORDINATION

In disaster response, improvisation can be seen as a mental activity leading to action by the use of creativity under severe time and resource constraints. Roles are a mix of expectations from a position or professional status,

1. C. Coetzee, V.D. Niekerk and E. Raju, "Disaster Resilience and Complex Adaptive Systems Theory: Finding Common Grounds for Risk Reduction," *Disaster Prevention and Management*, vol 25, no. 2, pp 196-211. Accessed at [www.emeraldinsight.com](http://www.emeraldinsight.com) on December 31, 2016.

relationships because of being part of a network, and behaviours needed for an effective disaster response. Role behaviour can encompass improvisations in procedures, status or change in roles, tools or equipment for a task, and geographical positioning or dispersal of men and material. Identification of response goals, observing field conditions and hypothesising about actions and consequences are some of the cognitive functions that are undertaken before decisions are made. Decision-making is under time-pressures, high stakes and consequences, and extreme complexity in a major disaster response. Leaders resort to both recognition-primed decisions in familiar situations and more reflective but time-consuming decisions in completely unfamiliar situations.

**Cognition and Learning:** Cognitive abilities, in terms of processes and representation, encompass intelligence, learning and knowledge management. Away from computational approaches, an interpretive methodology can examine how meanings are created in a social context. This needs to be based on subjects such as sociology of knowledge, social psychology of organisation, social cognition, organisational learning and knowledge management. Studies in the USA on the World Trade Centre (WTC) 9/11 attacks and 1995 Oklahoma bombing clearly bring out the prominence of conventional behaviour coupled with the cognitive process and linked to the observation among responders. Improvisation was normally limited to procedures and status, rather than material aspects. However, when improvising, actors do undertake observation and hypothesising<sup>2</sup>. Lack of sufficient information or cognitive abilities to process and analyse leads to uncertainty in an organisation. Propositions of bounded rationality and attendant complexities apply during task completion and are dependent on levels of uncertainty.

Individual cognitive processes contribute to the larger domain of explicit and implicit organisational knowledge. This allows group and institutional sense-making and knowledge creation as in a helical spiral. High levels of organisational process maturity, capability and performance are directly

---

2. D. Mendonca, G. Webb, C. Butts, and J. Brooks, "Cognitive Correlates of Improvised Behaviour in Disaster Response: The Cases of the Murrah Building and the World Trade Centre", *Journal of Contingencies and Crisis Management*, 2014, DOI: 10.1111/1468-5973.12057. John Wiley & Sons Ltd.

**High levels of organisational process maturity, capability and performance are directly associated with higher degrees of organisational cognition and knowledge base. Individuals, in turn, gain from the organisation's vastly larger cognitive base.**

associated with higher degrees of organisational cognition and knowledge base. Individuals, in turn, gain from the organisation's vastly larger cognitive base. Yet, the organisational domain is a created or artificial system that can be changed, redesigned and improved. This is greatly influenced by goals, participants, technology, social structure and inter-organisational relationships<sup>3</sup>.

Emotion is important where humans exist in a social structure, more so in a disaster scene.

It is important in motivating, directing and regulating individual actions towards an objective goal. It complements all the cognitive processes of intelligence, attention, learning, decision-making and problem solving if it is positive. In the same manner, good cognitive abilities enable stability and emotional well-being. Organisational learning is the process of change in structure, functions and behaviour for the betterment of the organisation. This is a result of experience, cognition, emotion and environmental influences that the organisation undergoes while functioning or interacting with the outside. A state of meta-learning is reached when an organisation is acutely aware of its learning processes and in control of them; those with a higher degree of cognition have better capacities for the same.

**Managing Dependencies:** Alvin Toffler used the term 'ad hocracies' for a decentralised network of teams involved in a project which undergo rapid changes. Malone et al (1994) define coordination as managing dependencies between activities. It can exist between a spectrum of competition, co-operation and collaboration<sup>4</sup>. The key is to clearly identify dependencies and processes to manage them constructively. This is possible only by identifying the needs and capacities of all the agencies in a disaster response. One type of dependency is sharing

---

3. F.S. Nobre, M.A. Tobias and D.S. Walker, "A New Contingency View of the Organisation: Managing Complexity and Uncertainty Through Cognition," *Brazilian Administration Review*, vol 7, no. 4, Article 4, pp. 379-396. Accessed at [www.axpad.org.br/baron](http://www.axpad.org.br/baron) on December 25, 2016.

4. W.T. Malone and K. Crowston, "The Inter-Disciplinary Study of Coordination," *ACM Computing Surveys*, vol. 26, no. 1, March 1994.

limited resources. A range of economic theories explain coordination across competition and collaboration such as Classical Microeconomics, Transaction Cost Theory, Agency Theory, and Mechanism Design. Research using sociology and psychology in Organisation Theory points to the optimisation value of division of activities and management of dependencies between actors. Inter-dependencies can be pooled (only sharing resources), sequential (activity dependent), and reciprocal (input dependent). These are done by a range of mechanisms like standardisation, supervision and mutual adjustment. To manage inter-dependencies between groups first requires clubbing those with strongest inter-dependencies into distinct groups such as the UN cluster system for humanitarian action.

One concern is prerequisites based on activities that follow other actions. This is done by notifying the schedules, sequencing and tracking progress. It allows interventions and reminders where progress lags. The next is transfer where physical transportation and communication allow the next activity to begin on receiving a product. This may include concepts of buffers, surge capacities, just-in-time and parallel processes. Another concern is usability wherein standardisation and participatory design of processes and products allow unimpeded flow of interrelated activities. The first act of group coordination is to identify a common or shared goal. This is then decomposed into activities based on functional aspects, type of product, consumption requirements or by geographical dispersion. This process can be top-down or bottom-up which allows more buy-ins and commitment in a multi-agency set-up. A top-down approach based on a hierarchical set-up, however, has less transaction costs and is more responsive, but is more prone to processor failure. However, all this is underlined by trust and trustworthiness.

**The first act of group coordination is to identify a common or shared goal. This is then decomposed into activities based on functional aspects, type of product, consumption requirements or by geographical dispersion. This process can be top-down or bottom-up which allows more buy-ins and commitment in a multi-agency set-up.**

## TRUST IN DISASTER RESPONSE

The two main concerns of disaster response are time-sensitivity and effectiveness, and this is also underlined by the overall costs of the operations. A mix of centralised and decentralised mechanisms could address these concerns. Computers and Information Technology (IT) networking allows real-time collaborative decision-making without being collocated, e.g. video conferencing, digital signatures, etc. Yet, changes in this consensus-based structure are inevitable in circumstances where high reliability and rapid response are critical. Coordination is a major theme in disaster response simply because no agency has the capacity to go it alone and satisfy critical needs. In normal life, coordination aspects are generally only noticed when there is a lack of them, causing problems and wastages. A simple definition of coordination is working together harmoniously, which has the important element of managing dependencies. Goal relevant relationships, critical to effectiveness and efficiency, are termed inter-dependencies. For disaster response, the definition of “composing purposeful wholes” seems to be most apt for coordination<sup>5</sup>. Disaster coordination is primarily based on protocols and accepted artefacts for information flow. Coordination mechanisms can vary, e.g. avoidance, reservation schemes, commitments, polling approaches, shifting task dependencies (learning), third-party means and multi-stage negotiation strategies. However, a prerequisite for effective coordination, cooperation and collaboration is different degrees of trust among the actors responding.

**Conceptual Framework of Trust:** The concept of trust permeates across all disciplines of human and social endeavour; however, each has a different lens to define it. Sociology sees it as a social construct, e.g. institutional-based arrangements of certification, membership or rules such as in the medical profession. Psychology, on the other hand, sees it as an individual trait-based construct where childhood developments influence dispositions to trustworthiness. The truth is both these aspects contribute to trust formation among individuals, groups or networks. One classification

---

5. A.W. Holt, “Diplans: A New Language for the Study and Implementation of Coordination,” *ACM Transactions on Office Information Systems*, 6(2), 1988. pp. 109-125.

mooted by Zucker (1986) trifurcates it into the process, characteristic and institution-based phenomenon. Process is about past experiences and interaction, which are often based on personal relationships and earned trust. This leads to a reputation that could be transmitted through third parties. Characteristic-based trust is based on the personal attributes of others and a belief-system that is innate. This is what leads to stereotyping. Institution-based trust is a systems approach where objects are technical or social.

Across the literature on trust, the most prevailing themes are of competence, integrity, predictability and benevolence. Competence is task-, profession- or skill-based that focusses on individual capabilities. Integrity is commitment to one's part of the obligation, sticking to your word and reciprocity. The belief that another has mutual interests at his core is benevolence. Predictability is about consistency and reliable behaviour that allows reasonable forecasting. Repeated social and professional interactions strengthen trust as it graduates from conditional to unconditional, and thereafter, to blind trust<sup>6</sup>.

Power equations in relationships between individuals or groups exist due to asymmetry of information. Many actions are not visible or cannot be tracked, therefore, one trusts the reliable pattern of behaviour. Managing these power dynamics is the key to managing trust, and a big part is played by sharing of power. Mayer et al (1995) have put up a model of trust at work which incorporates the properties of the trustor, the attributes of the trustee and the risks in the situation<sup>7</sup>. The essence of trust is a willingness to be vulnerable to

**Power equations in relationships between individuals or groups exist due to asymmetry of information. Many actions are not visible or cannot be tracked, therefore, one trusts the reliable pattern of behaviour. Managing these power dynamics is the key to managing trust, and a big part is played by sharing of power.**

---

6. K.L. Belton, "Research in Role of Trust in an Evolving Network for Knowledge Translation," PhD Thesis, Epidemiology, Dept of PHS, University of Alberta. Accessed at [www.cra.library.ualberta.ca](http://www.cra.library.ualberta.ca) on December 30, 2016.

7. R.C. Mayer, J.H. Davis and F.D. Schoorman, "An Integrative Model of Organisational Trust," *Academy of Management Review*, (20), pp. 709-734.

**Trust developed quickly, implicitly or explicitly, allows a range of coordination, deliberation, cooperation or collaboration. Therefore, trust can be defined as a belief in one that the other can be relied upon to behave according to expected and accepted norms, fulfil mutually agreed obligations and, in general, act in the best interests of each other. This definition has a key element of inter-personal trust.**

the actions of others even if one is not able to track or monitor them. A traditional model of trust encompasses elements of familiarity, threats, deterrent to opportunism, shared experiences, demonstrated trustworthiness, etc. However, in an internet and computer linked world, the concept has moved to “swift trust” with presumptive trust networks based on roles categories and functions.

#### **TRUST IN HASTILY FORMED RELIEF NETWORKS**

The area of supply chain management and collaboration documents trust as a core theme underlying its efficiency and optimisation. Inter-organisational relationships based on trust are mostly focussed on long-term mutually beneficial areas. However, disasters invite Hastily Formed Relief Networks (HFRN) that work in extremely complex, emergent and adaptive environments. The challenge here is to develop swift trust<sup>8</sup>. This is a critical facet in relief supply chains where flexibility in operations is most evident. A mix of government and non-government organisations competing for resources and credibility heightens the need for swift trust.

An HFRN has been defined as a network of people established rapidly, from different communities, working together in a shared conversation space, in which they plan, commit to, and execute, actions to fulfil a large, urgent mission. Emergent response groups are crisis-driven, task or goal-oriented, self-evolving, time-sensitive and temporal, composite and complexly networked. Also, the membership is dynamic and ever-evolving, depending on the phase of response, with need-based relationships. There may be neither a shared

8. D. Meyerson, W. DeWitt and R.M. Keebler, “Swift Trust and Temporary Groups,” in R.M. Kramer and T.R. Tyler, eds., *Trust in Organisation: Frontiers of Research and Theory* (Thousand Oaks, CA: Sage Publications Inc,1996), pp. 166-195.

history nor a future in terms of working together. Trust developed quickly, implicitly or explicitly, allows a range of coordination, deliberation, cooperation or collaboration<sup>9</sup>. Therefore, trust can be defined as a belief in one that the other can be relied upon to behave according to expected and accepted norms, fulfil mutually agreed obligations and, in general, act in the best interests of each other. This definition has a key element of inter-personal trust<sup>10</sup>.

**Trust in Virtual Groups:** Hung et al (2004) suggest that trust in such virtual set-ups starts strong through the peripheral route as no other choice is available. This is moderated by perceived risks and takes long to graduate to the central route of knowledge-based trust. It is also easily repairable by its very nature. The central route is subject to available interactions and is a cognitive assessment of the other party's integrity, ability and benevolence. Better outcomes over time and repeated interactions lead to strengthening trust and its robustness. Of course, the ultimate stage is the habitual route where emotional and personal identification is made. But the central and habitual stages require face-to-face contacts or additional guarantees since computer mediated communication lacks personal knowledge accumulation and increases perceived risks.

As a leader, one needs to strengthen peripheral cues such as clearly defined roles, rules of engagement, standard categorisation and reputational aspects. The emphasis must shift to ability, integrity and benevolence aspects as trust matures. This can only happen if a leader is knowledgeable on these constructs and intervenes proactively. Team building exercises are among other means to remove stereotyping, negative biases and preferences. A perception of control helps in removing misgivings and encourages a personal disposition to trust.

**Models of Swift Trust:** The model suggested by Hung et al (2004) appears to be apt for disaster response scenarios where multiple agencies converge<sup>11</sup>.

---

9. HFN Research Group (2006) [www.hfncenter.org/](http://www.hfncenter.org/). Accessed on December 22, 2016.

10. P. Tatham and G. Kovacs, "Developing and Maintaining Trust in Hastily Formed Relief Networks". G. Kovacs and K.M. Spens, eds., *Relief Supply Chain Management for Disasters: Humanitarian Aid and Emergency Logistics*. [Business School Reference (IGI Global). ISBN 978-1-60960-825-85 (e-book)].

11. Y-T. C. Hung, A.R. Dennis and L. Robert, "Trust in Virtual Teams: Towards an Integrative Model of Trust Formation". In Proceedings of the 3rd Hawaii International Conference on Systems Sciences, Track 1, Vol. 1, 2004. Accessed on December 22, 2016 from [www.deepblue.lib.umich.edu](http://www.deepblue.lib.umich.edu).

**Development of common approaches, rules and structures allows newcomers to join in with confidence and dissuades maverick behaviour. However, in a dynamic environment where flexibility is the key, overstructuring can impede effectiveness; therefore, a balance needs to be found.**

This is premised on three routes to build trust: peripheral, central and habitual. This network and model is mediated not only by an active feedback mechanism, but perceived risks and the attendant communication environment to actively moderate outcomes. Also, as time passes, interactions increase and relationships mature and trust moves from the peripheral to the habitual. A lot depends on collocation and face-to-face meetings, as also the cultural context of the situation. Quick turnover of people and leaders at this dynamic stage also brings in additional complexities. At the same time, despite competition between agencies and turf-battles, a common humanitarian goal

unifies people at inter-personal levels with considerable inter-dependence at all levels. The levels of trust also vary from issue to issue as well as across time. In forming networks, some level of trust is implicit, a baseline from where it either grows or declines.

The first element in the peripheral route is third party information. This is essentially organisational or an individual professional reputation that includes expertise and demonstrated historical performances against laid down criteria. This is relayed through third parties or common databases. The second element is dispositional or an individual propensity to trust. Nothing much can be done about this except being aware of the pitfalls and individuals with these traits. The groupings too can be made aware of this problem. The third element of the peripheral route is rules, the presence of which regulates behaviour towards predictability. Development of common approaches, rules and structures allows newcomers to join in with confidence and dissuades maverick behaviour. However, in a dynamic environment where flexibility is the key, overstructuring can impede effectiveness; therefore, a balance needs to be found. The fourth element is categorisation, including perceived ideological and ethical differences,

and stereotyping. These judgemental issues need to be tackled by leaders of agencies by organising more official and social interactions. The final element in the peripheral route is roles. Roles can be accepted implicitly depending on competence certified through standardisation and recognised frameworks. For example, doctors and engineers can be accepted at face value, as also certified logisticians.

In a disaster, the dangers of physical harm to respondents and the chances of failure affect trusting behaviour. Where perceived risk is high, trust becomes more difficult to assume or enact. An ambiguity in roles, responsibilities and accountability increases this aspect, and needs to be mitigated by transparency and more face-to-face contacts. Skewed task load and fatigue are also factors that challenge trust in perceived risky situations. Computer networks and related communications do not clarify or add to trust building even through video conferencing as much as face-to-face briefings and debriefings. There are implications for agency leaders and strategic leadership if a swift trust model is to be adopted. The following are some obvious ones flowing from the discussions so far.

- The central and habitual routes of trust are important where the stakes and perceived risks are high. But these are based on long-term issues such as earlier experiences of working together, agency reputation and size, etc.—aspects that need to be planned and enacted over time.
- Third party information and transparent databases of track records and certified competencies allow establishing of quick credibility. This can be furthered by enabling face-to-face interactions.
- Dispositional aspects are highly individual and difficult to address in a general manner. However, common approaches, Standard Operating Procedures (SOPs), standardised forms and assessment templates do mitigate this to some degree. Transparent processes and standard rules for communication could be the key in allowing trust despite dispositional differences.
- In both dispositional and categorisation elements, awareness at leadership levels will allow remedial actions where required. Leaders need to be ready to educate their teams or individuals on these aspects.

**In a study of the Israeli Defence Forces and US Army, the dominating themes in building of swift trust were: differences in perception of goals; action-based tasks enhanced possibilities; success in smaller tasks led to better and larger trust, standardisation of processes, SOPs and communications; prospects of working together in the future; and evolved leadership.**

- Standardisation of competencies and certification that is aligned to worldwide standards will allow knowledge of this to serve as the proxy for actual competence. This must come along with transparent and objective evaluation of the work that is in progress or has been completed.

**Inter-Organisational Trust:** This could be an extension of inter-personal trust by means of transfer through and between individuals. Temporary teams may be characterised by limited or no history of working together, diversity of skills and capacities, little prospects of working together in the future, action-based tasks

with complexity, uniqueness and high inter-dependence, and a requirement for continuous inter-relating and coordinating. In such complexity and uncertainty, swift trust needs team identity, role clarity, cultural moderation or adaptation, and free flow of communication.

In a study of the Israeli Defence Forces and US Army, the dominating themes in building of swift trust were: differences in perception of goals; action-based tasks enhance possibilities; success in smaller tasks led to better and larger trust, standardisation of processes, SOPs and communications; prospects of working together in the future; and evolved leadership. Among the business community, variation in themes included management of competitive and collaborative relationships at the same time, rigid positions or posturing due to distrust, an environment of negotiations due to trust, and good leadership influencing members in aligning to group trust perceptions. Many teams in disaster response are widely dispersed and connected only virtually, including cyber volunteers. In a study on virtual teams, it was, firstly, suggested that consistent and effective communication led to initial

trust which was critical to what developed later<sup>12</sup>. Secondly, action-based tasks shifted the focus from social themes, helping swift trust to grow. Thirdly, positivity and transparency in communications enhanced collaborative efforts. Lastly, leadership of the team was critical in steering these efforts.

### TRUST, BIG DATA AND SOCIAL MEDIA IN DISASTER RESPONSE

Crisis informatics was a term introduced a decade ago, but shot into prominence only a few years ago after 2010 because of technological leaps in mobile phone processor and network capacities. Social Media (SM) especially plays a crucial part in this area. There are three main sub-groups under which this subject has advanced. The first is information collection which includes aspects such as SM data mining, SM-based crisis recognition, and SM-based geo-location applications. The second is communication, with facets such as detecting misinformation, Twitter analysis for improved Situational Awareness (SA), crisis-communication with the public, and use of SM by agencies to communicate. Finally, there are apps and systems to enable collective sense-making and collaboration among organisations and volunteers: for example, map mashups and crowd sourcing of geo-tagged information<sup>13</sup>.

**Big Data Analytics as Decision Support:** After the earthquake in Haiti (2010), an era of digital humanitarians has dawned with the emergence of big data gathering and analysis during disaster response. A platform named ‘Ushahidi’ was copiously used to develop crowd-maps and actively involve the affected and the concerned through mobiles and web-based activity. A

**A virtual community of tech-savvy volunteers helped make the response quicker and more effective. Big data is large, unstructured and dynamic data-sets that cannot be handled by traditional information technology or computer hardware and methods.**

---

12. S.L Jarvenpaa, R.T. Shaw and D.S. Staples, "Toward Contextualized Theories of Trust: The Role of Trust in Global Virtual Teams", *Information Systems Research*, vol. 15, no. 3, September 2004, pp. 250–267. issn1047-7047. eissn1526-5536 04 1503 0250.

13. S.N. Lee, S. Hirschmeier, S. Muller and L.J. Luz, "Enablers in Crisis Information Management: A Lit Review," Proceedings of the 50th International Conference on System Sciences, 2017, pp. 274-283. ISBN 978-0-9981331-0-2.

**Knowledge management from diversified and dispersed individuals entails accurate aggregation and transforming tacit knowledge quickly to the research table for timely use. Nowhere is this more pertinent than the field of disaster management.**

virtual community of tech-savvy volunteers helped make the response quicker and more effective. Big data comprises large, unstructured and dynamic data-sets that cannot be handled by traditional information technology or computer hardware and methods. There are many sources of big data: mobile Call Detail Records (CDR); online activity such as SMS and Twitter; sensors such as Unmanned Aerial Vehicles (UAVs), satellite feed and mobiles suitably networked in real-time; personal data and location through mobiles; publicly available web-based government websites; and, crowd sourcing, which is an active method based on

volunteers and participation. The current focus by national governments on e-governance can enable all these sources to contribute meaningfully in disaster response.

Some applications of big data analytics are public health (epidemiology); population tracking during migrations; sociological behaviour of the affected, etc. Recent technological revolutions in communication have made this simple and mass-based. Mobiles (smart phones) can act as accelerometers (to detect movement), provide audio/visual content, provide co-location through Bluetooth and Global Positioning System (GPS), and allow crowd sourcing SMS. Tracking all these can provide an analysis of community movement and behaviour. Neo-geography platforms such as OpenStreetMap allow participative mapping techniques with audio-visual inputs also. This allows quick crisis mapping to provide situational awareness and support to decision-making for effective response.

**Swarm Intelligence:** Collective or swarm intelligence deals with behaviour of decentralised and self-organised systems, e.g. ants and bees in nature. It applies to human beings when minds meet to collectively solve problems in real life. Many studies have brought out the relevance of swarm

optimisation, ant colony systems and bee algorithms for human crowd sourcing to solve problems. Knowledge management from diversified and dispersed individuals entails accurate aggregation and transforming tacit knowledge quickly to the research table for timely use. Nowhere is this more pertinent than the field of disaster management. Any system that is modelled on complex adaptive theories has scope to benefit from swarm intelligence approaches. Quick data collection, spot analysis and real-time research allow problem solving in dynamic and fast-changing scenarios. The reasons for such application are many, among which some are as follows. First, data only starts becoming available as the problem emerges and develops. Second, quick dissemination of issues allows ideas to be exchanged from diverse stakeholders in real-time. Third, in an inter-connected and networked environment, it is increasingly possible to use technology to break “silo mentalities” to allow boundary spanning inter-disciplinary approaches. Crowd sourcing, social media, probabilistic mechanisms and metaheuristics allow tapping the potential of crowds. Lastly, in a world that is increasingly transparent and accountable to the public, stakeholder engagement in real-time has been made possible by technology<sup>14</sup>.

**Use of Social Media:** The use of social media and crowd sourcing to populate maps with synthesised information in creating accelerated memory is based on the theory of metaheuristics. Ant colony algorithms point to modelling optimum paths that allow success to attract more and better ideas. All these nature-based applications are providing breakthroughs that cannot be ignored. Gone are poll-based methods, replaced by real-time connected swarm methods that allow interactive and reflective methods in tapping crowd wisdom. Some issues in this are workflow, hierarchy and task allocation, synchronising and sequencing, quality control and reputation, motivation and incentive, and active or passive intelligence guidance. Members of these virtual communities may not have rigid structures or hierarchy but can be flattish and unconventional, and transition from workers to leaders and vice-

---

14. C.W. Callaghan, “Knowledge Management and Problem Solving in Real Time: The Role of Swarm Intelligence,” *Interdisciplinary Journal of Information, Knowledge and Management*, vol. 11, 2016, pp. 177-199. Retrieved from [www.informingscience.org](http://www.informingscience.org) on November 22, 2016.

versa. Guidance to such a fluid arrangement can be by unique signals or information at the interfaces of a problem. This allows larger contributions and the attendant advantages of scales. There is implicit or explicit division of labour and invisible guidance which leads to synergy just like *stigmergy* in insects. The structures and changes are driven by real needs from bottom-up that leads to evolution towards optimisation.

Crowd wisdom can be tapped through crowd sourcing or crowd computing. In disasters, the former has been effectively used in searching, micro tasking, translation, data verification and data classification, using open-source principles. Crowd computing is used for solving complex problems by breaking it down into solvable parts. The other innovative thrust is to mix the data-handling ability of computers and better pattern-finding ability of humans to arrive at complementary hybrid models. One example is the Artificial Intelligence for Disaster Response (AIDR) platform which can automatically classify tweets after being 'taught' by crowds. Experience shows that early tweets are mostly about cautions and warnings, while later ones reflect damage, casualties, requirements, donations, etc. AIDR collects relevant tweets of a disaster and asks a crowd to label a subset of this data, which, in turn, trains an automatic classifier to handle huge amounts of data. Therefore, this method becomes very specific to a disaster and leads to user-friendly relevant processes. AIDR combines human intelligence and machine capabilities to handle large amounts of data to obtain labels from a subset of the data. The classification process is based on an active learning approach by the machine using crowd sourced wisdom<sup>15</sup>.

Extracting meaningful information from micro blogging messages has been done many times in large disasters. For example, Hurricane Sandy in 2012 with two million tweets, the Japan tsunami in 2011 where 5,500 tweets were posted every second, and 2 million tweets after the earthquake in Haiti in 2010. Real time analysis of twitter data to extract casualty reports, critical requirements, geo-location of crisis sets, etc. has been done very effectively to

---

15. M. Imran, C. Castillo, J. Lercas, P. Meier and S. Vieweg, *AIDR: Artificial Intelligence for Disaster Response*, 2014, WWW'14 Companion, Seoul, Korea. [www.dx.doi.org/10.1145/](http://www.dx.doi.org/10.1145/). Accessed on December 6, 2016.

enhance the situational awareness of disaster managers. Systems are generally based on machine learning techniques that rely on crowd sourcing. Experimental dashboards such as Disaster Response<sup>9</sup>, in partnership with the United Nation's Office for the Coordination of Human Affairs (OCHA) are refining this further for speed and accuracy<sup>16</sup>. Many platforms on the internet use Twitter to gather meaningful information on disasters for analysis by responders and helpers. All of them are based on ingesting or collecting data from Twitter using machine learning classification techniques, along with help from crowd sourcing methods. Extracting from 140

character limited tweets is much more difficult than from longer texts such as blogs and texts. Also, classifiers do not work on different disasters or templates; therefore, a fresh effort has to be made in every new disaster.

The 2004 Indian Ocean tsunami witnessed the first-ever volunteer generated internet-based website that was modulated for about two weeks. Today, social media and different approaches of handling mass data and crowd sourcing allow the public at large to play a crucial contributory role in disaster management, especially in improving SA and coordination of activities. It allows the emergence of networks that are complex and adaptive, and creatively solves problems through crowd wisdom. This role is not limited to the response phase only but covers the entire cycle. An example of improving SA is the Australian Emergency Situational Awareness (ESA) platform which detects tweet outbursts and presents information in terms of timelines and spatial maps by event detection, classification, clustering and geo-tagging. On the other hand, platforms such as CrisisMapping use

**Many platforms on the internet use Twitter to gather meaningful information on disasters for analysis by responders and helpers. All of them are based on ingesting or collecting data from Twitter using machine learning classification techniques, along with help from crowd sourcing methods.**

---

16. M. Imran, S. Eebassouni, C. Castillo, F. Diaz and P. Meier, "Extracting Information Nuggets from Disaster Related Messages in Social Media," proceedings of the 10th ISCRAM Conference, Baden-Baden, Germany.

**A highly tight-knit and bureaucratic set-up with standard procedures and formalities, is still not very comfortable with crowd sourcing data and analysis from emergent and independent groups. It is difficult to integrate these in a formal or highly accountable manner since the concept of command and control is not acceptable to them.**

digital volunteers to do this job on a sample, and machines to learn and do this on a mass scale. A crucial factor is the nature of applied programming interface of major social network platforms that are unique, and determine the access of outsiders. Geo-tagging allows retrieval of spatial data but it needs GPS enabled programmes on the devices. Geo-coding is based on references to geographical features that allow coordinates to be fixed. This can be also done by automatic searches for geographical clues. Some platforms alternate between archived and live data processing which allows regular feeds for better latency as well as better contextual analysis by working deeply and retrospectively<sup>17</sup>.

**UN and the Virtual Community:** The UN Office for the Coordination of Humanitarian Affairs (OCHA) primarily collaborates with governmental and non-governmental agencies to facilitate a coordinated response in humanitarian disasters and logistics supplies in such crises. A highly tight-knit and bureaucratic set-up, with standard procedures and formalities, is still not very comfortable with crowd sourcing data and analysis from emergent and independent groups. It is difficult to integrate these in a formal or highly accountable manner since the concept of command and control is not acceptable to them. The Digital Humanitarian Network (DHN) is a volunteer-based virtual group that is loosely structured to become active during disaster management. OCHA and DHN are increasingly collaborating for mutual benefits; the latter being able to take advantage of OCHA's formal network with most humanitarian agencies. The contrast between the two in terms of bureaucratic structure, hierarchy, formal SOPs, etc is stark. OCHA's Field Information Service (FIS) is responsible for

---

17 M. Imran, C. Castillo, F. Diaz and S. Vieweg, "Processing Social Media Messages in Mass Emergency: A Survey," *ACM Computing Surveys*, vol 47, no. 4, Article 67.

information coordination between clusters (UN). Its network with the virtual community has allowed it a role as a boundary spanner.

The UN's OCHA is mobilised in the case of major disaster events where the national capacities are overwhelmed. The normal UN method is to divide the task among 11 clusters with the initial assessment of requirements by OCHA, after which it takes on the mantle of coordination of the Humanitarian Programme Cycle. The start is a Multi-Cluster Initial Rapid Assessment (MIRA) by OCHA within two weeks. This requires systematic collation and analysis of data, including community level inputs and analysis. During Typhoon Haiyan over the Philippines in November 2013, OCHA approached the digital volunteer organisation MicroMappers to use Twitter to map out the crisis. While this first attempt did not prove decisive, it gave an impetus for future research into this area. The MIRA framework is focussed on eight themes: crisis drivers; scope and profile; population status; response capacities and effectiveness; international efforts; humanitarian access; gaps; and, priorities<sup>18</sup>. OCHA now formally accepts Twitter as a source to triangulate or confirm information through other conventional sources. It also accepts that social media is a valuable source for early or real-time information during critical phases.

DHN includes virtual organisations such as Humanitarian OpenStreetMap Team, Standby Taskforce, GEOCAN and CrisisMappers. These are focussed on disaster responses or humanitarian crises and based on peer-to-peer networking. Their strength lies in harnessing diversity and dispersed talents towards common objectives. However, capacities, core strengths and specialisations vary and are unpredictable. Sustainability over a long time is also a problem. Integrating this diversity into a formal structure is problematic, and requires a flatter and more flexible approach. Shared Situational Awareness (SSA) for humanitarians and disaster responders is a critical issue in a melee of complexity. It requires a synthesis and synergy of modern information technology and time-tested institutional practices to build up real-time SSA. Incorporating new and stranger communities such as DHN may be the key to the survival of bodies such as OCHA in

---

18. S. Vieweg, C. Castillo and M. Imran, "Social Informatics," *Lecture Notes on Computer Science*, vol 8851, Springer International Publishing. Accessed at [www.springer.com](http://www.springer.com) on December 10, 2016.

**Usability by the end-user is critical in the designing stage. A further development would be to graduate from enhancing situational awareness to decision support such as forecasting. A core requirement and challenge would continue to be validating the credibility and truthfulness of the social media context.**

an increasingly connected world. The roles of boundary spanners and creative leaders seem to be game-changers.

#### **CHALLENGES IN USING BIG DATA WITH TRUST**

Experiences in Nepal in 2015 indicate many problems in handling of big data by volunteers. Firstly, volunteers are essentially untrained in the specifics such as the nature and extent of damage to infrastructure. Secondly, local language barriers and cultural contexts are not understood by most, resulting in poorly structured and unsynthesised data. Thirdly, standard formats to fill data are not available or not readily accepted. Fourthly, the virtual community may not be able to elicit responses from formal organisations due to a lack of credibility or face-to-face contact. Fifthly, quick rotation of volunteers inserts a large component of unpredictability. Lastly, virtual volunteers may not adhere to the core humanitarian principles.

There are many challenges to big data being credible and reliable. Some of these are variety (structure), velocity and volume (speed and quantity), veracity, vagueness (language) and validity (removing biases). There are other issues of volunteers and misuse potential that require caution when relying on big data. It must also be remembered that this is only an enabler or facilitator; decisions leading to action are still taken and implemented by humans. Response is extremely time-sensitive, and, therefore, real-time credibility, security and tolerance to disruption of infrastructure must be ensured. The final issue is putting all the analyses and information in a user-friendly package.

There are pitfalls to look for when handling such large data. First, the velocity of flow can be overwhelming in unpredictable bursts. Secondly, the size may run into millions of items, occupying many gigabytes of space. Finally, much of the information may comprise duplication such as retweets.

In terms of context, the ungrammatical and short-form nature of micro-blogging is difficult to sort out and analyse by simple machine learning templates. There are other attributes such as clarity, timeliness, objectivity and context that are difficult for a non-human to handle with accuracy. All media, including print media, videos, photographs, etc need to be integrated into a coherent holistic analysis. Filtering and classification may take into account subjective or objective context, type of information, source, credibility, time or location<sup>19</sup>. What is finally most important is usefulness and efficacy to the whole process of disaster management. Usability by the end-user is critical in the designing stage. A further development would be to graduate from enhancing situational awareness to decision support such as forecasting. A core requirement and challenge would continue to be validating the credibility and truthfulness of the social media context. Also, it must graduate from a passive approach to active questioning, or posting, of requirements. A desired end-state would be to use these platforms for active coordination of a chaotic disaster scenario.

The main concern in using social media for information on disasters is authenticity and reliability. Many media houses such as BBC and CNN use contrasting or multiple sources and phone interviews to check this out. YouTube videos can be confirmed by correlating the time of day with shadow, weather and accents of people, as also geographical features by using Google Earth. The internet explosion and social networking has allowed a revolution in social mobilisation. The Red Balloon Challenge by the US Defence Advanced Research Projects Agency (DARPA) clearly demonstrated the means of making sense of contradictory and dynamic data from a large geographical area. This was done by a team from the Massachusetts Institute of Technology (MIT) on laptops using social media, crowd sourcing and a recursive incentive mechanism. Claims and counter-claims can be verified based on mass participation and multiple evidences volunteered for an incentive. Evaluation is done through crowd sourced voting<sup>20</sup>. Platforms such as Verily have been developed for

---

19. Ibid.

20. A. Popoola, V. Naroditskiy, C. Castillo and I. Rahwan, "Information Verification during Natural Disasters," WWW 2013 Companion, Rio de Janeiro, Brazil.

**A network established purposely or incidentally, aims for knowledge sharing, problem solving, innovating or capacity building. It allows cross-fertilisation of ideas and inter-disciplinary approaches. There is evidence that some of the factors that attribute to successful networks are clarity of purpose and goals, leadership, core values, resources and flexibility.**

disaster scenarios, which use these concepts to collect and verify inputs such as photos or status reports. It is based on rewards and incentives to those whose contributions lead to verified information that allow effective action by responders. These are not in monetary form but as recognition and trust-based allowances for more access to functions on the dashboard. It is felt that the spirit of disaster volunteerism responds better to recognition and reputation rather than monetary benefits. However, some platforms in the developing countries reward with airtime on mobiles.

**Network Challenges:** A network established purposely or incidentally, aims for knowledge sharing, problem solving, innovating or capacity building. It allows cross-fertilisation of ideas and inter-

disciplinary approaches. There is evidence that some of the factors that attribute to successful networks are clarity of purpose and goals, leadership, core values, resources and flexibility. But a network of organisations that are independent and differ on many counts has multiple challenges. Firstly, a combination of competition and inter-dependence creates vulnerabilities that can be taken advantage of by opportunistic parties or behaviour. Secondly, this collaborative social identity can get tied to a group-think that can put blinkers on the effort to look for fresh ideas. Group or network loyalties may inhibit the required change or evolution. Thirdly, people or personality factors and cultural contexts among organisations require time and effort to be sustained. Lastly, the usefulness or success criteria of networks need objective and honest evaluation.

Among large crisis responders, a new specialisation has emerged, i.e. the social media analyst, who, while monitoring and engaging with the SM

community, helps to detect problems, identify trends and senses real needs<sup>21</sup>. He/she also detects and addresses rumours and misinformation among the community. He/she contributes to SA enhancement by providing information such as videos after validation through means such as corroboration, authenticity check by reverse imaging, tracking reliable sources, etc. He/she has to constantly update himself/herself on relevant handles, hashtags and websites. Assessing sentiments and emotions is another vital role along with a proactive programme to mitigate them if required.

#### WAY AHEAD

**Table-Top Exercises:** Large disasters are ‘wicked problems’ that are complex, virtually unsolvable and vexing. They are characterised by: a problem not understood till the formulation of a solution; a no-stopping rule; no right or wrong solutions; novelty and uniqueness; each problem a one-shot operation; and, no alternative solutions. Many approaches have been suggested to manage these problems. One is ‘muddling through’ which is based on using small and incremental actions from past-learning and adaption, depending on current progress. A second approach by Stubbart (2008) advocates pre-disaster planning as a social learning process so that all agencies are on board a common ground of shared understanding<sup>22</sup>. The underlined theme is that problem solving and learning go together when addressing ‘wicked problems’.

**No decision will satisfy all the stakeholders, and, therefore, there is no right or wrong—only good enough solutions. A number of variables, including terrain, resources, capacities, awareness, weather, etc. ensure that each context is unique and requires deeper understanding by responders. The solution is also context-unique, and, therefore, a one-shot operation. Finally, since there is no given alternate solution, group consensus and creativity will define emergent solutions.**

21. R. Power and J. Kibell, “The Social Media Intelligence Analyst for Emergency Management,” proceedings of the 50<sup>th</sup> International Conference on System Sciences, 2017, pp. 313-322. ISBN 978-0-9981331-0-2.

22. C. Stubbart, “Uncertainty, Complexity, Conflicts of Interests, Emotional Involvement and the Quality of Crisis Thinking,” Faculty Working Paper 1289, 1986, College of Commerce and Business Administration, University of Illinois at Urbane-Champaign.

Complete understanding is a problem because of the complexity and dynamic nature of the environment. Multiple stakeholders with different perceptions and agendas only compound the issue. Conflict of interests among stakeholders and the affected community has a great impact on decisions. Since problem definition is not static or firmed up, there can be no fixed criteria for success. And, therefore, the no-stopping rule. No decision will satisfy all the stakeholders, and therefore, there is no right or wrong—only good enough solutions. A number of variables, including terrain, resources, capacities, awareness, weather, etc. ensure that each context is unique and requires deeper understanding by responders. The solution is also context-unique, and, therefore, a one-shot operation. Finally, since there is no given alternate solution, group consensus and creativity will define emergent solutions.

In a wicked problem, it may be futile in terms of time constraints to fully grasp a situation and act in the most optimum manner. Expertise and experience can weigh limited factors and use heuristics to act fast. At the same time, feedback channels are open to make sense, as events unfold and 'surprises' creep up, to adapt and modify strategies. However, group-think must take into account well documented biases such as collocation blindness which refers to the tendency of collocated members in a distributed command or 'virtual' control team to resist reaching out to distributed members even when they may have better expertise. Another well-documented bias is in-group bias, where members favour own group over people from other groups. In the effort to break up complex or wicked problems into manageable parts by different teams, a 'deference to expertise', wherever it lies, must never be lost sight of. This must be monitored by senior leaders who may be preoccupied in undertaking strategic oversight and garnering resources. The decision support must have mechanisms of feedback to senior levels and the ability to allow informed dissent by experts on the decisions being taken.

A table-top exercise simulating disaster response is planned around interaction, coordination mechanisms and integration of organisational differences and ethos. It focusses on communication between agencies for

a collaborative system to emerge. These are very structured and normally unsuitable to creatively attack 'wicked problems'. However, this can be addressed by: allowing players to tame the issue in the table-top rather than the planning stage; focus on unsolved and vexing issues rather than routine ones; and, use plans and lessons-learned to collaborate in the present. Focussing on unplanned and unpredictable issues will allow more dynamism in table-tops.

**Lessons Learnt: Table-Tops:** In many multi-agency tasks in disaster response, a common refrain is lack of understanding of each other, leading to sub-optimal collaboration in a critical life and death scenario. Limited sharing of information is due to poor incompatible structures, poor information management, lack of interoperability of equipment or plain agency agendas of keeping information to themselves. Misinformation or misunderstanding is due to the lack of a common operating picture that is relevant and contextual to an agency. It could also be due to the lack of clarity on the roles, responsibilities and capabilities of each other. Confusion over leadership (shared, distributed or specialisation-based) also distorts mutual accommodation. A similar effect is caused by a poor structure of command and control, which varies from phase to phase. Cultural differences in processes such as decision-making create friction if not countered with more experience of working and exercising together<sup>23</sup>. The following measures are suggested to ensure better collaboration and coordination in disaster response tasks between agencies:

**Overload of information needs to be avoided. Design of information flow must cater to individual group or agency requirements. DSA is based on just-enough and tailored information and not all that is available. This also aids quick decision-making at dispersed locations. The overall aim being the right information, in the right format and at the right time.**

---

23. S. Edzen, "Table-Top Exercises for Emergency Management: Tame Solutions for Wicked Problems," Draft Paper, Lulek University of Technology, Sweden. Accessed from [www.itu.diva-portal.org](http://www.itu.diva-portal.org) on December 3, 2016.

- Meta situation awareness is about knowing and understanding other agencies' capacities, actions and status at a point of time. Along with clear roles and responsibilities, and areas of overlap and mutual support, this will lead to automatic coordination to avoid conflict and duplication.
- Shared or compatible mental models are critical to Distributed Situational Awareness (DSA) and coordination among dispersed actors. This is possible by joint training, exercises and scenario-building. This is then supported by procedures, protocols and systems that allow each agency to augment its cognitive processes and personal schema to grasp real-time SA. Therefore, the end-user is important in terms of the form of communicated information.
- Overload of information needs to be avoided. Design of information flow must cater to individual group or agency requirements. DSA is based on just-enough and tailored information and not all that is available. This also aids quick decision-making at dispersed locations. The overall aim being the right information, in the right format and at the right time.
- A 'system' of leadership that caters to distributed roles and tasks, changing priorities during different phases and specialisation focus at critical points, and, allows trust for collaboration that has to be put in place. This can happen only through exercising jointly or gaining experience through actual work. The core task of such leadership also includes monitoring and evaluation of performance of teams.
- There may also be a need to incentivise collaboration through active or passive measures. Awareness and understanding of the benefits of the collaborative and synergised model can create all-round positivity, clarity and trust.

# ANALYSIS OF IRAN - CHINA RELATIONS

ANU SHARMA

The most significant impact of the Iranian nuclear deal has been on China. China has been regarded as one of the prime winners of the deal, as Iran pulls back key elements of its enrichment programme which gives a chance to Beijing to deepen its historic partnership with Iran. This impending opening can prove to be a chance for the Chinese state-owned energy companies to increase their involvement with Iran's oil and natural gas industries, and Iran could become a prospective and important export market for a range of Chinese products. Iran and China share the outrage suffered at the hands of the West, stripping them of their past glory and power. Over the past few decades, China and Iran have been developing a broad and deep partnership centred on China's energy needs by taking advantage of Iran's abundant resources and, in this process, engaging in arms sales and defence cooperation with the underlining aim to establish a geostrategic balancing against the US in the region. This paper will look into the nature and range of relations that exist between China and Iran. It will also try to analyse if the nuclear deal will change the pattern of this bonhomie between the two nations. With economic sanctions on Iran being lifted after the implementation of the nuclear deal, the multi-billion-dollar trade relationship between China and Iran is set to expand as China is expected to invest more heavily in Iran's oil, gas and industrial sectors.

---

Ms **Anu Sharma** is a Research Associate at the Centre for Air Power Studies, New Delhi.

**The most significant impact of the Iranian nuclear deal has been on China. China has been regarded as one of the prime winners of the deal, as Iran pulls back key elements of its enrichment programme which gives a chance to Beijing to deepen its historic partnership with Iran.**

#### **HISTORICAL BACKGROUND**

Iran and China established official diplomatic relations in 1971. Despite modest early interactions, it was a long time before China acquired substantial vested interests in the region, and with Iran specifically. At the time, China did not have the financial means or the diplomatic or political heft to promote and protect its interests in the region.<sup>1</sup> However, since the Islamic Revolution in 1979, Beijing has viewed Iran as a potential political and strategic ally and gone ahead to cultivate a strategic partnership with it. For several decades now, the Sino-Iranian partnership

has had a positive effect on China's energy security and on the development of Iran as an important player in the geopolitical scene in the West Asian region. There are several issues that brought Iran and China together: (a) the common suspicion of the US; (b) China, as a growing economy wanted energy security to fulfil its energy demand and, therefore, viewed Iran as a favourable partner; (c) Iran's isolationism also played a significant role in bringing the two countries together. Iran's ability to play against the big powers in the region was visualised by China as making it a possible ally in the region; and (d) lastly, China's economic reforms and its emergence into the big league made it look towards Iran not only as an energy supplier but also in the form of untapped markets for Chinese products. Besides having large oil reserves, Iran is also one of the major geopolitical players in the Persian Gulf region. However, this mutually beneficial relationship has been under pressure since the time sanctions were imposed by the international community on the Iranian regime. Despite the sanctions, China was able to find ways of continuing its relationship with Iran in order

---

1. Peter Mackenzie, "A Closer Look at Iran-China Relations", September 2010, [https://www.cna.org/CNA\\_files/PDF/D0023622.A3.pdf](https://www.cna.org/CNA_files/PDF/D0023622.A3.pdf). Accessed on April 21, 2016.

to meet its energy needs and requirements.<sup>2</sup> Despite all its attempts, the US government failed to persuade China to follow the example of Iran's other main trading partners which included India, South Korea, the United Arab Emirates (UAE), the European Union (EU) and Japan. This inability of the American authorities to make Beijing impose sanctions on Iran or at least follow the requirements of Washington concerning trade and economic cooperation with Tehran, posed a challenge to the sanctions regime at that time.<sup>3</sup>

China had maintained its relations with the pre-revolutionary Iran under the Shah's regime as well as the post-Islamic Revolution Iran. After World War II, and with the onset of the Cold War, China's Communist regime was considered a threat by the US. This led to the utilisation of the political and diplomatic power of the US to stop China's penetration into the region in order to curb the spread of Communism in the whole West Asian region. Mohammad Reza Shah's regime in Iran had forged close diplomatic, economic and political ties with the US after the overthrow of the Mossadegh government in 1953. However, the relationship between Iran and China was not close during the Shah's regime despite having trade relations. Additionally, Iran was diplomatically obligated (as a result of its relations with the US) to choose both its economic and political alliances. Moreover, the Sino-Soviet political rift in the later part of the 1960s led China to look for the new partners for an alliance, thereby, shifting its interests towards Iran and the other oil producing nations in West Asia.<sup>4</sup>

The Islamic Revolution and the subsequent Iranian hostage crisis left the Western world with a feeling of suspicion and mistrust of the new Islamic Republic that emerged. China had to work hard to reestablish its

---

2. Nikolay A. Kozhanov, "U.S. Economic Sanctions Against Iran: Undermined by External Factors", *Middle East Policy Council (MEPC)*, vol. xviii, no. 3, Fall 2011, <http://www.mepc.org/journal/middle-east-policy-archives/us-economic-sanctions-against-iran-undermined-external-factors?print>. Accessed on April 20, 2016.

3. Ibid.

4. Manochehr Dorraj and Carrie L. Currier, "Lubricated with Oil: Iran-China Relations in a Changing World", *MEPC*, vol. xv, no. 2, Summer 2008, <http://www.mepc.org/journal/middle-east-policy-archives/lubricated-oil-iran-china-relations-changing-world?print>. Accessed on August 22, 2016.

**During the Iraq-Iran War of the 1980s, China provided significant military support to Iran which helped China rebuild its trust with the newly emerged Iranian regime. Also during the war between Iran and Iraq, China was the major supplier of advanced weapons to Iran in areas ranging from tanks and fighter jets to fast-attack patrol craft and anti-ship missiles.**

relations with Iran. After the revolution, when Ayatollah Khomeini, the Supreme Leader of Iran, pursued the policy of “*neither east, nor west*”, China emerged as an ideal partner for Iran. As a matter of fact, Iran desperately needed China’s support during those difficult times. The West had already imposed sanctions on Iran following the American hostage crisis, and the Iraqi invasion of Iran in the 1980s made it difficult for Iran to survive without arms. According to Michael Singh, historically, Iran and China have shared mutual relations on the single pretext of their mutual suspicion of the US. The modern Sino-

Iranian relationship started when China became an indispensable security partner to Iran by supplying it with arms as well as providing it with key nuclear components.<sup>5</sup> During the Iraq-Iran War of the 1980s, China provided significant military support to Iran which helped China rebuild its trust with the newly emerged Iranian regime. Also, during the war between Iran and Iraq, China was the major supplier of advanced weapons to Iran in areas ranging from tanks and fighter jets to fast-attack patrol craft and anti-ship missiles. However, the development of a strong alliance between the two can be specifically attributed to three main reasons: one, China never interfered in Iran’s domestic and foreign policies; two, China needed Iranian energy and natural resources which was also beneficial for Iran; and three, the Chinese leadership was not perceived as a threat in Iran as it did not have any imperialistic ideas vis-à-vis Iran.<sup>6</sup>

---

5. Michael Singh, “The Sino-Iranian Tango”, *Foreign Affairs*, July 21, 2015, <http://www.foreignaffairs.com/print/1114921>. Accessed on April 28, 2016.

6. S. Harold and A. Nader, “China and Iran: Economic, Political, and Military Relations”, *Occasional Papers*, vol. 50, RAND Corporation, January-December 2012, [http://www.rand.org/content/dam/rand/pubs/occasional\\_papers/2012/RAND\\_OP\\_351.pdf](http://www.rand.org/content/dam/rand/pubs/occasional_papers/2012/RAND_OP_351.pdf). Accessed on April 29, 2016.

The relationship between Iran and China changed course when the Chinese economy started growing, thereby increasing its energy needs and also seeking new markets to sell its products. At that time, China's relations with Iran were driven not only by its energy needs and profit making, but also by its strategic agenda to limit US influence in the region.<sup>7</sup> It must be added that Iran's strained relations with the US and Western Europe made China an alluring partner. Iran needed a reliable buyer for its oil and gas, and a supplier of military equipment and weapon systems. Not surprisingly, the relationship proved to be a mutually beneficial one.<sup>8</sup>

### **DIMENSIONS OF THE RELATIONSHIP**

**Economic Relations:** China was a crucial partner in helping Iran during the sanctions and had an extensive economic relationship with Iran despite the United Nations Security Council's (UNSC's) sanctions. The two nations have cooperated in different sectors, including energy and construction. China emerged as a top economic partner of Iran, investing heavily in the energy sector and filled in the vacuum created with the departure of other Western nations. As a result of the Iran-Iraq War and the imposition of sanctions, Iran's energy sector infrastructure had become outdated and inefficient. China played a significant role in rebuilding this infrastructure as well as engaging in joint venture exploration and oil and gas field development projects.<sup>9</sup> During the years when Iran was facing sanctions, China was one of a handful of countries that continued trading with Iran. The volume of trade between Iran and China, which has increased significantly in the recent years, had multiplied since the early 1990s. While in 1994, the volume of trade stood at around \$450 million, it rose to \$2.3 billion in 2001 and

---

7. Joel Wuthnow, "Are Chinese Arms About to Flood into Iran?", January 13, 2016, <http://www.nationalinterest.org/feature/are-chinese-arms-about-flood-iran-14887?page=2>. Accessed on April 21, 2016.

8. Dorraj and Currier, n. 4.

9. Aaron Morris, "From Silk to Sanctions and Back Again: Contemporary Sino-Iranian Economic Relations", *Al-Nakhlah*, Winter 2012, <https://www.ciaonet.org/attachments/19720/uploads>. Accessed on April 30, 2016.

**China is already Iran's largest trading partner with bilateral trade surpassing \$50 billion in 2014—a 31.5 per cent increase from the previous year. During Chinese President Xi Jinping's visit to Iran earlier this year, the two countries also agreed to increase bilateral trade more than 10-fold to \$600 billion in the next decade as China pursues its *One Belt One Road* project, an ambitious network of road, rail and port routes that will connect China to Central Asia, South Asia, West Asia and Europe.**

\$30 billion in 2010.<sup>10</sup> China is already Iran's largest trading partner with bilateral trade surpassing \$50 billion in 2014—31.5 per cent increase from the previous year. During Chinese President Xi Jinping's visit to Iran earlier this year, the two countries also agreed to increase bilateral trade more than 10-fold to \$600 billion in the next decade as China pursues its *One Belt One Road* project, an ambitious network of road, rail and port routes that will connect China to Central Asia, South Asia, West Asia and Europe.<sup>11</sup> Long-term contracts in the energy and mining sectors were also discussed during this visit. Iran is seeking to attract

\$50 billion annually in foreign investment for the country's ailing \$400 billion economy. China had been Iran's biggest trading partner, with trade between the two nations amounting to some \$52 billion in 2014, before the fall in oil prices.<sup>12</sup>

The rapid growth in trade and economic relations between the two countries has been attributed to two factors—the first being China's sustained and substantial economic growth, turning a predominantly agrarian self-contained economy into a fast developing industrial powerhouse. The second factor is related to the limited number of choices that Iran had for economic

10. Ariel Farrar-Wellman and Robert Frasco, "China-Iran Foreign Relations", July 13, 2010, <http://www.irantracker.org/foreign-relations/china-iran-foreign-relations>. Accessed on August 22, 2016.

11. Huileng Tan, "China Tilts to Iran as Xi Caps Visits with 17 Accords", January 25, 2016, <http://www.cnbc.com/2016/01/25/china-tilts-to-iran-as-xi-caps-visit-with-17-accords.html>. Accessed on April 30, 2016.

12. Golnar Motevalli, "China, Iran Agree to Expand Trade to \$600 Billion in a Decade", January 23, 2016, <http://www.bloomberg.com/news/articles/2016-01-23/china-iran-agree-to-expand-trade-to-600-billion-in-a-decade>. Accessed on April 30, 2016.

cooperation due to the sanctions which were imposed by the US on Iran following the hostage crisis in 1979. Imposition of a wide range of sanctions, first by the US since the early 1980s and then by the United Nations Security Council since 2006, which had expanded in range and depth, made the situation all the more difficult for Iran. This was coupled with the continuing rise in demand for a wide range of consumer goods in the Iranian economy. As a result of all this, the Iranian market was flooded with Chinese products.<sup>13</sup>

Iran holds the world's third largest source of proven oil reserves and second largest source of proven gas reserves. The Iranian economy largely revolves around its energy sector which has been the basis of the Sino-Iranian economic relations. The Chinese oil demand increased to almost 90 percent from 1993 till 2002, and by 2008, China was importing approximately 7.8 billion barrels per day. In 2009, Iran supplied China with more than 23 million metric tonnes of crude oil, making it China's third largest oil supplier after Saudi Arabia and Angola.<sup>14</sup> Iran is also China's largest source of liquefied petroleum gas. But this flow of energy is not unidirectional. Due to the lack of internal refining capabilities, Iran imports 40 percent of its refined gasoline from external sources, of which China provided 30 percent in 2009.<sup>15</sup> However, the imports fell by more than 30 percent in the first half of 2010, making Iran the only country to experience declining oil exports to China in 2010. Iran formed a joint oil and gas committee with China to broaden and expedite energy cooperation. Furthermore, China signed a \$20 billion agreement

**Chinese oil demand increased to almost 90 percent from 1993 till 2002, and by 2008, China was importing approximately 7.8 billion barrels per day. In 2009, Iran supplied China with more than 23 million metric tonnes of crude oil, making it China's third largest oil supplier after Saudi Arabia and Angola. Iran is also China's largest source of liquefied petroleum gas.**

---

13. Mohsen Sahriatnia, "Iran-China Relations: An Overview of Critical Factors", *Iranian Review of Foreign Affairs*, vol. 1, no. 4, Winter 2011, pp. 57-85.

14. Morris, n. 9.

15. Ariel Cohen et. al, "Iran's Energy Sector: A Target Vulnerable to Sanctions", February 14, 2011, <http://www.heritage.org/research/reports/2011/02/irans-energy-sector-a-target-vulnerable-to-sanctions>. Accessed on August 23, 2016.

in May 2011 to boost bilateral cooperation in Iran's industrial and mining sectors.<sup>16</sup> Between 2005 and 2010, Chinese firms signed contracts worth \$120 billion in the Iranian energy sector.<sup>17</sup> In July 2010, China and Iran's Oil Ministry announced a \$40 billion deal to revamp Iran's petroleum refining industry.<sup>18</sup> China imported 0.63 billion barrels per day of Iranian oil in the first half of 2014, which was 48 percent more than imports by it in the previous year.<sup>19</sup>

Sino-Iranian commercial relations, outside the energy sector, had also shown an increasing trend. China imported \$3.12 billion of Iranian non-energy products in 2009 which included iron ore, methanol, propane, polyethylene, styrene, butane, ethylene-glycol, paraxylene, chrome stone, marble, oil and mineral seals, and purified copper. Iran mainly imported from China railroad and subway locomotives parts, oil and gas pipelines, LCD and LED modules, car parts, polystyrene, bananas and cars. China also made vast infrastructure investments in the non-energy sector in 2009 which included construction contracts for bridges, highways, railways, airport infrastructure and metro rail systems.<sup>20</sup> China also exports manufactured goods to Iran such as computer systems, household appliances, and cars.<sup>21</sup> Reports by the Iran-China Chamber of Commerce and Industries stated that bilateral trade between China and Iran diminished significantly in the year 2012. It went down from approximately \$3 billion in 2011 to \$400 million in 2012.<sup>22</sup> One of the reasons cited for this was the sanctions that were imposed on Iran by the Western powers.

Thus, the continued Sino-Iranian economic engagement is expected to further expand in the period after the successful completion of the Iranian nuclear deal and removal of sanctions. China's ambitious One Belt, One

---

16. Kozhanov, n. 2.

17. Tan, n. 11.

18. Motevalli, n. 12.

19. Lauren Dickey and HeliaIghani, "Iran looks East, China Pivots West", August 25, 2014, <http://thediplomat.com/2014/08/iran-looks-east-china-pivots-west/>. Accessed on August 23, 2016.

20. Ibid.

21. Wuthnow, n. 7.

22. Arash Karami, "Chinese Investment in Iran Said to Drop from \$3 Billion to \$ 400 Million", <http://iranpulse.al-monitor.com/index.php/2013/03/1555/chineseinvestment-in-iran-said-to-drop-from-3-billion-to-400-million/>. Accessed on August 23, 2016.

Road (OBOR) project had been designed to connect China to West Asia through which it can expand its strategic and economic relationships in the energy rich nations in the West Asian North African (WANA)<sup>23</sup> region along with access to the Caspian Sea, Arabian Sea and Indian Ocean. Both nations have far too much to lose, with China needing the Iranian oil supplies to fuel its domestic economic and industrial growth and unrestricted access to northern Iran through OBOR. Iran, on the other hand, needs the ever growing energy markets for its oil industry to sustain its economic growth as well as any benefits that could accrue from China's revival of its Silk Road initiative.

**Both nations have far too much to lose, with China needing the Iranian oil supplies to fuel its domestic economic and industrial growth and unrestricted access to northern Iran through OBOR. Iran, on the other hand, needs the ever growing energy markets for its oil industry to sustain its economic growth as well as any benefits that could accrue from China's revival of its Silk Road initiative.**

**Political and Diplomatic Relations:** The Silk Road set the stage for the strengthening of diplomatic relations between Iran and China. Historically, both Iran and China were the non-Western empires that had suffered humiliation at the hands of the Western nations. In practical terms, this translated into foreign policy goals of a multipolar world, free of US hegemony, and in this respect, the goals of both nations remain quite aligned.

The rapprochement between China and US in the midst of the Cold War subsequently created a gap in the relations between China and Iran. The reason attributed for this is the fact that China's support to the new revolutionary regime in Iran could have damaged the new and somewhat positive developments in the Sino-US relationship. China was in desperate need of US technology for its technologically starved industry, and this could be obtained only through normalisation of US-China relations, that

---

23. WANA: West Asian North African region

opened it to US and other Western technologies.<sup>24</sup> However, the Iran-Iraq War in the 1980s did contribute towards the improvement of the relationship between China and the Iranian regime. In the Iran-Iraq War, the US openly supported Iraq while the Chinese policy-makers, under the rule of Deng Xiaoping, were more focussed on strengthening its international position. Given the favourable circumstances of trade between Iran and China, the diplomatic relations eventually expanded considerably and resulted in significant progress in bilateral trade relations.<sup>25</sup> Added to this mix was also the commonality of interests between Iran and China: their mutual distrust related to the US, and the creation of a multipolar world order where each is a dominant power in its respective region. This shared idea, in turn, allowed their relationship to evolve despite a few fundamental shifts in their outlooks and interests. Their commonalities also extended due to the existence of the semi-authoritarian and semi-democratic system of regimes that prevailed in their respective states.<sup>26</sup>

There are two emerging scenarios—the Caspian Sea and the Shanghai Cooperation Organisation (SCO)—which could help sustain the momentum in the Sino-Iranian relationship. The first scenario points towards China intensifying its quest for gaining access to the energy resources of the Caspian Sea region.<sup>27</sup> Through this, it seems, China wants to decrease its heavy dependence on oil imports from the Persian Gulf. As a result, China is more interested in a stronger and more stable Iran that can help facilitate its transit of oil from the Caspian region. The second scenario is that of Iran becoming a member of the SCO. The SCO was created in 1996 with the aim of demilitarising the border between China and the former Soviet Union.

---

24. R. Hameed, "Sino-Iran Relations Current Developments and Future Scenario", *Policy Perspectives*, vol.7, no.2, 2010, <http://www.ips.org.pk/pakistan-and-its-neighbours/1094-sinoiran-relations-current-developments-and-future-scenario.html>. Accessed on September 2, 2016.

25. Mahmoud Gahfour, "China's Policy in the Persian Gulf", *MEPC*, vol. xvi, no. 2, Summer 2009, <http://www.mepc.org/journal/middle-east-policy-archives/chinas-policy-persian-gulf?print>. Accessed on September 14, 2016.

26. John Garver, "China and Iran: An Emerging Partnership Post-Sanctions", February 8, 2016, <http://www.mei.edu/content/china-and-iran-emerging-partnership-post-sanctions>. Accessed on September 2, 2016.

27. John S. Park and Cameron Glenn, "Iran and China", *The Iran Primer*, <http://iranprimer.usip.org/resource/iran-and-china>. Accessed on August 29, 2016.

However, it evolved into a wider regional organisation in the subsequent years, with Iran being granted the status of observer in 2005. If Iran is given full membership of the SCO—which was refused to it due to the sanctions—it could provide Iran an organisational context to forge closer relations with the states vital to its interest in Central Asia.<sup>28</sup>

However, there are speculations that despite greater opportunities, Sino-Iranian relations in the post-Iran nuclear deal scenario will lead to limited ties. The reason cited for this has been related to China's need to maintain positive diplomatic relations with the other states not only in the WANA region but also with many Western and European nations. Beijing has stronger trade ties with Riyadh and imports nearly double the quantity of oil from Saudi Arabia as compared to Iran.<sup>29</sup> China has, till now, tried to balance its regional commitments by keeping a relatively low diplomatic profile and avoiding taking strong positions on various contentious issues in the region which has also been a part of China's soft power politics. However, as against this, to further strengthen the relationship between the two nations, President Xi Jinping visited Iran earlier in 2016 to sign a 25-year strategic plan.<sup>30</sup> But definitely, China will need to tread this path carefully while balancing its relations with the US and other key Western powers. In the case of the Iranian nuclear issue, China's overall objective had been to play the role of a mediator for the peaceful resolution of the issue. The purpose of

**Beijing has stronger trade ties with Riyadh and imports nearly double the quantity of oil from Saudi Arabia as compared to Iran. China has, till now, tried to balance its regional commitments by keeping a relatively low diplomatic profile and avoiding taking strong positions on various contentious issues in the region which has also been a part of China's soft power politics.**

---

28. Ibid.

29. Joel Wuthnow, "Posing Problems Without an Alliance: China-Iran Relations after the Nuclear Deal", *SF*, no. 290, February 2016, <http://www.ndupress.ndu.edu>. Accessed on August 31, 2016.

30. "Beijing Balances Iranian Opportunities with Tehran Troubles: China-US Focus", <http://www.chinausfocus.com/peace-security/beijing-balances-iranian-opportunities-with-tehran-troubles/>. Accessed on August 29, 2016.

this could have been to elevate China's standing in the international arena as a "responsible global player."<sup>31</sup> Coinciding with President Xi Jinping's more assertive foreign policy approach, China's diplomacy in the nuclear talks beginning in 2013 had been bolder as compared to the previous rounds.<sup>32</sup>

**Defence Relations:** Defence relations between Iran and China are a complex matter and various issues are linked with these. At some point, the idea of defence cooperation with Iran is objectionable to some of the major powers of the world. China had aided Iran's efforts to modernise its military hardware through the transfer of military technology and the sales of small arms and tactical ballistic missiles, anti-access systems and anti-ship cruise missiles. However, Iran sought to advance its weapons programme with assistance from China. Iran's military interactions with China started in the early 1980s during the Iran-Iraq War (1980-88). China supplied arms to both sides during that war which amounted to a total of almost \$5 million during 1980-88.<sup>33</sup> China supplied advanced weapons to Iran in areas ranging from tanks to fighter jets to fast-attack patrol craft and anti-ship missiles, breaking all the multilateral non-proliferation norms. At this time, Beijing was driven mainly by the profit motive and also the strategic desire to strengthen Iran in the region against the excessive US influence.<sup>34</sup> In the 1990s, China assisted Iran in the production of various anti-ship ballistic missiles.<sup>35</sup> However, Chinese arms sales to Iran gradually declined in the 1990s and 2000s due to pressure from the US and the imposition of sanctions by the UN against Iran. Those sanctions initially prohibited involvement in Iran's nuclear and ballistic missile industries but were later expanded to cover conventional weapons such as combat aircraft and warships.<sup>36</sup>

---

31. Mackenzie, n. 1.

32. Emma Scott, "A Nuclear Deal with Chinese Characteristics: China's Role in the P5+1 Talks with Iran", *China Brief*, vol. 15, issue 14, July 17, 2015, [http://www.jamestown.org/programs/chinabrief/single/?tx\\_ttnews%5Btt\\_news%5D=44172&cHash=a196bde88d782a0173dbd4793a06104f#V9EC5Zh97IU](http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=44172&cHash=a196bde88d782a0173dbd4793a06104f#V9EC5Zh97IU). Accessed on September 2, 2016.

33. Farrar-Wellman and Frasco, n. 10, p. 71.

34. Wuthnow, n. 7.

35. Rashida Hameed, "Sino-Iranian Relations: Current Developments and Future Scenarios", *Policy Perspectives*, vol. 7, no. 2, January-June 2010, <http://www.ips.org.pk/global-issues-and-politics/1094-sino-iranian-relations-current-developments-and-future-scenario>. Accessed on August 30, 2016.

36. *Ibid.*

Military links played a significant role in the Iranian foreign policy post 1997. The level of cooperation related to the Chinese assistance towards Iran's ballistic missiles and nuclear programmes declined due to strong international and US pressure. Some transfer of defence articles continued, such as the sale of C-14 catamaran missile boats between 2000 and 2002, but the arms relationship essentially ended by 2005.<sup>37</sup> The UN sanctions on Iran in the 2000s posed another restraint on the prospects for China-Iran military ties, especially in areas such as nuclear and missile technology.

When the more pragmatic leader Hassan Rouhani became Iranian president in 2013, the Iranian government changed some of its tactics to achieve core objectives related to foreign policy and core defence-security programmes for confidence building and to minimise international suspicions.<sup>38</sup> In this context, more recently, in 2013 and 2014, with the new leadership in Iran, the stronger China-Iran military relations have begun to reverse a trend of declining cooperation.

Support for Iran's military development effort was advantageous to China's own military modernisation drive. The role of arms export was crucial in financing China's military research and development efforts, as mentioned earlier. Building with Iran a multi-dimensional, cooperative partnership, tested by adversity and founded on mutual understanding, trust and common interests, was one of the underlying objectives of China's military cooperation with Iran.<sup>39</sup> Iran placed great emphasis on military

**The level of cooperation related to the Chinese assistance towards Iran's ballistic missiles and nuclear programmes declined due to strong international and US pressure. Some transfer of defence articles continued, such as the sale of C-14 catamaran missile boats between 2000 and 2002, but the arms relationship essentially ended by 2005.**

37. "The SIPRI Arms Transfer Database Contains no Record of PRC Arms Sales to Iran after 2005," <http://www.sipri.org/databases/armstransfers>. Accessed on August 29, 2016.

38. Masoud Rezaei, "Chinese-Iranian Military Relations", *Iranian Review of Foreign Affairs*, vol. 5, no. 3, Fall 2014, pp. 109-148, <http://irfajournal.csr.ir/WebUsers/irfajournal/UploadFiles/OK/139409021356495000007-F.pdf>. Accessed on August 31, 2016.

39. John W. Garver, *China and Iran: Ancient Partners in a Post Imperial World* (Seattle: University of Washington Press, 2006), pp. 197-198.

**The Nuclear Threat Initiative reports that in the mid-1980s, China began training Iranian nuclear technicians in China under a secret nuclear cooperation agreement, assisted in the construction of Iran's primary research facility located at Isfahan, and also agreed to supply Iran with subcritical or zero yield nuclear reactors—all under IAEA safeguards.**

development to help it realise its goals in that area despite US pressure and threats, which earned China considerable 'political capital' in Iran. In spite of this US pressure, Beijing persisted to provide Iran with self-reliant indigenous nuclear, missile and conventional weapon capabilities. At the same time, China's assistance to Iran also rested on the belief that a militarily strong Iran could serve Chinese interests in constraining the US in the region.<sup>40</sup>

The sanctions regime crippled Iran's ability to procure critical conventional weapons platforms as well as technological expertise and necessary spare parts. Iran's conventional and technological deficiencies have helped mould its operational military strategy around asymmetrical and irregular warfare concepts on which it relies heavily today. However, with the removal of the sanctions, Iran is eager to modernise its military to keep pace with its regional rivals through its purchases of foreign arms and technologies.<sup>41</sup>

China has been adamant that its support of the Iranian nuclear programme has been limited to Iran's pursuit of peaceful nuclear technology. The Nuclear Threat Initiative reports that in the mid-1980s, China began training Iranian nuclear technicians in China under a secret nuclear cooperation agreement, assisted in the construction of Iran's primary research facility located at Isfahan, and also agreed to supply Iran with subcritical or zero yield nuclear reactors—all under International Atomic Energy Agency (IAEA) safeguards.<sup>42</sup>

---

40. Ibid.

41. Chris Zambells, "China and Iran Expand Relations after Sanctions' End", *China Brief*, vol. 16, issue 5, [http://www.jamestown.org/programs/chinabrief/single/?tx\\_ttnews%5Btt\\_news%5D=45179&cHash=53a60240c05c576b7b4a6b1f96678924#.V85eqZh97IU](http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=45179&cHash=53a60240c05c576b7b4a6b1f96678924#.V85eqZh97IU). Accessed on August 31, 2016.

42. "China's Nuclear Exports and Assistance to Iran", Nuclear Threat Initiative, <http://www.nti.org/db/China/niranpos.htm>. Accessed on September 10, 2016.

In the 1990s, China signed a 10-year nuclear cooperation agreement with Iran that allowed Iranian engineers to undertake training in China. This clearly indicated that it would solidify the already close technical cooperation between Iran and China.<sup>43</sup> Since then, there have been continuous reports stating that China had been directly assisting Iran with its nuclear programme. However, by 1997, this assistance was more “indirect.” There is no publicly available information indicating that China or Chinese entities have directly aided the most sensitive parts of Iran’s nuclear programme—uranium enrichment and the possible military dimensions addressed in numerous IAEA reports. Iran did use Chinese provided UF<sub>6</sub> in covert enrichment projects carried out between 1998 and 2002.<sup>44</sup> However, Iran’s uranium enrichment programme is based largely on technology acquired from the A.Q. Khan network. New generation centrifuge designs have been modified significantly—probably, at least, in part to avoid the need for difficult-to-obtain maraging steel.<sup>45</sup> Security ties between Iran and China also flourished at a time when international negotiations on Iran’s nuclear programme were still going on.

**More recently, Iran and China have intensified their military cooperation. In June 2016, Iran reportedly received a batch of TL-7 anti-ship missiles from China. This could mark a new phase of military-technical cooperation between the two countries.**

---

43. Elaine Sciolino, “China will Build A-Plant for Iran”, September 11, 1992, *New York Times*, <http://www.nytimes.com/1992/09/11/world/china-will-build-a-plant-for-iran.html>. Accessed on September 9, 2016.

44. “Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran,” IAEA GOV/2011/65, November 8, 2011, <http://www.iaea.org/Publications/Documents/Board/2011/gov2011-65.pdf>. Accessed on September 10, 2016.

45. Maraging Steel: it is known for possessing superior strength and toughness without losing the malleability. It is a special class of low-carbon ultra-high-strength steel that derives strength not from carbon, but from precipitation of intermetallic compounds (nickel, cobalt, molybdenum and titanium). Maraging steel’s strength and malleability in the pre-aged stage allows it to be formed into thinner rocket and missile skins than other steels, reducing weight for a given strength.

David Albright and Christina Walrond, “Iran’s Advanced Centrifuges,” *ISIS Report*, October 19, 2011, [http://isis-online.org/uploads/isisreports/documents/Iran\\_Advanced\\_Centrifuges\\_18October2011.pdf](http://isis-online.org/uploads/isisreports/documents/Iran_Advanced_Centrifuges_18October2011.pdf). Accessed on September 10, 2016.

More recently, Iran and China have intensified their military cooperation. In June 2016, Iran reportedly received a batch of TL-7 anti-ship missiles from China. This could mark a new phase of military-technical cooperation between the two countries. There are reports of Chinese companies producing C-802 and C-602 anti-ship missiles in order to equip the Islamic Republic of Iran's air force.<sup>46</sup>

Many scholars believe that Sino-Iranian military cooperation will expand considerably with the lifting of the sanctions under the Joint Comprehensive Plan of Action (JCPOA). There is a probability that the normalisation of relations between Iran and the West will eventually lead to the creation of a favourable climate for much greater Sino-Iranian military cooperation. A number of Chinese military technologies that would be attractive to Iran include long range air-to-air missiles and sea mines besides anti-ship cruise missiles. At the same time, the Chinese strategy of denying the US Navy access to the sea close to the Chinese coast can also be applicable to Iran. There will be a probable increase in the number of military-to-military exchanges of all sorts between the two nations. In the same realm, it was indicated during Chinese President Xi Jinping's latest visit to Iran that China may increase the sale of weapons to Iran.<sup>47</sup> This has generated fear in the US camps that China is pursuing this strategy despite the danger that these arms will be reexported to nearby conflict regions or embolden the Iranian military to challenge the US military positions in the Persian Gulf region, which is a major transit route for Chinese oil imports from the Persian Gulf.<sup>48</sup>

### **IMPLICATIONS FOR INDIA**

It is for sure that a new geostrategy is underway vis-à-vis Iran and the Persian Gulf region, post the Iranian nuclear deal. The rivalry between India and China for access to energy fields in the Persian Gulf and guarantee of free flow of energy from this Asian region, has redefined Iran's geopolitical situation

---

46. "China Strengthens Ties with Iran", July 2, 2016, <http://www.veteranstoday.com/2016/07/02/china-strengthens-ties-with-iran/>. Accessed on September 12, 2016.

47. Gahfour, n. 25.

48. Ibid.

in a new and unprecedented way. Further, since the lifting of the sanctions, India has been eyeing deeper energy ties with Iran in the oil and gas, and fertiliser and petrochemical sectors. At the same time, India is also striving hard for acquiring rights to develop the Farzad B gas field in the Persian Gulf region. Currently, India lags far behind the major regional players such as Russia, China and Turkey in the Central Asian region in gaining from the natural resources of the region.<sup>49</sup> Both India and Iran have a commonality of interest and a similarity in their national aspirations, especially relating towards preserving their strategic autonomy in their respective regions. For the two nations, the challenges have also come from the international pressures for “subverting or else reversing the already vigorous course of Indo-Iranian relations”<sup>50</sup> to the extent of dictating India’s relations with Iran. The recent years have witnessed various obstacles in the Indo-Iranian relations which were affected after the US imposed economic sanctions on Iran for its controversial nuclear programme. India’s experience of voting against Iran with the US on the IAEA resolution, thereby finding Iran in non-compliance with its international obligations were signs of international pressure for taking an anti-Iranian stance.<sup>51</sup> In the impending scenario, it is important that India treads this path with balance and strong determination to triumph over its competing interests between Iran and the US. On India’s part, it is also necessary that Indian diplomacy take this case of India-Iran partnership a little ahead in order to engage the “new” emerging Iran with greater sensitivity to its (Iranian) concerns for it to be successful.

## CONCLUSION

The Sino-Iranian partnership in the economic, political and strategic fields is very strong; however, it is strongly affected by both international

---

49. Anu Sharma, “Decoding PM Narendra Modi’s Forthcoming Visit To Iran: Opportunities For India”, *Caps In-focus*, May 10, 2016, [http://www.capsindia.org/files/documents/CAPS\\_Infocus\\_ANS\\_05.pdf](http://www.capsindia.org/files/documents/CAPS_Infocus_ANS_05.pdf). Accessed on November 29, 2016.

50. Ashok K. Behuria, “India and Iran: In Search of a New Rhythm”, in Anwar Alam, ed., *India and Iran: An Assessment of Contemporary Relations* (New Delhi: New Century Publications, 2011). pp. 52-71.

51. Chintamani Mahapatra, “India, Iran and the United States: Nuclear Diplomacy” in Alam, ed., *Ibid.*, pp. 95-105.

**In the impending scenario, it is important that India treads this path with balance and strong determination to triumph over its competing interests between Iran and the US.**

and domestic circumstantial variations in both nations. This also depends on their relations with the US which can fundamentally change the nature of Iran-China relations.<sup>52</sup> As the sanctions are lifted, China has the capacity—through military assistance, economic investment and the transfer of technology—to facilitate Iran’s rise as a regional power. However, the Western powers fear that given Iran’s record of working through proxies, Chinese assistance could also indirectly strengthen other non-state actors supported by

Iran. And Iran can offer China a strategically important foothold in the West Asian region, in case China chooses to challenge the US influence there.<sup>53</sup> Many American scholars believe that in order to keep the Sino-Iranian partnership in check, it is necessary to keep the US role in the region constructive and competitive.<sup>54</sup>

China has been sympathetic towards Iran and has shown interest in the stability of oil supply from the West Asian region. The nuclear accord between Iran and the Western powers could configure positively in the bilateral relations between the two by providing Iran “the much needed access” to the more advanced Western technologies and also reducing the geopolitical tensions between Iran and the US. There are chances that China is utilising this opportunity of opening up of Iran as an alternative to its reliance on the other West Asian nations for oil imports. At the same time, Iran offers immense investment opportunities for Chinese companies in several areas and particularly in energy and infrastructure.<sup>55</sup> Iran is being seen as a gatekeeper of Chinese interests in West Asia. From the Chinese

---

52. RAND Report

53. Mackenzie, n. 1.

54. Elizabeth Rosenberg and Alexander Sullivan, “Why China Likes the Iran Deal”, *CNN*, July 31, 2015, <http://edition.cnn.com/2015/07/31/opinions/rosenberg-sullivan-china-iran-deal/>. Accessed on September 4, 2016.

55. Stanly Johny, “China’s Long Game in West Asia”, *The Hindu*, January 29, 2016, <http://www.thehindu.com/opinion/op-ed/chinas-long-game-in-west-asia/article8163718.ece>. Accessed on April 13, 2016.

perspective, integrating Iran into OBOR is rooted in economics but can also play a role in enhancing stability in the already volatile West Asian region. However, considering the neighbourhood being hostile towards Iran, such a development is likely to be regarded as inimical to Arab interests and even threatening in the wake of the continuing Iran-Arab Gulf acrimony.<sup>56</sup>

There are chances that China can become more central to Iran's economic viability which is quite clear with Chinese Foreign Minister Wang Yi stating, "China is willing to encourage even more Chinese companies to invest in Iran and build factories via the joint development of industrial parks in accordance with Iran's development needs and China's ability."<sup>57</sup> However, in opposition to this, there are odds that this nuclear deal and removal of sanctions can lead to the marginalisation of China's role in Iran due to the expected flood of Western companies into Iran. Iran's swift turn to Europe and to the US, resonates its desperate need for acquiring the capital resources for their technology, as well as Tehran's wish to tie itself to the West in order to make itself more self-sufficient. Moreover, in this flood of Western companies, it seems that Tehran is being a little more cautious and reserved in expanding its relations with China.

**There are chances that China can become more central to Iran's economic viability which is quite clear with Chinese Foreign Minister Wang Yi stating, "China is willing to encourage even more Chinese companies to invest in Iran and build factories via the joint development of industrial parks in accordance with Iran's development needs and China's ability."**

---

56. Jeffery S. Payne, "China's Iran Bet", June 8, 2015, <http://www.mei.edu/content/map/china%E2%80%99s-iran-bet>. Accessed on September 10, 2016.

57. Ben Blanchard, "China's Foreign Minister Pushes Iran on Nuclear Deal", *Reuters*, February 16, 2015, <http://www.reuters.com/article/us-iran-nuclear-china-idUSKBN0LK05Q20150216>. Accessed on September 11, 2016.

# ANALYSIS OF THE AMERICAN ACTION PLAN FOR A NEW MIDDLE EAST

AMARJIT SINGH

The expressions of the United States in West Asia appear complex and inexplicable to many mainly because the underlying motivations are not clear, while the dynamic situation among diplomats and ground realities among dozens of countries makes information gathering quite onerous. Thus, the narrative that the United States presents is often discrepant, and many of its actions cryptic, not that there is any common law that precludes quiet behaviour and quiet diplomacy. But, this makes it hard to believe that the United States really wants the outcomes in the Middle East that it publicly proclaims. As masters in the art of prevarication and war, owing to their massive economic and military prowess, the Americans' real intent is likely hidden from the public eye, and the truth is different from what it seems or what the media reports. Interestingly, though, this is somewhat consistent with the Chanakya and Machiavelli styles of managing security.<sup>1,2</sup>

On the face of it, the United States is anti-Islamic State in Iraq and Syria (ISIS), but many of the actions of the ISIS are those that the United States

---

Dr **Amarjit Singh** is Professor of Construction and Engineering Management at the University of Hawaii at Manoa, Honolulu. Views expressed in the article are solely those of the author.

1. Akhilesh Pillalamarri, "Chanakya: India's Truly Radical Machiavelli," *The National Interest*, January 29, 2015, available at: <http://nationalinterest.org/feature/chanakya-indias-truly-radical-machiavelli-12146>.
2. Ibid. Though Max Weber wrote – and Henry Kissinger agreed – that compared to the *Arthashastra*, *The Prince* was "harmless."

**The reading of US intelligence services that Iraqi Sunnis could be pitted against Iraqi Shias to keep Iraq perpetually destabilised plays right into the hands of conceivable US plans, schemes, and intentions.**

supports and desires, and benefits from. For instance, creating a bulwark against Iraqi Shias who side with Iran; and fighting Syria's Assad who is a Russian protégé, and, as an Alawite, belongs to a sect of Shia Islam;<sup>3</sup> and quietly backstabbing Saudi Arabia that a vast majority of the legislators in Washington DC don't like.<sup>4</sup> That Congress mustered enough votes to override President Obama's veto of the 9/11 Bill that allows US citizens to sue Saudi Arabia speaks volumes of the sentiments of US lawmakers and citizens.<sup>5</sup> But, it also reveals how removed

President Obama may have steered from mainstream USA: like the fact that he made sudden visits to Saudi Arabia, including one when he cut short his visit to India, even while it was reported that King Salman snubbed him during his visit to Saudi Arabia of April 2016.<sup>6,7</sup>

After deciding to prematurely withdraw from Iraq without completing the work of subjugation and the total disarming of the Baathist military elements, against the advice of senators such as John McCain, a political opponent, President Obama might have fulfilled a naive election promise arising from a poor grasp of *realpolitik*, as alleged by numerous critics and military advisers. But, under no circumstances does it appear that the US intends to let Shias dominate Iraq, because that would make the Shia Iran powerful, against US interests. Thus, the reading of US intelligence services that Iraqi Sunnis could be pitted against Iraqi Shias to keep Iraq perpetually destabilised

---

3. Which partly explains why Iran's extremist mullahs support Assad.

4. "Congress Passes Saudi 9/11 Lawsuits Bill," *BBC News*, September 9, 2016, available at: <http://www.bbc.com/news/world-us-canada-37310593>.

5. Karoun Demirjian and Juliet Eilperin, "Congress Overrides Obama's Veto of 9/11 Bill," *The Washington Post*, September 28, 2016, available at: <https://www.washingtonpost.com/news/powerpost/wp/2016/09/27/senate-poised-to-vote-to-override-obamas-veto-of-911-bill/>.

6. "Obama to Cut Short India Trip to Visit Saudi Arabia," *LA Times*, January 24, 2015, available at: <http://www.latimes.com/nation/nationnow/la-na-nn-obama-india-trip-20150124-story.html>.

7. Adam Edelman, "President Obama Begins Saudi Arabia Trip with Snub by King Salman, as Activists Unearth more Evidence of Saudi Links to 9/11," *New York Daily News*, April 20, 2016, available at: <http://www.nydailynews.com/news/politics/president-obama-snubbed-saudi-arabia-trip-king-salman-article-1.2609081>.

plays right into the hands of conceivable US plans, schemes, and intentions.<sup>8</sup> To help in this, the former elements of Saddam Hussein's diehard army from Tibriz and nearby Sunni locations were still intact. Bring to them a leader such as Abu Bakr al-Baghdadi, and a strong enough army can be created that will fight Iraqi Shias and keep Iraq undermined for a very long time. By inductive reasoning, the plan was well thought out and deliberated.

#### THE PECULIAR AL-BAGHDADI

Indeed, it begs suspicion why the US released Al-Baghdadi after interning him in Guantanamo after capturing him outside Fallujah in 2004. Though he was classified as a "low-level prisoner" to be eventually released, such disinformation strategies are common among intelligence agencies. For example, imprisoned criminals are often used for behind-the-lines enemy actions and counter-intelligence operations as a condition of their release and reversal of conviction, with the releasing government warning the criminal that he would be disavowed if ever caught. For instance, this happened at least in part in the case of the Mumbai terrorists when Pakistan refused to even admit they were Pakistani citizens.<sup>9</sup>

Al-Baghdadi was a perfect protégé of the US to forge in Iraq what the US wanted: a Sunni Muslim militia. As it is, the US Army had close contacts with Sunni insurgents, particularly after the Fallujah operations during Gulf War II where the two sides got to know each other during the negotiation

**Ironically, Kuwaiti donors have also backed the ISIS and the remnants of Iraq's Baathist regime, believing that the Shia forces are really the greater enemy. The poor and oppressed Kurds would have to be sacrificed yet once again, as Al-Baghdadi's forces were enabled to capture the Kurdish oilfields of Ajil, Hamrin, Najamah, and Al Qayyarah, providing them an enhanced flow of income.**

8. Joseph Micallef, "Death to America: Shia-Sunni Rivalry and the Realignment of the Middle East," *Huffington Post*, April 23, 2015, available at: [http://www.huffingtonpost.com/joseph-micallef/death-to-america-shia-sun\\_b\\_6726458.html](http://www.huffingtonpost.com/joseph-micallef/death-to-america-shia-sun_b_6726458.html).

9. Sebastian Rotella, "Mumbai Attacks Renew Questions About Pakistan's Crackdown on Militants," *ProPublica*, July 13, 2011, available at: <http://www.propublica.org/article/mumbai-attacks-renew-questions-about-pakistans-crackdown-on-militants>.

periods, which resulted in the US eventually leaving Fallujah alone. Not only that, but with his clerical background, Al-Baghdadi easily garnered respect from among the Sunnis. Thus, foisting Al-Baghdadi on Iraq was a perfect secret plan that had the bells of success ringing.

### **THE IMPACT OF SAUDI AND GULF FUNDING**

To this plan was easily added the Saudi Arabian money to enable Al-Baghdadi to roam with impunity. The Saudis are always willing to play alongside the US, mainly because that's what they can do best, not having any impressive military prowess, demonstrated, in part, by their poor military performance in Yemen, a militarily weak country, while Saudi Arabia has modern weapons and gadgetry. American intelligence had reason to sell the broad strategy to Saudi Arabia and Saudi donors by saying that Al-Baghdadi would fight Shia elements in Iraq and Syria to check Iranian power growth and help in toppling Assad. Thus, a weakened and exhausted Middle East was ensured by this strategy. Consequently, and whatever the precursors, Saudi Arabia funnelled \$2 million a month to Baghdadi's ISIS, mostly to pay for fighters (\$500 a month) and commanders (\$1,200 a month).<sup>10</sup> Ironically, Kuwaiti donors have also backed the ISIS and the remnants of Iraq's Baathist regime, believing that the Shia forces are really the greater enemy.<sup>11</sup> The poor and oppressed Kurds would have to be sacrificed yet once again, as Al-Baghdadi's forces were enabled to capture the Kurdish oilfields of Ajil, Hamrin, Najamah, and Al Qayyarah, providing them an enhanced flow of income.<sup>12</sup> It wasn't till the ISIS let loose its anger at the Saudi monarchy that Saudi Arabia was compelled to see the light of day, and so withdrew the funding.<sup>13</sup> But by then, the damage had been

---

10. "Rand Paul: Punish those who Fund ISIS," *TIME*, November 17, 2015, available at: <http://time.com/4116601/paris-attacks-rand-paul/>.

11. Josh Rogin, "America's Allies Are Funding ISIS," *The Daily Beast*, June 14, 2014, available at: <http://www.thedailybeast.com/articles/2014/06/14/america-s-allies-are-funding-isis.html>.

12. Fazel Hawramy, Shalaw Mohammed, and Luke Harding, "Inside Islamic State's Oil Empire: How Captured Oilfields Fuel ISIS Insurgency," *The Guardian*, November 19, 2014, available at: <http://www.theguardian.com/world/2014/nov/19/-sp-islamic-state-oil-empire-iraq-isis>.

13. Lori Plotkin Boghardt, "Saudi Funding of ISIS," The Washington Institute, June 23, 2014, available at: <https://www.washingtoninstitute.org/policy-analysis/view/saudi-funding-of-isis>.

done, and the ISIS had entrenched itself in its nouveau caliphate.

#### US, ISIS, AL QAEDA AND THE MUSLIM BROTHERHOOD

How can anyone ever think that the US can't retake the oilfields that the ISIS has captured? The rag-tag militia of the ISIS, just about 10-12,000 militiamen strong, is easy game for the US to take out. But, it is noteworthy that the US has not done so. Recall that Obama withdrew all US forces from Iraq, probably with the hope that the Arabs would do the fighting for them. All the while after 2011, the US assisted the Iraqi government

with training and limited armaments, then sent in a small force to "show" to the world they were really anti-terrorist and anti-ISIS, when, in fact, they had likely groomed the terrorists in the first place. The advantage of this was that Al-Baghdadi could damage the West Asian countries, such that their future opportunity to exercise power would be curtailed. The US was demonstrating its skills of riding two horses at the same time. But, with its military, diplomatic, and economic power, the US could easily afford to do so. The proof was in the pudding, and the compass swings again and again to point to the USA. However, the US has now very craftily forged a coalition of the Sunni dominated countries.

The ISIS is also openly against the Muslim Brotherhood, who they consider apostates. This partly explains why Turkey is anti-ISIS and does not really wish to topple Assad, because the present Turkish government is an offshoot of the Muslim Brotherhood, while the Egyptian dictatorship, which considers the Muslim Brotherhood as a scourge, wishes to fight the ISIS. All

**The advantage of this was that Al-Baghdadi could damage the West Asian countries, such that their future opportunity to exercise power would be curtailed. The US was demonstrating its skills of riding two horses at the same time. But, with its military, diplomatic, and economic power, the US could easily afford to do so. The proof was in the pudding, and the compass swings again and again to point to the USA. However, the US has now very craftily forged a coalition of the Sunni dominated countries.**

this helps the USA in two ways. In Egypt, it helps the US get Al-Sistini's support to fight the ISIS. In Turkey, it puts the screws on Erdogan's regime, which has been the most anti-USA in its rhetoric, and makes it difficult for the USA to operate militarily out of Turkey in West Asia.<sup>14</sup>

Ironically, inasmuch as the US claims to fight Al Qaeda, its secret support of the ISIS puts the lie to its words. The ISIS has openly claimed to have succeeded from Al Qaeda.<sup>15</sup> Hence, the whole world is bewildered at how the USA has adroitly allowed the ISIS to thrive while claiming otherwise in public, its intentions to destroy Al Qaeda. The complexities can only be resolved and understood when it is accepted that the USA will first start the fire and let it rage, and then come in to extinguish it. That is to say, that by so doing, the US would have achieved its aims. This is not an easy road to traverse, but the US has handled tougher opponents before.

### **USA's SECRET INTENTIONS**

The USA's secret intentions are scarcely to see peace in West Asia and the Middle East, in general—but to see turmoil, instead. This is understandable, and perhaps respectable, given the troubles that have been brought upon the United States by this region. It is frequently philosophically and arguably better to crush an enemy or perceived enemy rather than let it regroup and grow, even if covert methods must be used.

Correspondingly, the thinking in the US may be that is better to have the Middle Easterners fight each other rather than fight the United States. And so, the region, like flies to honey and moths to a flame, has apparently fallen hook, line, and sinker for the US ploys and deceptions, not that the USA leaves it with multiple choices, being the great power it is. Therefore, to the discredit of the regional leaders, they have failed to realise that they are no match for the US, in not only military and economic power, but also in wiliness and duplicity. But, in so doing, the US is preserving solely its own interests, and no country or individual has a viable argument against that philosophy of self-preservation. At times, spying and lying are matters of survival, not to

14. Graeme Wood, "What ISIS Really Wants," *The Atlantic*, March 2015, available at: <http://www.theatlantic.com/magazine/archive/2015/03/what-isis-really-wants/384980/>.

15. *Ibid.*

mention state policy, and the US was obviously pushed to the limit of tolerance with 9/11 when the Middle Easterners brought down the wrath of the US on themselves, much like taunting a hornet's nest. Or was that Al Qaeda's plan in the first place – to topple monarchies in the Middle East by bringing in the USA to do the dirty work it did not have the wherewithal for?

For obvious reasons, the US has many enemies in the Middle East, especially for its support of Israel through its 1956, 1967, and 1973 Wars against the Arabs, which is hardly a

moral offence. Remember, the Popular Front for the Liberation of Palestine (PFLP) blew up airplanes in the Jordanian desert in 1970, after prominently retaining six American hostages. The famous 1979 drama of the takeover of the American Embassy in Tehran infuriated the US immensely, and it still feels that its revenge against Iran is incomplete. Though the US prompted Saddam Hussein to invade Iran, Saddam's operations were ineffective in the end. After weak signals were sent by US Ambassador April Glaspie, Saddam mustered the courage to invade Kuwait, which brought US forces into direct confrontation with Iraq, since the US was committed to the defence of Kuwait as a consequence of the Iran-Iraq War, not to mention reports that Kuwait, Saudi Arabia, and UAE paid the US for that war.<sup>16</sup>

Everything in the Middle East has only been downhill since then: Saddam threatened Glaspie that individual Arabs could take the war to the USA.<sup>17</sup> And, strong links point to Saddam Hussein having a relationship with Al Qaeda and Osama bin Laden, resulting in the Kenya bombings of

**For obvious reasons, the US has many enemies in the Middle East, especially for its support of Israel through its 1956, 1967, and 1973 Wars against the Arabs, which is hardly a moral offence.**

---

16. Louis Jacobsen, "Donald Trump says Kuwait Never Paid US Back for Ousting Saddam Hussein," *PolitiFact*, April 27, 2011, available at: <http://www.politifact.com/truth-o-meter/statements/2011/apr/27/donald-trump/donal-trump-says-kuwait-never-paid-us-back-ousting/>.

17. Elaine Sciolino and Michael R. Gordon, "Confrontation in the Gulf; US Gave Iraq Little Reason not to Mount Kuwait Assault," *The New York Times*, September 23, 1990, available at: <http://www.nytimes.com/1990/09/23/world/confrontation-in-the-gulf-us-gave-iraq-little-reason-not-to-mount-kuwait-assault.html?pagewanted=all>.

**In allowing the ISIS to be rampant, and given that the outcome reflects which party eventually gains, it is evident that the US was able to craftily unite the disagreeing Sunni nations of the Middle East into a sort of coalition, albeit for limited purposes.**

1996, followed by the infamous attacks on the twin towers in New York.<sup>18, 19</sup> But, despite the ensuing interventions by the US in the Middle East, the USA's revenge was not over, since Iran came out stronger from the Iran-Iraq War than it was going in. In aiming to find a path, the Mideast players have themselves shown a path to the USA, where internal rivalries and hatreds (mainly Shia-Sunni) have allowed the USA to exploit both sentiments. Through this path, the revenge stands a better chance of being firmly realised. But, it's not only about revenge: it is also about genuinely ensuring that terrorist strikes and propaganda against the USA cease.

#### **US AND ISRAELI CRAFTINESS**

In allowing the ISIS to be rampant, and given that the outcome reflects which party eventually gains, it is evident that the US was able to craftily unite the disagreeing Sunni nations of the Middle East into a sort of coalition, albeit for limited purposes. Thus, the US continued to feign its role by encouraging the UAE, Qatar, and Jordan to launch air strikes against Baghdadi's ISIS. But, we all know how ineffective those air strikes were. But by then, the blow had been struck: the Sunni nations were united by default because they now had a common enemy. That the ISIS now considered those united Sunni nations as enemies is evident. The ISIS was, thus, on its own in its self-proclaimed caliphate, a situation it would not mind because now it was beholden to none.<sup>20</sup> But, the process had enabled the USA to

---

18. Glenn Kesler, "The Cheneys' Claim of a 'Deep, Longstanding, Far-reaching Relationship' between al-Qaeda and Saddam," *The Washington Post*, July 17, 2014, available at: [https://www.washingtonpost.com/news/fact-checker/wp/2014/07/17/the-cheneys-claims-of-a-deep-longstanding-far-reaching-relationship-between-al-qaeda-and-saddam/?utm\\_term=.24869a3a6f11](https://www.washingtonpost.com/news/fact-checker/wp/2014/07/17/the-cheneys-claims-of-a-deep-longstanding-far-reaching-relationship-between-al-qaeda-and-saddam/?utm_term=.24869a3a6f11).

19. Thomas Joscelyn, "WikiLeaks: The Iraq-Al Qaeda Connection Confirmed, Again," *The Weekly Standard*, April 26, 2011, available at: <http://www.weeklystandard.com/wikileaks-the-iraq-al-qaeda-connection-confirmed-again/article/558271>.

20. Wood, n. 14.

forge a united Sunni coalition of Saudi Arabia, Qatar, Jordan, and UAE, while Kuwait was already in the USA's corner. At the same time, the ISIS has been kept relatively weak, so as not to go out of control.<sup>21</sup> Correspondingly, Benjamin Netanyahu once said that the ISIS was not a threat to Israel – but that Iran really was.<sup>22</sup> It seems that exactly what Israel and the US want in West Asia is happening there: having the various Muslim factions in West Asia destroy each other so as to weaken as a cognisant threat to Israel and the free world in the long run.

**At the same time, the ISIS has been kept relatively weak, so as not to go out of control. Correspondingly, Benjamin Netanyahu once said that the ISIS was not a threat to Israel – but that Iran really was.**

It doesn't go unobserved that the ISIS hasn't attacked Israel at all. This is easy to understand if it can be believed that Baghdadi's masters (the USA) haven't granted permission for this. Of greater import, however, is that reports have suggested that Israel's Mossad has trained the ISIS fighters.<sup>23</sup> Whether that is true or not, it is for certain that the war-fighting capabilities of its enemies, Syria, Libya, and Iraq, have been painfully degraded to the benefit of Israel. But, it is a fact that even though the Muslim governments may change in the Arab nations, they remain united in their anti-Israel platform, even while Jordan and Saudi Arabia have learned to take a back seat, while Egypt was quietened after the 1979 peace agreement. And, Iraq was quite badly mauled by the USA, such that it is in no position to threaten Israel. But, Iran and the Hezbollah remain a vocal threat to Israel. There still being an existentialist threat to Israel, it is in the vital survival interests of Israel to humble the capability of its enemies any time an opportunity presents itself. And the opportunity has presented itself—the ISIS serves as the perfect tool for that. Hence, the theory that Israel might

---

21. Like a controlled fire set by fire-fighters to burn dry bush rather than have a natural fire burn it, at which occasion, the fire can conceivably rage out of control.

22. "Netanyahu: Iran Greater Threat than ISIL," *Al Jazeera*, September 30, 2014, available at: <http://www.aljazeera.com/news/americas/2014/09/netanyahu-says-iran-greater-threat-than-isil-2014929211933546717.html>.

23. Volubrijotor, "Russia Says Israel Training ISIS: Israel Secret Intelligence Service," *Political Vel Craft*, May 13, 2015, available at: <https://politicalvelcraft.org/2015/05/13/russia-says-israel-training-isis-israel-secret-intelligence-service/>.

**Thus, the US fights its secret war in the Middle East without sending troops there, a line that Hillary Clinton reiterated in the campaign trail very recently. Manifestly, this is a smarter strategy than sending tens of thousands of its own troops.**

have aided the ISIS is not without its arguable foundations.

It, thus, also appears easy to understand why the USA never really funded the Free Syrian Army with lethal arms, though Hillary Clinton apparently wanted to. But Clinton was probably not privy to the secret plans, as told to Gen Wesley Clark by Kissinger, and revealed by Gen Wesley Clark himself.<sup>24</sup> Indeed, much of US intelligence is plausibly outside the knowledge of its masters, just as the Pakistani ministers are not told all that the Inter-Services Intelligence (ISI) does. This is a trait of every powerful intelligence agency: they can operate with impunity, without taking their governments into confidence. Hence, they become a government within a government, no matter that the civilian government has the power to appoint the chief of the agency.<sup>25</sup> Every new US president must perforce compromise sooner or later, since he knows little of the ongoing covert operations, and has single-minded, conspiring advisers coming out of the woodwork of the intelligence agencies to waylay his thinking.

Thus, the US fights its secret war in the Middle East without sending troops there, a line that Hillary Clinton reiterated in the campaign trail very recently. Manifestly, this is a smarter strategy than sending tens of thousands of its own troops. Why shed your own blood when the enemy will shed its blood to fulfil your purpose?

Moreover, arming the Free Syrian Army could make the war end in Syria with Assad's ouster, which would not satisfy US intentions of redrawing borders in the Middle East. Hence, you see that Assad is still in power today

---

24. Amarjit Singh, "The Middle East Destabilized by Design," *Centre for Land Warfare Studies*, Article #1234, August 6, 2014, available at: <http://www.claws.in/1234/the-middle-east-destabilized-by-design-amarjit-singh.html>.

25. However, Pakistan's chief of the ISI is not appointed by the civilian government.

(at the time of writing) after five years of serious civil war and external invasion by the ISIS, and that Russia and the US are working on a peace agreement in Syria to somewhat blunt each other. However, the war by their proxies shall go on.

To have the war-fighting ability of the Arabs and Muslims bled to death is the real US and Israeli intention, and that intention is being achieved by the US day by day. Taking in a few thousand Syrian refugees does not hurt a large nation like the US, since it allows it to mask its real intentions, while screening the Syrian refugees to take mostly the rich and educated ones who stand to cause the least trouble when in the US, thereby minimising any collateral damage of taking in the refugees. The plot, again, is perfect.

**In addition, a new “map of the Mideast” that was made by Lt Col. Ralph Peters, and which has been discussed at the US National War Academy, North Atlantic Treaty Organisation (NATO) Defence College, and other places since 2006, shows a total redrawing of the region.**

### THE “NEW” MIDEAST

Though many may term this “plot” a conspiracy theory, one cannot fail to recognise that the outcomes of the events in the Middle East are systematically downgrading the economic and military capabilities of those that would seek to hurt the US and Israel – Syria and Iraq to be specific, while Iran has been downgraded over the past twenty years through boycotts and sanctions.<sup>26</sup> And, as far as the military threat of Iran and the Shias against Israel is concerned, the USA is working hard to start a Sunni-Shia war that would be the largest among the West Asian countries ever. The US might be slowly but surely moving towards a “new Middle East,” as said by Condoleeza Rice soon after the invasion of Lebanon by Israel in 2006,

---

26. Derek Tsang, “Bloggers: Edward Snowden Leaked NSA Documents show U.S., Israel Created Islamic State,” *PunditFACT*, August 19, 2014, available at: <http://www.politifact.com/punditfact/statements/2014/aug/19/blog-posting/edward-snowden-leaked-nsa-documents-show-us-israel/>.

[W]hat we're seeing here [in regards to the destruction of Lebanon and the Israeli attacks on Lebanon], in a sense, is the growing—the 'birth pangs'—of a 'New Middle East' and whatever we do, we [meaning the United States] have to be certain that we're pushing forward to the New Middle East [and] not going back to the old one.<sup>27</sup>

In addition, a new "map of the Mideast" that was made by Lt Col. Ralph Peters, and which has been discussed at the US National War Academy, North Atlantic Treaty Organisation (NATO) Defence College, and other places since 2006, shows a total redrawing of the region. Iraq is trifurcated; Saudi Arabia is broken down; Jordan gets a "Greater Jordan" thereby allowing the Hashemite Kingdom to get some of its ancient lands back; Turkey is sliced to make way for Kurdistan; Baluchistan is created; and Afghanistan gets Quetta and the present northern Baluchistan province of Pakistan.<sup>28</sup> This map has become one of the most visited pages of the *Armed Forces Journal*. The vitriol that has been generated prompted the Turkish chief of staff to contact the US' chairman of the joint chiefs of staff and protest about the map.<sup>29</sup>

A more realistic map is modified by the author in Fig 1 that closely complements, and builds upon, the Peters map: Iran, Syria, Iraq, and Turkey lose territory to the Kurds wherever the Kurds are in large numbers on their outlying border areas; but the Kurds are not landlocked, and get an opening to the Black Sea. Of course, none of this is going to happen simply, and will necessitate war. Iraq is quadfurcated into the Iraqi Shia, Iraqi Sunni, Kurd areas, and the central city-state of Baghdad, if that can be viable. Saudi Arabia loses control over its eastern part of the peninsula, gets relegated only to its Islamic places of worship and Riyadh, under the old name of the region, Hejaz, but spins off the northern homeland and southern homeland territories to the native Bedouins who have owned them for centuries. The monarchy of the Saud family collapses. Yemen finds itself a beneficiary of

---

27. Mahdi Darius Nazemroaya, "Plans for Redrawing the Middle East: The Project for a "New Middle East"," *Global Research*, October 1, 2006, available at: <http://www.globalresearch.ca/plans-for-redrawing-the-middle-east-the-project-for-a-new-middle-east/3882>.

28. "Peters' 'Blood Borders' Map," *Armed Forces Journal*, October 2, 2013, available at: <http://armedforcesjournal.com/peters-blood-borders-map/>.

29. Nazemroaya, n. 27, 23

the southern districts of Saudi Arabia that have Shia populations. Israel gains firm control of the West Bank, which it has vowed to never release, but a “New Palestine” sliver of territory is created east of the West Bank that has the river Jordan as a natural border with Israel. Jordan will need to give up some territory for that, but will gain from the northern areas of present Saudi Arabia and a route to the sea via the Gulf of Aqaba. Jordan gaining territories from Saudi Arabia is really a partial retake of the territories it owned in the 19th century, because the present Hashemite Kingdom owned the greater part of the Arabian peninsula at one time, including the holy site of Mecca that it ruled non-stop since the 10th century till it was overtaken by the Kingdom of Saud in 1924, and pushed northwards. The incentive for Jordan to give up a sliver of land for a Palestinian state is the greater land it will acquire from Saudi Arabia, as well as a route to the ocean. The Palestinians are likely to jump on board, seeing an attractive chance without any obligation or compromise with Israel. This will also put to rest the two-state idea about Israel and Palestine, and give each country its own state.

The rearrangement of the Muslim Mideast affects its immediate and turbulence-ridden Muslim neighbours to the east – Pakistan and Afghanistan. Pakistan breaks down, Kashmir reverts to India, and the Federally Administred Tribal Area (FATA) goes to Afghanistan which always laid claim to it. Baluchistan gets the present-day Baluchistan province, including Quetta, and other Baluch areas in Iran, but Iran gets the Shia region of Herat

**The rearrangement of the Muslim Mideast affects its immediate and turbulence-ridden Muslim neighbours to the east – Pakistan and Afghanistan. Pakistan breaks down, Kashmir reverts to India, and the Federally Administred Tribal Area (FATA) goes to Afghanistan which always laid claim to it. Baluchistan gets the present-day Baluchistan province, including Quetta, and other Baluch areas in Iran, but Iran gets the Shia region of Herat in Afghanistan, over which Iran has gone to war against Afghanistan many times in the 19th century and earlier.**

**Over the past 15 years, Saudi Arabia has been slowly buying major weapons from the US, such that Saudi Arabia arguably spends more on foreign defence acquisitions than India, which is a country ten times larger.**

in Afghanistan, over which Iran has gone to war against Afghanistan many times in the 19th century and earlier. The creation of Baluchistan helps the USA get a direct route to Afghanistan via a friendly area. West Punjab and Sindh either become independent states, which they once were, or else become protectorates of India, mainly because Pakistan has no historical reason to exist, with "Pakistan" not even being a historical name for that part.

Yet it stands to common sense that such immense redrawing of borders cannot happen without war. "This constructive chaos –which generates conditions of violence and warfare throughout the region, would, in turn, be used so that the United States, Britain, and Israel could redraw the map of the Middle East in accordance with their geo-strategic needs and objectives."<sup>30</sup> India stands to benefit, as well.<sup>31</sup> The concept of a new Mideast resonates with Henry Kissinger's belief of never ending war to retain primacy.<sup>32</sup> Further, the map confirms the thinking and actions of successive US governments. Thus, West Asia is headed towards a realignment of borders to better reflect the ethnic status of the people. By so doing, existing Muslim nations would stand weakened, Israel would feel less threatened, and the oil of the region would firmly and logically come largely under the management and control of the Western oil companies.

The 9/11 event was a wake-up call for America, in this regard, to retaliate across the entire Middle East against elements that sought the destruction

---

30. Ibid.

31. But, without a shade of doubt, this rearrangement will benefit India, secure India's security both vis-à-vis Pakistan and China, and improve India's economy. By the break-up of Pakistan, the nexus between Pakistan and China will disappear, the dual threat of attack by Pakistan and China on India will disappear, China will be deprived of the China-Pakistan Economic Corridor (CPEC), and this will make Chinese shipping through the Indian Ocean more vulnerable to Indian interdiction in time of war. Hence, it is actually of paramount importance for India that Pakistan is broken down.

32. Greg Grandin, "How Henry Kissinger Helped Make Endless War an All-American Tradition," *In These Times*, November 9, 2015, available at: <http://inthesetimes.com/article/18581/henry-kissinger-greg-grandin-us-military-air-power>.

of the USA. Hence, the revenge of the USA is most natural. All present events in the Middle East must be looked at with this new map in perspective, because they tell the tale of the motivation behind the present events – from Pakistan and Afghanistan to Libya.

### SAUDI MILITARY BUILD-UP AND THE SHIA CRESCENT

Over the past 15 years, Saudi Arabia has been slowly buying major weapons from the US, such that Saudi Arabia arguably spends more on foreign defence acquisitions than India, which is a country ten times larger.<sup>33</sup> The whole purpose of Saudi Arabia in buying those weapons, and for the US to sell them, is to create an opposition against a more populous Shia Iran and the Shia crescent of Baluchistan, Bahrain, Yemen, Syria's Assad, and Hezbollah. Note that the UAE and Bahrain forbid Iranian tourists, and Shia-Sunni friction has been rife in Bahrain and Kuwait for decades going back to the Iran-Iraq War.<sup>34</sup> The whole region is now polarising into an Iran-dominated Shia group vs. a Saudi Wahhabi-led Sunni group. Saudi Arabia has pulled the Sunni and nuclear Pakistan into this group, while it already has the involvement of Egypt, another major power in West Asia.<sup>35</sup>

The Saudi-Iran (read Sunni-Shia) rivalry has resulted in a re-pivot by Saudi Arabia and Iran across all major Muslim populations in all countries in the Middle East and South Asia, and their reach has extended to distant

**It is notable that Sunni-Shia rivalry is so endemic that Indonesia already simmers with anti-Shia sentiment, such that only 0.5 percent of the population is Shia, while Malaysia bans the Shia faith altogether, while outwardly claiming to be secular.**

---

33. "Top 10 Largest Arms Importer Countries in the World," World Knowing, accessed November 2016, available at: <http://worldknowing.com/top-10-largest-arms-importer-country-in-the-world/>.

34. The author was present in Kuwait in the early 1980s when the Iranian bombings were reported there.

35. "Pakistan joins Saudi-Led Anti-Terror Coalition," *Sputnik*, December 18, 2015, available at: <https://sputniknews.com/politics/20151218/1031937789/pakistan-join-saudi-coalition.html>.

Southeast Asian countries such as Malaysia.<sup>36,37</sup> It is notable that Sunni-Shia rivalry is so endemic that Indonesia already simmers with anti-Shia sentiment, such that only 0.5 percent of the population is Shia, while Malaysia bans the Shia faith altogether, while outwardly claiming to be secular.<sup>38,39</sup>

The events in January 2016, when Saudi Arabia hanged a Shia cleric, after which the Iranians retaliated by assaulting the Saudi Embassy in Tehran, followed by Saudi Arabia severing diplomatic ties with Iran, are precursors of more serious events to come. As a consequence, and without a shade of doubt, Russia stood to gain by supplying arms to the Shia powers, and has slowly positioned itself to side with the group that is perceived to be anti-US, to balance the power of, and preempt, the US' hegemony in the region. The rest, such as the USA removing the arms embargo against Iran is partly smoke and mirrors and bluff, but arguably with an amazing masked purpose of allowing Iran to build up its military muscle so that the two major powers in West Asia – Saudi Arabia and Iran—along with their smaller allies, can battle it out, to surely dismember each others' ability to ever raise their heads again against the United States or Israel. West Asia would then be finally and successfully defanged for decades, may be centuries, to come.

In fact, it is to be observed that the first large purchases of the Iranian regime, after the US sanctions were removed, comprised the armaments from Russia.<sup>40</sup> As shocking as this may sound to Russia, this is probably just what the US wants – so that Iran and Saudi Arabia may eventually feel confident enough go to war and downgrade each other. There is seemingly a larger geopolitical plot to this than meets the eye.

---

36. Abha Shankar, "The Saudi-Iran Rivalry and Sectarian Strife in South Asia," *The Diplomat*, October 6, 2016, available at: <http://thediplomat.com/2016/10/the-saudi-iran-rivalry-and-sectarian-strife-in-south-asia/>.

37. "Saudi Royal Family Gave \$681M to Malaysian PM Who Banned Shia Islam," *NewsRescue*, January 30, 2016, available at: <http://newsrescue.com/saudi-royal-family-gave-681m-to-malaysian-pm-who-banned-shia-islam/#axzz4MdLrJKh4>".

38. Ethan Harfenist, "Anti-Shia Sentiment Simmers Ahead of Indonesia's Election," *Vice News*, May 26, 2014, available at: <https://news.vice.com/article/anti-shia-sentiment-simmers-ahead-of-indonesias-election>.

39. "In Otherwise Tolerant Malaysia, Shiites are Banned," *Al Arabiya News*, January 14, 2011, available at: <https://www.alarabiya.net/articles/2011/01/14/133463.html>.

40. Adam Kredon, "Iran to Spend \$8 Billion on Russian Weapons and Warplanes," *The Washington Free Beacon*, February 16, 2016, available at: <http://freebeacon.com/national-security/iran-spend-8-billion-russian-weapons/>.

Further, the war in Yemen is solely a war between the Houthis, who belong to the Zaydi Shia sect, supported by Iran, and the Sunnis, who hold the reins to the government with Saudi support. By itself, Saudi Arabia has poor fighting skills, and will need to buy professional armies, such as those of Pakistan and Egypt, to fight on its side in a future Shia-Sunni war. Thus, Saudi Arabia has tried hard to get Egypt and Pakistan to enter the war along with a coalition of nine other Sunni nations. Pakistan has resisted, and Egypt has dragged its feet.<sup>41,42</sup>

**Though Israel would like to see its enemies destroyed without suffering from the side effects itself, there is no effective alternative to the present strategy for the foreseeable future because the present events are working quite successfully.**

Though Israel would like to see its enemies destroyed without suffering from the side effects itself, there is no effective alternative to the present strategy for the foreseeable future because the present events are working quite successfully. Israel would be happy to see its Muslim adversaries destroy each other. And, as for itself, Israel now has immense confidence that it can shoot down the incoming missiles or nuclear-tipped rockets that Iran may launch at it. Israel's new David's Sling is more effective than the US' Patriot missile, and has been offered to the Indian defence forces; all six of the Sunni Gulf Cooperation Council (GCC) members are interested in procuring David's Sling to protect themselves from Iranian Shia rockets.<sup>43</sup> That said, Israel would shed no tears if Iranian bombs are used on the Sunnis of Saudi Arabia and Pakistan, and the Pakistani Sunni bomb is used on Iran via Saudi Arabia.

---

41. Kamran Haider and Natalie Obiko Pearson, "Pakistan Resists Saudi Troop Request for Yemen; Seeks Cease-Fire," *Bloomberg*, April 9, 2015, available at: <http://www.bloomberg.com/news/articles/2015-04-10/pakistan-calls-for-yemen-cease-fire-as-saudi-arabia-seeks-troops>.

42. David Kirkpatrick, "Egypt Says It May Send Troops to Yemen to Fight Houthis," *The New York Times*, March 26, 2015, available at: [http://www.nytimes.com/2015/03/27/world/middleeast/saudi-arabia-houthis-yemen.html?\\_r=0](http://www.nytimes.com/2015/03/27/world/middleeast/saudi-arabia-houthis-yemen.html?_r=0).

43. "David's Sling," Wikipedia, available at: [https://en.wikipedia.org/wiki/David%27s\\_Sling](https://en.wikipedia.org/wiki/David%27s_Sling).

**And so, the US is confident that Russia will not be able to sustain a prolonged entanglement in Syria, hurting as it is from the economic sanctions imposed by the West. It knows that Russia will desire to forge peace quite soon.**

### **RUSSIA'S GAME PLAN AND PRESENCE, AND THE SAUDI TRAP**

The entrance of Russia into Syria is no sorrow, either, for the USA, even though it must officially object to the Russian intervention. The fact is that any engagement in a war in West Asia will economically drain Russia, much more than it drained the US in Iraq and Afghanistan to the tune of \$4.8 trillion.<sup>44</sup> To wit, the US presidential candidate, Donald Trump, claims that the USA spent \$6 trillion [more than thrice the entire 2015 Gross Domestic Product (GDP) of India], thereby draining US infrastructure repair and investment.<sup>45</sup> The US could withstand this economic depletion, much as it has already withstood 15 years of Mideast turmoil, but a feeble Russia would be consumed by it. This is why we partly saw Russia scurry towards a ceasefire in Syria (September 2016). And so, the US is confident that Russia will not be able to sustain a prolonged entanglement in Syria, hurting as it is from the economic sanctions imposed by the West. It knows that Russia will desire to forge peace quite soon. Con Coughlin writes,

The Russian economy already has enough difficulties without having to bear the cost of Mr. Putin's latest act of military aggression. Moscow's invasion of Afghanistan in the 1980s ultimately bankrupted the Soviet Union: the Syrian conflict could have a similarly catastrophic effect on modern Russia.<sup>46</sup>

But, for the US, it is just as well that Russia supplies armaments to the Shia fighters, because, in that event, any war with the better-armed Sunnis could

---

44. "Economic Costs" Watson Institute for International and Public Affairs, Costs of War Project, updated September, 2016, available at: <http://watson.brown.edu/costsofwar/costs/economic>.

45. Tim Rains, "Trump: We Spent \$6 Trillion in the Middle East, We Could Have Rebuilt Our Country Twice," *Real Clear*, September 26, 2016, available at: [http://www.realclearpolitics.com/video/2016/09/26/trump\\_we\\_spent\\_6\\_trillion\\_in\\_the\\_middle\\_east\\_we\\_could\\_have\\_rebuilt\\_our\\_country\\_twice.html](http://www.realclearpolitics.com/video/2016/09/26/trump_we_spent_6_trillion_in_the_middle_east_we_could_have_rebuilt_our_country_twice.html).

46. Con Coughlin, "Russia's Failed Adventure in Syria," Gatestone Institute, December 2015, available at: <https://www.gatestoneinstitute.org/6990/russia-failure-syria>.

be bloodier. There is precedence in this: the US supported Iraq for eight years in its war against Iran, as a proxy war for the US, aiding Sunni Saddam Hussein and supplying him with weapons of mass destruction, resulting in deeper destruction of the Muslim world, eventually precipitating the destruction of Iraq after the Iraq-Iran and Gulf Wars. Thus, the US finds it best to make the Sunnis fight the Shias rather than have its own troops fight both, much as advocated by Hillary Clinton. Though outwardly, the US backs the Sunnis, the subtle nuance in arming the Shias is achieved through the Iran deal that released US\$ 150 billion in Iranian funds that were tied up, and subsequent Russian military supplies to Iran that are more possible with this vast sum of money released.<sup>47</sup> Though Russia thinks it is (i) making money by selling armaments to Iran; and (ii) that it can project itself as a player in the Middle East, the truth is that the USA is outwitting Russia by far, since it has more staying power and stamina.

Russia's game plan in the Middle East is to feed its sense of self and remind itself of the great global power it once was, hoping that it can sustain itself over the long haul, obtain acceptance from the Shias, establish a permanent presence in West Asia, and hope that its economy will one day become strong enough to sustain its projection of power. As analysed by the Orient Advisory Group,

Currently, the regional dynamic is showing that the conflict has entered a phase in which Russia plays for the Iranians the same role the US has played for the Arabs. It was the US that used military force to liberate Kuwait from

---

47. Harold Rhode, "The US Role in the Sunni-Shi'ite Conflict," Gatestone Institute, March 2013, available at:<https://www.gatestoneinstitute.org/3708/the-us-role-in-the-sunni-shiite-conflict>.

**In the case of Pakistan, Trump believes that Pakistani nuclear abilities must be secured, while Hillary worries that the nukes could fall into the hands of *jihadis* by way of a military coup for which something should be done.**

Iraqi forces in 1991. Now, it is the Russians who use military force to achieve the Iranian goal of keeping Assad in power.<sup>48</sup>

This falls right into the American game plan of fuelling Muslim parochial sentiments and the arms race between the Shias and Sunnis. Hence, Russia's presence is making little difference to the overall US' game plan, and may, in fact, be accelerating it by Russian arms going to Iran. The rapprochement between Turkey and Russia is, thus, neither here nor there in the greater

Sunni-Shia conflict, evidently conceived and orchestrated by the USA.<sup>49</sup> In fact, Saudi Arabia has worked to undermine Russian oil revenues by first raising oil production and preserving its share of the European oil market in competition with Russia, the world's top oil producer.<sup>50</sup>

The situation is all the more convoluted because Saudi Arabia and the USA have conspired to draw Russia into the region. Peter Lvov writes, "Apparently, Washington has decided to crush Russia along with Iran and Syria, without waiting for the arrival of Hillary Clinton as a newly elected head of state."<sup>51</sup>

Now, by offering to cut back on production and raise oil prices, Saudi Arabia is offering Moscow lucrative contracts. However, as soon as Moscow finishes Saudi Arabia's bidding, the latter falls back to looking after its own interests. "Saudi Arabia has tried to play this trick on Russia time and time again, promising lucrative contracts that were retracted immediately once

48. "Putin's Game Plan in the Mid-East," July 2016, available at: <http://mebriefing.com/?p=2363>.

49. Though a strange rapprochement that has only come about after the failed coup attempt, where the US is alleged to have had a hand, for which Prime Minister Erdogan was tipped off by the Russians, which helped Erdogan save his own life. Yet, Turkey is a member of NATO that is nervous of the Russian bear.

50. Tim Dais, "Saudi Arabia Is Forced to Raise Cash as Oil Prices Tank," *Forbes Business*, September 23, 2016, available at: <http://www.forbes.com/sites/timdaiss/2016/09/23/saudi-arabia-is-forced-to-raise-cash-as-oil-prices-tank/#5597b755f079>.

51. Peter Lvov, "Saudi Arabia is Setting a Trap for Moscow Yet Again," *New Eastern Outlook*, July 19, 2016, available at: <http://journal-neo.org/2016/07/29/saudi-arabia-is-setting-a-trap-for-moscow-yet-again/>.

Saudi Arabia got what it was after.”<sup>52</sup> The indications from the past behaviour are that Russia will believe the Saudi promises this time also, and, thus, fall into yet another trap of Saudi Arabia, which is to send false signals to Russia, make it believe it has regained superpower status in the Mideast, and get it away from breathing down Saudi Arabia’s neck, besides plotting the long-term setback to Russia’s economy by increasing oil production any time it wants.<sup>53</sup> And once Moscow is economically weak, it will not be able to deliver to its allies in the region (read Iran in the large part, while Syria is only a proxy of Iran).<sup>54</sup>

**In the event that the Iran-US deal is cancelled, Saudi Arabia will feel emboldened to attack Shia interests economically and militarily, much as it has already demonstrated in Yemen. In the event that the ISIS is defeated, the Shias will feel emboldened. In either case, the war in the Mideast will perpetuate, out of which a new Mideast will surely emerge.**

#### **THE US PRESIDENTIAL RACE, 2016**

As interesting as the presidential race was for the personality attacks and accusations by both sides on character flaws and deceptive actions, the deeper reading is that the election of either candidate would make no difference to the overall US game plan in West Asia and the Middle East, in general, or, for that matter, Pakistan. Both candidates proposed to further pursue US interests in the Mideast: Trump, by sending in ground troops and escalating the aerial bombing; Hillary, by funding local militias and armies to take each other out, and by enforcing a possible no-fly zone over Syria. In the case of Pakistan, Trump believes that Pakistani nuclear abilities must be secured, while Hillary worries that the nukes could fall into the hands of *jihadis* by way of a military coup for which something should

---

52. Ibid.

53. But Saudi Arabia’s game can only be temporary, because Russia is a country extremely rich in all types of natural resources. This signals again that the House of Saud is throwing punches above its weight, and, thus, cannot last too long before it itself frazzles to create the new countries in the Arabian peninsula.

54. Lvov, n. 51.

be done.<sup>55</sup> Both candidates, though riding different horses, and coming from different paths, promised to keep the Mideast on full boil for the next four years, treading slowly towards the “new” Mideast. All the while, it is firmly believed in many quarters that Hillary Clinton receives funds from foreign governments through the Clinton Foundation, which eventually sells America out to foreign governments and fulfils their bidding rather than advance the USA’s real interests, ensuring that Clinton assists the wars of foreign governments going on in the Middle East.<sup>56</sup>

In the event that the Iran-US deal is cancelled, Saudi Arabia will feel emboldened to attack Shia interests economically and militarily, much as it has already demonstrated in Yemen. In the event that the ISIS is defeated, the Shias will feel emboldened. In either case, the war in the Mideast will perpetuate, out of which a new Mideast will surely emerge.

## CONCLUSION

It is seen that American complicity in the Middle East is complete. And, in the way in which events are unfolding, it appears that all events are playing perfectly into the intentions of the US, i.e., to see the Arabs and Muslims eventually destroy each other in a Shia-Sunni Armageddon, if you may, to generate new geographical contours in the region. Further, these intentions are greatly aligned with the wishes of the Christian-dominated nations and Israel. It is evident that America is waging a secret war in the Middle East, because its verbal claims are quite the opposite or quite inexplicable, and all the nations – whether they are Shia or Sunni – are apparently playing into the USA’s hands.

Russia may try to exert a presence in the Mideast, and consider itself as a major player, but the truth is that Russia cannot reverse the overall game plan of the USA, which is to see Sunnis and Shias battle and damage each

---

55. Chidanand Rajghattai, “Hillary Worries about Jihadi Coup and Pakistani Suicide Nuclear Bombers,” *The Times of India*, October 1, 2016, available at: <http://timesofindia.indiatimes.com/world/us/Hillary-worries-about-Jihadi-coup-and-Pakistani-suicide-nuclear-bombers/articleshow/54613062.cms>.

56. William Douglas and Anita Kumar, “Why the Clinton Foundation and Foreign Money are an Issue,” *McClatchy DC*, June 22, 2016, available at: <http://www.mcclatchydc.com/news/politics-government/election/article85253837.html>

other. Thus, whether Russia supplies arms to Iran or not, the result will be identical, in that the Shia and Sunni moon will turn red with blood. The argument was further presented that no matter which candidate won the US presidential race, it would make no difference to the outcome in the Middle East, because both candidates propose continued US involvement in the Middle East with an aim of escalating the war, at least to defeat the ISIS, which they themselves likely created in the first instance. The plot is perfect.

While Israel, to the west of Muslim West Asia, is doing all in its power to weaken the Arabs and Muslim powers, India, to the east, must realise that a Shia-Sunni war in West Asia will likely be the denouement of a chapter that sees Pakistan considerably weakened and diminished. Thus, the situation in the Middle East is not something for India to fear, but to consider as an opportunity for itself, and prepare to fight a prolonged war on the western front without fear.

**Fig 1: The New Middle East**



# INDEX

## VOL. 1, NO. 1. MONSOON 2004 (JULY-SEPTEMBER)

1. A Great Leap Forward: Air Operations at Sea  
*Arun Prakash* 1-11
2. The Trinity of Air Power: Doctrine, Strategy and Technology  
*Ajit Bhaonani* 13-41
3. The Essence of Aerospace Power: What Leaders Need to Know  
*M. Drew* 43-55
4. Air War in Kosovo  
*Vinod Patney* 57-77
5. Air-land Warfare: The Imperatives of Jointness  
*V.G. Patankar* 79-87
6. Air Power in Afghanistan War  
*Kapil Kak* 89-108
7. Pakistan's Nuclear Threshold and India's Options  
*Gurmeet Kanwal* 109-124
8. China's Space Programme: An Overview  
*K. K. Nair* 125-156
9. Some Reflections on The IAF  
*Jasjit Singh* 157-179

## VOL. 1, NO. 2. WINTER 2004 (OCTOBER-DECEMBER)

1. Force Modernisation Planning Challenges  
*Jasjit Singh* 1-28
2. Nine Decades of Air Warfare  
*B.K. Bishnoi* 29-48
3. Strategising Aviation Industry  
*S.R. Deshpande* 49-72
4. Future Wars and Aerospace Power  
*Vinod Patney* 73-98
5. Naval Policy and Strategy of Pakistan  
*V. Sakhujia* 99-123
6. China's Aircraft Carrier Ambitions: Seeking Truth from Rumours  
*Ian Storey and You Ji* 125-146
7. Weaponisation of Space  
*Manpreet Sethi* 147-167
8. Indo-Russian Cooperation in Military Aviation: An Overview  
*Bharat Kumar* 169-193

## VOL. 2, NO. 1. SPRING 2005 (JANUARY-MARCH)

1. Network-centric Warfare: SME Fundamentals  
*Prem Chand* 1-24
2. Space Theory and Doctrines  
*K.K. Nair* 25-52
3. Air Power in Land Operations  
*Gurmeet Kanwal* 53-71
4. Satellite Imagery for Air Operations  
*D.N. Ganesh* 73-90
5. Russian Aviation Industry Trends  
*Deba R. Mohanty* 91-112
6. Strategic Leadership: Defining the Challenge  
*Michael Guillot* 113-128
7. Pakistan's Space Capabilities  
*Ajey Lele* 129-148
8. Arms Trade Offsets: The Key to Energise Our Defence Industry  
*Jasjit Singh* 149-177

## INDEX

---

### **VOL. 2, NO. 2. SUMMER 2005 (APRIL-JUNE)**

1. Precision Strike and Its Influence on Future Wars  
*V. Patney* 9-24
2. RMA and Aerospace Technologies (Part I)  
*M. Matheswaran* 25-46
3. Kashmir, Covert War and Air Power  
*Jasjit Singh* 47-67
4. Air Power and Special Operations  
*Saikat Datta* 69-95
5. Mackinder in the Aerospace Age  
*Anil Trikha* 97-117
6. Strategic Planning for the Air Force  
*Deborah L. Westphal, Richard Szafranski and Gregory S. Parnell* 119-139
7. Shrinking, Flourishing or Both? Global Defence Industry in Transition  
*Deba R Mohanty* 141-160
8. Time: The Critical Dimension in War  
*Ajay Singh* 161-179

### **VOL. 2, NO. 3. MONSOON 2005 (JULY-SEPTEMBER)**

1. Indo-US Relations in a Changing World  
*K. Subrahmanyam* 1-21
2. IAF and UN Peace-keeping Operations  
*Kapil Kak* 23-36
3. The Congo Diary  
*Charanjit Singh* 37-47
4. RMA and Aerospace Technologies (Part II)  
*M. Matheswaran* 49-71
5. Network-Centric Warfare  
*Rohit Varma* 73-90
6. Merging Frontiers of Air and Space  
*K.K. Nair* 91-115
7. Planning to Win  
*J.P. Humerwadel* 117-157
8. Nuclear Strategies in the Age of Missile Defences  
*Manpreet Sethi* 159-184

### **Vol. 2, No. 4. Winter 2005 (October-December)**

1. Indian Air Force in the Evolving Security Environment  
*S.P. Tyagi* 1-15
2. Joint Operations in Modern Warfare: Place, Role, and Impact of Air Power  
*Sartaj Bedi* 17-33
3. Static Principles of War in a Changing World  
*Sanjay J. Singh* 35-55
4. Planning Military Power for the Future  
*Jasjit Singh* 57-72
5. Centres of Gravity: Relationship with Effects-based Operations and Campaign Planning  
*A.S. Bahal* 73-90
6. Air Power and Asymmetric Challenges to India  
*T.D. Joseph* 91-112
7. ISR for Air Operations  
*T.M. Asthana* 113-128
8. ISR Doctrine, Technologies and Organisation for Air Operations  
*Bharat Kumar* 129-154
9. China's Nuclear Command and Control  
*Stephen Polk* 155-174

### **Vol. 3, No. 1. Spring 2006 (January-March)**

1. Joint Operations in Modern Warfare  
*M. Sabharwal* 1-30

## INDEX

---

2. Brahmastra of Future Wars "The Brahmos"  
*R.S. Nagra* 31-42
3. International Defence and Military Cooperation  
*A. Muthanna* 43-61
4. Trends in Defence Expenditure: India, China and Pakistan  
*V. N. Srinivas* 63-82
5. Military Modernisation in China: Some Implications for India  
*T.D. Joseph* 83-109
6. Pakistan's Conventional Arms Acquisitions: Priorities and Prospects  
*Shalini Chawla* 111-133
7. Indian Civil Aviation: A Revolution in the Making  
*R. Chidambaram* 135-150
8. In Search of High Ground: Air Power Trinity and the Decisive Potential of Air Power  
*David K. Edmonds* 151-177

### **VOL. 3, NO. 2. SUMMER 2006 (APRIL-JUNE)**

1. Management of Our Defence: Role of the COSC  
*Jasjit Singh* 1-28
2. Budgetary Reform for Sustained Modernisation  
*Amiya Kumar Ghosh* 29-58
3. Indian Defence Industry: Insulation Gradually Melting  
*A. Vinod Kumar* 59-84
4. Satellite Reconnaissance, ISR and Counter-measures  
*A.S. Bahal* 85-101
5. UAVS: Capabilities and Trends: A Case Study of the USA, Europe and Israel  
*Rajiv Goyal* 103-131
6. Beyond Utility Targeting: Toward Axiological Air Operations  
*W.W. Wijninga and Richard Szafranski* 133-155
7. Ethics and Values in Military Leadership  
*Arjun Subramaniam* 57-176

### **VOL.3 , NO. 3. MONSOON 2006 (JULY-SEPTEMBER)**

1. Indo-US Strategic Relations: The Nuclear Dimension  
*Manpreet Sethi* 1-26
2. India-China Relations: An Overview  
*Kapil Kak AVSM VSM (Retd)* 27-47
3. China's War Concept  
*Gurmeet Kanwal (Retd)* 49-74
4. RMA with Chinese Characteristics  
*Vinod Anand (Retd)* 75-94
5. Doctrine, Strategy and Nuclear Weapons  
*Rajesh Rajagopalan* 95-108
6. Military Aerospace Supply Chain  
*Samir Chabra* 109-121
7. Indian Defence Procurement Policy  
*V.N. Srinivas* 123-138
8. The Epistemology of War Gaming  
*Robert C. Rubel* 153-178

### **VOL. 1, NO. 2. WINTER 2006 (OCTOBER-DECEMBER)**

1. A Vision of India's Maritime Power in the 21<sup>st</sup> Century  
*Arun Prakash* 1-12
2. Strategic Role of Air Power: How we Need to Think, Train and Fight in the Coming Years  
*Arjun Subramaniam* 13-32
3. Interpreting the Lebanon War of 2006  
*Jasjit Singh* 33-61
4. Leveraging Space Capabilities for India's Defence  
*D.C. Kumaria* 63-87
5. Defence Manpower in India: Some Salient Issues  
*Gurmeet Kanwal* 89-107

## INDEX

---

6. Nuclear Security: Critical for Future Nuclear Expansion  
*Manpreet Sethi* 109-134
7. Logistics Management Practices  
*Rahul K. Bhonsle* 135-153
8. Has IT worked? The Goldwater Nichols Reorganisation Act  
*James R. Locher III* 155-182

### VOL. 2, NO. 1. SPRING 2007 (JANUARY-MARCH)

1. Future of Aerospace in India: Status and Strategy  
*M.M. Pallam Raju* 1-14
2. Aerospace Power and Integrated Operations  
*N.A.K. Browne* 15-36
3. Strategic Roles of Air Power: Think, Plan, Equip and Train for IT  
*A.S. Bahal* 37-56
4. Interpreting China's National Defence Policy  
*Gurmeet Kanwal* 57-85
5. Offensive Air Power in the High Mountains  
*R. G. Burli* 87- 105
6. AWACS: The Pivot of Aerospace Power  
*Atul Kumar Singh* 107-137
7. Pakistan's Defence Spending: Some Trends  
*Shalini Chawla* 139-157
8. The Essence of Coercive Power: A Primer for Military Strategists  
*Karl Mueller* 159- 174

### VOL. 2, NO. 2. SUMMER 2007 (APRIL-JUNE)

1. The Challenges Ahead for India's Foreign Policy  
*Shivshankar Menon* 1-10
2. Strategic Reach - Strategic Depth and the Question of the IAF's Strategic Posture  
*Jasjit Singh* 11-26
3. India's Nuclear Doctrine: The Basis for Credible Deterrence  
*Manpreet Sethi* 27-56
4. China's ASAT Test: Implications and Options  
*K. K. Nair* 57-74
5. Force Multipliers and Transformation of Air Defence  
*Atul Kumar Singh* 75-106
6. Military Power and Strategy of Iran  
*Shelly Johnny* 107-132
7. US Defence Industry Trends  
*Ashok Sharma* 133-156
8. The Impact of New Technologies in the Military Arena: Information Warfare  
*Paulo Fernando Viegas Nunes* 157- 178

### VOL.2 , NO. 3. MONSOON 2007 (JULY-SEPTEMBER)

1. Aerospace Power in a Changing National Security Environment  
*F.H. Major* 1-12
2. Winning the Next War-Jointly  
*Jasjit Singh* 13-28
3. Principles of War: Do They Require a Rethink?  
*A.V. Vaidya* 29-44
4. Effect-Based Operations  
*Vinod Patney* 45-58
5. From Winning to Deterring: China's Changing Discourse on Defence  
*Srikanth Kondapalli* 59-74
6. Pakistan's Nuclear Doctrine and Strategy  
*Manpreet Sethi* 75-109
7. Iranian Political System and the IRGC  
*Shelly Johnny* 111-137

## INDEX

---

8. Russia's Air Defence Strategy  
*Atul K. Singh* 139-162
9. The Information-based RMA and the Principles of War  
*Leonard G. Litton* 163-180

### **VOL. 2, NO. 4. WINTER 2007 (OCTOBER-DECEMBER)**

1. Financing Force Modernisation  
*Vinod K. Misra* 1-11
2. Airspace Management: A Synergised Approach  
*Atul K. Singh* 13-35
3. Roles and Missions of the Indian Air Force-2032 AD  
*Vinod Patney* 37-55
4. Change and Continuity in Warfare: An Indian Experience  
*P.K. Mallick* 57-77
5. Disinformation and National Defence  
*V.K. Verma* 79-94
6. Network-Centric Warfare and its Strategic Implications  
*M. Matheswaran* 95-119
7. Leveraging Outer Space for National Security  
*Ranjana Kaul* 121- 145
8. Pakistan's Nuclear Posture: Implications of Indo-US Cooperation  
*Peter R. Lavoy* 147-174

### **VOL. 3, NO. 1. SPRING 2008 (JANUARY-MARCH)**

1. National Governance and Internal Security  
*N.N. Vohra* 1-16
2. Joint Capability Requirements of India's Armed Forces: 2008-2033  
*Kapil Kak* 17-32
3. Military Manpower: Managing Quality and Costs  
*Verghese Koithara* 33-60
4. Defence Finance  
*A.V. Vaidya* 61-76
5. Towards Continuous Military Education in the IAF: a Need for Yesterday  
*M. Misra* 77-105
6. Space Security: Some Issues of Militarisation and Weaponisation  
*Kaza Lalitendra* 107-135
7. Interface Between Conventional and Nuclear Deterrence: A Case for the Indian Subcontinent  
*G.D. Bakshi* 137-157
8. False Gospel for Air Power Strategy? A Fresh Look at Giulio Douhet's "Command of the Air"  
*Michael D. Pixley* 159-178

### **VOL. 3, NO. 2. SUMMER 2008 (APRIL-JUNE)**

1. Indian Air Force in the Decades Ahead  
*F.H. Major* 1-8
2. Force Structuring and Doctrines of the IAF  
*Bhashyam Kasturi* 9-25
3. Strategic Role of Air Power  
*Sanjeev Bedi* 27-45
4. Electronic Warfare in the 21<sup>st</sup> Century  
*Sanjay Poduval* 47-73
5. Modernisation of the Pakistan Air Force  
*Shalini Chawla* 75-96
6. Inside the Labyrinth: NATO's Mission in Afghanistan and Continuing Relevance of Pakistan  
*Shelly Johnny* 97-122
7. Survivability of the Arsenal: The Essence of Successful Nuclear Deterrence  
*Manpreet Sethi* 123-146
8. Planning for Legitimacy: A Joint Operational Approach to Public Affairs  
*Tadd Sholtis* 147-168

## INDEX

---

### **VOL. 3, NO. 3. MONSOON 2008 (JULY-SEPTEMBER)**

1. Aerial Warfare: the Indian Way  
*V.K. Verma* 1-13
2. Use of Air Power in Sri Lanka: Operation Pawan and Beyond  
*Arjun Subramaniam* 15-35
3. Army Aviation in India  
*Rajeev Ghose* 37-63
4. Dragon in Space: Implications for India  
*Kaza Lalitendra* 65-98
5. Nuclear Deterrence and Conventional War: A Test of India's Nuclear Strategy  
*Manpreet Sethi* 99-118
6. Defence Procurement Challenges and New Paradigm Shift  
*J.V. Singh* 119-144
7. Leveraging Offsets in Arms Trade: Options for India  
*V. N. Srinivas* 145-170

### **VOL. 3, NO. 4. WINTER 2008 (OCTOBER-DECEMBER)**

1. The Rocky Road to Full Jointness  
*Benjamin S. Lambeth* 1-34
2. Indian Air Force: Building Indigenous Research Capability  
*T.M. Asthana* 35-50
3. Why and How of Air Dominance  
*A.V. Vaidya* 51-66
4. Pakistan's Navy: New Capabilities, New Roles?  
*Shalini Chawla* 67-93
5. Weaponisation of Outer Space and National Security: Faultlines in the Law  
*G.S. Sachdeva* 95-115
6. Ballistic Missile Defence: Strategic Issues and Dilemmas  
*Anand Sharma* 117-149
7. Defence Transformation: An Appraisal  
*P.K. Mallick* 151-179

### **VOL. 4, NO. 1. SPRING 2009 (JANUARY-MARCH)**

1. National Defence and Aerospace Power  
*Fali H. Major* 1-5
2. Building Air Dominance  
*T. M. Asthana* 7-21
3. Future Shape, Size and Role and Shape of Indian Air Force  
*P.K. Mehra* 23-42
4. Analysis and Assessment of Military Operational Requirement of AWACS in IAF  
*A.B.S. Choudhry* 43-62
5. China's Space Power  
*Srikanth Kondapalli* 63-78
6. Missile Defence: Concepts and Technologies  
*Anand Sharma* 79-111
7. The Evolution of the Cruise Missile Discourse: A Conceptual Construct  
*Sitakanta Mishra* 113-140
8. Transformation in Military Logistics  
*J.V. Singh* 141-174

### **VOL. 4, NO. 2. SUMMER 2009 (APRIL-JUNE)**

1. Employment of Aerospace Power: Regional Imperatives for Change  
*Fali Homi Major* 1-8
2. India's Tibet Problem  
*Prem Shankar Jha* 9-22
3. China's Air Force in the Coming Decades: Trends and Implications  
*Rajiv Ghose* 23-50
4. Force Modernisation: Principles and Practice  
*S. Sammadar* 51-71

## INDEX

---

5. History and Evolution of Network-Centric Warfare  
*Sanjay Poduval* 73-97
6. Focussed and Dynamic Response Logistics  
*J.V. Singh* 99-132
7. Air Dominance: Concept and Practice  
*Vinod Patney* 133-148
8. Air Dominance in 4<sup>th</sup> Generation and Irregular Warfare  
*Arjun Subramaniam* 149-165

### **VOL.4, NO. 3. MONSOON 2009 (JULY-SEPTEMBER)**

1. North Korea's Nuclear Tests  
*Jayadeva Ranade* 1-16
2. Six Decades of Peacekeeping  
*E.R. Rajappan* 17-51
3. Lowering the High Ground for Effect-based Operations  
*Kaza Lalitendra* 53-90
4. AWACS and Aerostats: Roles and Missions  
*A.B.S. Chaudhry* 91-115
5. The Revolution of Cruise Missile Technology  
*Sitakanta Mishra* 117-143
6. Review of the Defence Budget  
*Amiya Kumar Ghosh* 145-192

### **VOL. 4 NO.4. WINTER 2009 (OCTOBER-DECEMBER)**

1. Implications of China's Navy Modernisation  
*Jaydeva Ranadev* 1-16
2. The Chinese Concept of Comprehensive National Power: An Overview  
*P.K. Ghosh* 17-54
3. Integrated Perspective Planning  
*A.V. Vaidya* 55-71
4. Counter-Terrorism  
*Rajiv Ghosh* 73-100
5. CTBT Exhumed: Need India Worry?  
*Manpreet Sethi* 101-124
6. Military-Media Relations: Can the Media be a Force Multiplier?  
*P.K. Mallick* 125-155
7. The Most Dangerous Nation  
*Amarjit Singh* 157-176

### **VOL. 5, NO.1. SPRING 2010 (JANUARY-MARCH)**

1. Air Power in Sub-Conventional Wars in the South Asian Region  
*Rajiv Ghose* 1-30
2. Towards 'Intelligent' Cruise Missiles: Contours of Innovation  
*Sitakanta Mishra* 31-54
3. Cyber Space Vulnerabilities and Challenges: Threats to National Security Dynamics  
*M.K. Sharma* 55-90
4. NCW: the Double-edged Sword  
*Sanjay Poduval* 91-115
5. Combat Support Operations in the Indian Air Force: A Historical Appraisal  
*A.B.S Chaudhry* 117-135
6. Climate Change and National Security: Contrarian or Interrelated?  
*Manoj Kumar* 137-152
7. India-Afghanistan Relations During the Soviet Intervention in Afghanistan  
*K.N. Tennyson* 153-183

### **VOL. 5, NO.2. SUMMER 2010 (APRIL-JUNE)**

1. On Air Power  
*K.K. Jumbo Majumdar* 1-3

## INDEX

---

|   |         |
|---|---------|
| 2. Air Dominance and the Future of Air Power<br><i>Jasjit Singh</i>                               | 5-24    |
| 3. Integration of MoD and Defence Planning<br><i>R. Venkataraman</i>                              | 25-51   |
| 4. Asia in the Debate on American Grand Strategy<br><i>Michael J. Green</i>                       | 53-72   |
| 5. Defence Cooperation: A Case Study of India and Singapore<br><i>Pankaj Jha and Rahul Mishra</i> | 73-96   |
| 6. Afghanistan and the American Strategic Perspective<br><i>Sanjeev Bhadauria</i>                 | 97-115  |
| 7. Challenge for the Indian Military: Managing Ozone Depleting Substances<br><i>Manoj Kumar</i>   | 117-150 |
| 8. Geo-politics of the Gulf 1971-1991<br><i>M.R. Khan</i>   | 151-177 |

### **VOL. 5, NO. 3. MONSOON 2010 (JULY-SEPTEMBER)**

|  |         |
|--|---------|
| 1. Force Modernisation Challenges<br><i>P.K. Mehra</i>                             | 1-16    |
| 2. Indigenisation of Air-Launched Weapons<br><i>S. Bhanoji Rao</i>                 | 17-35   |
| 3. PLAAF in Transition 1979-93<br><i>Vishal Nigam</i>                              | 37-75   |
| 4. China's Electronic and Cyber Warfare Capabilities<br><i>Sanjay Poduval</i>      | 77-111  |
| 5. Towards a Nuclear Weapon Free World: Indian Perspectives<br><i>Swaran Singh</i> | 113-128 |
| 6. National Security Mechanism and the HDO<br><i>R. Venkataraman</i>               | 129-153 |
| 7. Technology: A Historical Perspective<br><i>A.K. Singh</i>                       | 155-183 |

### **VOL. 5, NO. 4. WINTER 2010 (OCTOBER-DECEMBER)**

|  |         |
|--|---------|
| 1. China's Defence Industry: Organisational Reforms<br><i>Vishal Nigam</i>                                     | 1-30    |
| 2. Defining Strategic Culture<br><i>Arjan Sen</i>  | 31-54   |
| 3. Likely Demands on Future Leaders<br><i>Rajiv Ghose</i>  | 55-78   |
| 4. Deception in Strategic Thinking: a Diagnosis<br><i>S. Rajasimman</i>  | 79-105  |
| 5. India's Civil Nuclear Network: A Reality Check<br><i>Sitakanta Mishra</i>                                   | 107-132 |
| 6. Pakistan's Nuclear Delivery Systems<br><i>Shalini Chawla</i>  | 133-158 |
| 7. China's Military Strategy: Perspectives from the White Papers on National Defence<br><i>Shikha Aggarwal</i> | 159-179 |

### **VOL. 6, NO. 1 SPRING 2011 (JANUARY-MARCH)**

|  |         |
|--|---------|
| 1. The Iranian Nuclear Issue: India's Response<br><i>Asif Shuja</i>  | 1- 26   |
| 2. Interpreting China's Grand Strategy<br><i>J.V. Singh</i>  | 27-57   |
| 3. Chinese Space Programme: Influence of Chinese Strategic Culture on its Development<br><i>Manu Midha</i> | 59-103  |
| 4. Defeating Pakistan's Nuclear Strategy<br><i>Manpreet Sethi</i>  | 105-122 |
| 5. China's Aircraft Carrier Ambitions<br><i>Nan Li and Christopher Weuve</i>                               | 123-146 |

## INDEX

---

6. Security Structures in the Gulf: Past and Present  
*M.R. Khan* 147-173

### VOL. 6, NO. 2 SUMMER 2011 (APRIL-JUNE)

1. Impact of Offset Policy on India's Defence Industrial Capability and Policy Issues  
*S. N. Misra* 1-25
2. ATOMS FOR PEACE: Balancing the Promotion of Nuclear Energy and Non-proliferation  
*Hina Pandey* 25-46
3. Chinese Defence Forces: Modernisation After 1980  
*J. V. Singh* 47-78
4. Contours of India's Nuclear Safety  
*Sitakanta Mishra* 79-114
5. Domestic Politics Surrounding the Iranian Nuclear Programme  
*Asif Shuja* 115-142
6. Nuclear Weapons Proliferation in Asia: The Twenty-First Century Pattern  
*Yeon Jung Ji* 143-168
7. Understanding China's Military Strategy: A Study of the PLAAF  
*Shikha Aggarwal* 169-193

### VOL. 6, NO. 3 MONSOON 2011 (JULY-SEPTEMBER)

1. Some Aspects of Our Wars in Future  
*Jasjit Singh* 1-24
2. Air Power in Stability and Anti-Terrorist Operations  
*Arjun Subramaniam* 25-52
3. Air Power as an Instrument of Coercive Diplomacy  
*M. Bahadur* 53-68
4. The Barriers to Military Transformation  
*Rajiv Puri* 69-92
5. China's Civil Aviation Industry  
*Vishal Nigam* 93-112
6. Information Warfare: Elements and Forms  
*Rakesh Arora* 113-144
7. The Changing Patterns of Global Climate Change Architecture  
*Dhanasree Jayaram* 145-162
8. West Asia: Ongoing Conflicts and India  
*Sharad Srivastava* 163-194

### VOL. 6, NO. 4 WINTER 2011 (OCTOBER-DECEMBER)

1. How to Minimise the Proliferation Impact of Nuclear Deterrence  
*Sverre Lodgaard* 1-28
2. Patterns of Insurgency: Strategies and Doctrines  
*A. V. Chandrasekaran* 29-50
3. Effect of Weather and Terrain on Airlift Operations  
*Ashok K. Chordia* 51-80
4. Training Future Environment Leaders  
*Manoj Kumar* 81-104
5. Political Islam, Democracy and Arab Spring  
*M. R. Khan* 105-128
6. Nuclear Doctrine and Deterrence: A Chinese Perspective  
*S. Rajasimman* 129-152
7. The Rise of China and South Korea's Strategic Flexibility  
*Yeon Jung Ji* 153-169

### VOL. 7, NO. 1 SPRING 2012 (JANUARY-MARCH)

1. K. Subrahmanyam and India's Strategic Culture  
*Shri Shivshankar Menon* 1-12
2. The Resurgence of Naxalism: Implications for India's Security  
*S. Adhikari* 13-38

## INDEX

---

3. New Frontiers of Military Leadership: Environmental Forays 39-58  
*Manoj Kumar*
4. India-Iran Relations Under the Shadow of India-US Strategic Partnership 59-76  
*Asif Shuja*
5. The Need for Strategic Change in Regional Powers'  
Policy Toward Afghanistan for Political Stability 77-94  
*K.N. Tennyson*
6. Rashtriya Rifles in Kashmir: India's Counter-Terrorism Force 95-116  
*Debalina Chatterjee*
7. Shifting Strategies and Tactics of the US/NATO Forces and the  
Taliban in the Present Afghan War 117-140  
*Shelly Johny*
8. Self-reliance and Synergy in Aerospace Sector: The Road Ahead 141 -166  
*S. N. Misra*
9. Air Dominance Over the Oceans 167-188  
*Jasjit Singh*

### VOL. 7, NO. 2 SUMMER 2012 (APRIL-JUNE)

1. India's National Security: Challenges and Issues 1-14  
*Shivshankar Menon*
2. Robotic Air Logistics: A Transformational Capability in Warfare 15-32  
*Manmohan Bahadur*
3. Revolution in Military Affairs 33-48  
*Raj Kumar Upadhyaya*
4. Geo-Political Changes Driving China's Aviation Industry 49-68  
*Vishal Nigam*
5. Decoding Cyber Terrorism: Towards a Culture of International Co-operation 67-88  
*M.K. Sharma*
6. Siting of Indian Nuclear Plants: The Modus Operandi 89-120  
*Sitakanta Mishra*
7. China's Naval Strategy: Strategic Evolution and Emerging Concepts of Warfare 121-152  
*Shikha Aggarwal*
8. India-Iran Relations: Challenges Ahead 153-172  
*K.N. Tennyson*
9. The Fissile Material Cut-Off Treaty: A Debate in Perpetuity 173-188  
*Hina Pandey*

### VOL. 7, NO. 3 MONSOON 2012 (JULY-SEPTEMBER)

1. India-China Relations: Problems and Prospects 1-26  
*Karwal Sibal*
2. Quality Fundamentals in Support of Air Power 27-54  
*P.V. Athawale*
3. Social Acceptance of Nuclear Power in India 55-82  
*Sitakanta Mishra*
4. Nuclear Aspiration as a Hedging Strategy: The Case of Iran 83-106  
*Yeon Jung Ji*
5. China's Tibet Policy: Implications for India 107-124  
*Sana Hashmi*
6. PLA: Military Operations Other Than War (MOOTW) 125-152  
*J.V. Singh*
7. The Umbrella Politics 153-178  
*Debalina Chatterjee*

### VOL. 7, NO. 4 WINTER 2012 (OCTOBER-DECEMBER)

1. China in the Twenty-First Century:  
What India Needs to Know about China's World View? 1-16  
*Shyam Saran*

## INDEX

---

2. A Defining Moment of the Debate: Manned versus Unmanned Platforms of Airpower 17-34  
*Manoj Kumar*
3. Positioning of Israel with its Neighbours and Its Missile Defence System 35-48  
*Indrani Talukdar*
4. Reforms in PLA Training 49-72  
*J.V. Singh*
5. China's Military Space Programme 73-106  
*K.K. Nair*
6. The Politics and Strategy of Environmentalism 107-130  
*Dhanasree Jayaram*
7. Chinese Acupuncture in An Iaf-Paf Face-Off 131-156  
*Vikram Munshi*
8. Nuclear Waste: India's Gordian Knot? 157-180  
*Sitakanta Mishra*

### **VOL. 8, NO. 1 SPRING 2013 (JANUARY-MARCH)**

1. Debating India's Defence Expenditure: Problems and Prospects 1-18  
*Bhartendu Kumar Singh*
2. Nuclear Disarmament and Non Proliferation: The Steps to Global Zero 19-32  
*Stuti Banerjee*
3. Grand Strategic Approach: A Perspective 33-52  
*Prateek Kapil*
4. Dragon's Information Warfare: Implications for India 53-70  
*Raj Mongia*
5. Geostrategic Implications of Environmental Change for Island Nations: A Case Study of Indo-Maldivian Equations 71-94  
*Dhanasree Jayaram*
6. Addressing Nuclear Terrorism: An Interdisciplinary Approach 95-116  
*Yeon Jung Ji*
7. Closure of The Strait of Hormuz: Possibilities and Challenges for India 117-136  
*Rhea Abraham*
8. Bhutan and China Relations: It's Impact on India 137-148  
*Indrani Talukdar*
9. South China Sea Imbroglio: An Indian Perspective 149-166  
*Sana Hashmi*
10. Airship: A Viable Airlift Option 167-180  
*Ashok K Chordia*

### **VOL. 8, NO. 2 SUMMER 2013 (APRIL-JUNE)**

1. Is India's Nuclear Deterrent Credible? 1-18  
*Shyam Saran*
2. Air Maintenance 2025: Prospects and Limitations 19-34  
*Mammohan Bahadur*
3. PLA Logistics Reforms 35-56  
*J.V. Singh*
4. Examining China's Space Strategy 57-80  
*Manpreet Sethi*
5. China's Readjustment Strategy 81-106  
*Vishal Nigam*
6. Opportunities Unbound: Sustaining Multi-dimensional Indo-Russian Relations 107-126  
*Lungthuiyang Ramei*
7. Iran's Air Power: Is it Powerful Enough for the US? 127-140  
*Indrani Talukdar*
8. Space: The Indian Odyssey 141-160  
*Rajat Jairath*
9. Direction of the Nuclear Dragon 161-180  
*Arjun Subramanian P*

## INDEX

---

### **VOL. 8, NO. 3 MONSOON 2013 (JULY-SEPTEMBER)**

|     |  |         |
|-----|--|---------|
| 1.  | Launch of Air Power Journal (In Retrospect)<br><i>D.C. Bakshi</i>                            | 1-4     |
| 2.  | Pakistan's Ideological Slide into Jihad: Consequences And Prospects<br><i>Shalini Chawla</i> | 5-36    |
| 3.  | India's Cyber Warfare Strategy in Next Decade<br><i>M.K. Sharma</i>                          | 37-66   |
| 4.  | Geo-Political Perspective: Tibet<br><i>Raj Mongia</i>  | 67-92   |
| 5.  | Energising Aerospace Industry: A National Security Imperative<br><i>Nishant Gupta</i>        | 93-110  |
| 6.  | Navigating the Arctic: Players From Asia<br><i>Ji Yeon-Jung</i>                              | 111-128 |
| 7.  | Nuclear Safety-Security-Safeguards: The Intricate Interface<br><i>Sitakanta Mishra</i>       | 129-156 |
| 8.  | Geo-Politics and Strategy Formulation<br><i>Prateek Kapil</i>                                | 157-172 |
| 9.  | Cyber Warfare and National Security<br><i>E. Dilipraj</i>                                    | 173-188 |
| 10. | The Afghanistan Refugee Crisis: Implications for Pakistan and Iran<br><i>Rhea Abraham</i>    | 189-208 |

### **VOL. 8, NO. 4 WINTER 2013 (OCTOBER-DECEMBER)**

|     |   |         |
|-----|---|---------|
| 1.  | Civil-Military Relations: Opportunities And Challenges<br><i>N.N. Vohra</i>                                   | 1-18    |
| 2.  | National Security And Aerospace Power<br><i>Arup Raha</i>   | 19-26   |
| 3.  | Using Nuclear Weapons First: "A Hell of an Alternative"<br><i>Manpreet Sethi</i>                              | 27-42   |
| 4.  | India's Ballistic Missile Defence<br><i>Arjun Subramanian P</i>   | 43-60   |
| 5.  | Analysis of PLA Potential Against India<br><i>Ravinder Chhatwal</i>   | 61-90   |
| 6.  | The Daulat Beg Oldi Crisis: Myths, Mistakes and Lessons in Dealing with China<br><i>Bhartendu Kumar Singh</i> | 91-106  |
| 7.  | Israel's Concept of Cumulative Deterrence: Will it bring Peace to the Region?<br><i>Manmohan Bahadur</i>      | 107-126 |
| 8.  | The Dynamics of Civil-Military Relations in Israel<br><i>Lunghuiyang Riamei</i>                               | 127-146 |
| 9.  | Forming India-Vietnam-Japan Trident<br><i>Ankit Kumar</i>   | 147-168 |
| 10. | Myanmar: The new Strategic Pawn in Asia Pacific?<br><i>Asha Mary Mathew</i>                                   | 169-186 |

### **VOL. 9, NO. 1 SPRING 2014 (JANUARY-MARCH)**

|    |   |        |
|----|---|--------|
| 1. | Conflicts and Aerospace Power in 21 <sup>st</sup> Century<br><i>Arup Raha</i>                                     | 1-8    |
| 2. | Strategic Imperatives of Military Networks: Towards A Credible Military Cyber Power<br><i>M.K. Sharma</i>         | 9-30   |
| 3. | Deterrence and Dissuasion<br><i>Ashish Singh</i>  | 31-46  |
| 4. | IAF's Development Towards Greater Capability: 2032<br><i>Vivek Kapur</i>  | 47-70  |
| 5. | Transformation of The IAF: Towards Achieving A Greater Role in National Security Dynamics<br><i>Nishant Gupta</i> | 71-94  |
| 6. | Why is China Exhibiting Belligerent Behavior?<br><i>Raj Mongia</i>  | 95-110 |

## INDEX

---

7. The Shanghai Cooperation Organisation: Evolution, Contemporary Relevance and Future Trajectory  
*Pravda P.* 111-128
8. A Brief Look into Formation of Japan's Defence Policy  
*Prerna Gandhi* 129-148
9. Russia's Policy Towards Central Asia in Post-Cold War Era  
*Chandra Rekha* 149-174

### VOL. 9, NO. 2 SUMMER 2014 (APRIL-JUNE)

1. Coercion and Air Power  
*Mamohan Bahadur* 1-32
2. US and Russian Air Bases in Central Asia  
*Vivek Kapur* 33-52
4. Cyber Space: Implications for National Security  
*A.k. Tiwary* 53-70
5. Ballistic Missile Defence in Asia  
*Arjun Subramanian P.* 71-92
6. United States and Pakistan: Nuclear Security Issues  
*Stuti Banerjee* 93-112
7. Understanding The Crimean Episode  
*Amarjit Singh* 113-132
8. The Irony of China-Japan Relations: Why Do They 'Cooperate' Despite The 'Conflict'?  
*Prerna Gandhi* 133-156
9. Oman's Strategic Location, Its Foreign Policy and Air Power Capabilities  
*Indrani Talukdar* 157-182

### VOL. 9, NO. 3 MONSOON 2014 (JULY-SEPTEMBER)

1. Management of National Security: Some Concerns  
*N.N. Vohra* 1-16
2. Defending The Aircraft Carrier  
*Pradeep Chauhan* 17-34
3. A National Security Strategy for India  
*Bhartendu Kumar Singh* 35-54
4. Air Power: Future Challenges and Emerging Roles  
*Dhiraj Kukreja* 55-78
5. Defence Beyond Design: Towards A New Nuclear Paradigm  
*Sitakanta Mishra* 79-98
6. The INF Treaty: Its Successes, Failures and The Future  
*Debalina Ghoshal* 99-120
7. Terror in the Deep and Dark Web  
*E. Dilipraj* 121-140
8. The Ukraine Imbroglio: Does it Impact India?  
*Chandra Rekha* 141-162
9. Deconstructing Al Qaeda's Terrorist Network in India  
*Aersh Danish* 163-194

### VOL. 9, NO. 4 WINTER 2014 (OCTOBER-DECEMBER)

1. Challenges of Air Power  
*Arup Raha* 1-10
2. Counter-Strike: India's Nuclear Strategy  
*Manpreet Sethi* 11-34
3. National Security Scan: Are The Good Days Coming?  
*P.V. Naik* 35-50
4. Attack Helicopters: Where do we use them? Who should use them and for what?  
*A.G. Bewoor* 51-72

## INDEX

---

|    |   |         |
|----|---|---------|
| 5. | The Simple Light Fighter Aircraft Reincarnated<br><i>Vivek Kapur</i>                                | 73-86   |
| 6. | India and the "Indo-Pacific"<br><i>Prerna Gandhi</i>  | 87-106  |
| 7. | Iran's Role in the Energy Security of the Caspian Basin<br><i>Ramu C M</i>                          | 107-132 |
| 8. | Arctic Region: The new Geo-Political Theatre of Russia<br><i>Chandra Rekha</i>                      | 133-156 |
| 9. | Russia in the Arctic: Challenges and Prospects for Tapping Energy Resources<br><i>Trioum Sharma</i> | 157-182 |

### **VOL. 10, NO. 1 SPRING 2015 (JANUARY-MARCH)**

|    |   |         |
|----|---|---------|
| 1. | Changing Nature of War<br><i>Shekhar Sinha</i>  | 1-16    |
| 2. | Indian Air Power: Its Impact in India's Strategic Neighbourhood<br><i>Manmohan Bahadur</i>                      | 17-40   |
| 3. | Genesis and Early Growth of the Indian Aircraft Industry<br><i>Vivek Kapur</i>                                  | 41-60   |
| 4. | The Threat of Nuclear Terrorism<br><i>Arjun Subramanian P</i>   | 61-80   |
| 5. | India's Stand on Internet Governance: Oxymoronic or Opportunistic?<br><i>Ashish Gupta</i>                       | 81-98   |
| 6. | India and the United States: Reinvigorating The 'Energy' Relationship<br><i>Stuti Banerjee</i>                  | 99      |
| 7. | India-US Nuclear Pact: How Strategic Partnership got Entangled in Domestic Politics<br><i>Poujenlung Gonmei</i> | 121-140 |
| 8. | India's Policy Options to Change Pakistan's Behaviour<br><i>Ankit Kumar</i>                                     | 145-198 |

### **VOL. 10, NO. 2 SUMMER 2015 (APRIL-JUNE)**

|    |   |         |
|----|---|---------|
| 1. | Aerospace Power in the Indian Context of Nation Building<br><i>K K Nair</i>   | 1-20    |
| 2. | India's Aerospace Footprint in the IOR<br><i>R A Masekar</i>  | 21-36   |
| 3. | "Internet Of Things": A New Paradigm for Military Operations<br><i>Ashish Gupta</i>   | 37-56   |
| 4. | Covert Cyber Capabilities of the US<br><i>Dilipraj E</i>  | 57-78   |
| 5. | Deconstructing Disaster Management: With Special Reference to Civil-Military Linkages<br><i>Nishant Gupta</i>                         | 79-110  |
| 6. | The Senkaku Islands Dispute and its Implications for the Pacific Island Chains<br><i>Amarjit Singh</i>                                | 111-132 |
| 7. | Solar Powered Aviation: A New Revolution?<br><i>R K Narang</i>  | 133-148 |
| 8. | The Emergence of the Asian Defence Industry: Are China and Japan Going to Face a War in the 'Business of War'<br><i>Prerna Gandhi</i> | 149-172 |

### **VOL. 10, NO. 3 MONSOON 2015 (JULY-SEPTEMBER)**

|    |  |       |
|----|--|-------|
| 1. | Deterrence in Outer Space: The US Way<br><i>Manpreet Sethi</i>                                     | 1-16  |
| 2. | Cyber Attacks on Satellites: A Paradigm Shift in Asat Application<br><i>P A Patil</i>              | 17-32 |
| 3. | Cost-Effectiveness and Utilisation of Air Power in Fourth Generation Warfare<br><i>Vivek Kapur</i> | 33-58 |

## INDEX

---

4. "Design and Make in India": Military Aircraft 59-78  
*R K Narang*
5. Management of Strategic Research and Development in Defence 79-94  
*Sumati Sidharth and Manoj Kumar*
6. The United States and Iran Nuclear Deal 95-110  
*Stuti Banerjee*
7. An Assessment of NPT Review Conference, 2015: Expectations, Obligations, Dilemmas and Opportunities 111-136  
*Hina Pandey*
8. Extra-Regional Powers in IOR: Imperatives for India 137-160  
*Yogesh V Athawale*
9. The Problems with China's Xinjiang Policy: Linkages Between Domestic and External Behaviour 161-180  
*Swati Arun*

### VOL. 10, NO. 4 WINTER 2015 (OCTOBER-DECEMBER)

1. India's Security Challenges: Role of Aerospace Power Inaugural Address By CAS 12Th Subroto Mukerjee Seminar 1-8  
*Arup Raha*
2. Defence Production and Acquisition Policies: Suggestions for a Paradigm Shift 9-36  
*Dhirendra Singh*
3. Indian Military Nuclear Programme: Trajectory and Future Course 37-54  
*Arjun Subramanian P*
4. Role of India, Pakistan, China in Afghanistan Post-US Drawdown 55-80  
*Shalini Chawla*
5. Has The US Administration gone soft on China, Leading to its Rise? 81-110  
*Temjenmeren Ao*
6. Cyber Attacks via Hardware Exploitation: An Insidious and Elusive Menace 111-126  
*Ashish Gupta*
7. Development of the Aerospace Industry in US and USSR/Russia 127-156  
*Vivek Kapur*
8. Human Systems Approach to a More Effective Application of Air Power 157-180  
*M Misra*

### VOL. 11, NO. 1 SPRING 2016 (JANUARY-MARCH)

1. China's Major Military Reforms and Their Implications For India 1-16  
*Jayadeva Ranade*
2. South China Sea Dispute: Role of Regional Powers 17-46  
*Sana Hashmi*
3. Building The Case for Sea-Based Nuclear Deterrent 47-64  
*Deep Jyoti Burman*
4. Balancing Make in India: Aerospace Sector 65-82  
*Rajiv Kumar Narang*
5. Cyber Deterrence: Strategic Imperatives and Operational Challenges 83-98  
*Ashish Gupta*
6. Criticality Analysis and Protection of National Critical Information Infrastructures (NCIIS) 99-132  
*MK Sharma*
7. Leadership Challenges in Humanitarian Assistance and Disaster Relief 133-150  
*Rajesh Isser*
8. Indo-Russian Economic Cooperation: The Need for a New Vision 151-180  
*Chandra Rekha*
9. Pivoting the Pacific: Two-Level Games and US Military Presence in Japan and the Philippines 181-201  
*Nidhi Prasad*

## INDEX

---

### VOL. 11, NO. 2 SUMMER 2016 (APRIL-JUNE)

1. The Unfolding Contours of 21st Century Naval Aviation 1-22  
*Arun Prakash*
2. Military Leadership Training: Understanding and Mastering Personal Leadership 23-40  
*S C Mukul*
3. Indian Air Power: Ambitions to Secure Aerospace 41-62  
*Manmohan Bahadur*
4. ISIS: The New Terror 63-84  
*Dhiraj Kukreja*
5. The Rationale for the Indian Nuclear 'Exceptionalism' 85-102  
*Manisha Chaurasiya*
6. Espionage, Intelligence and Exploitation in the Digital Age: Concurrent Manifestations Of The Cyber Zeitgeist 103-124  
*Ashish Gupta*
7. India's Membership in the Shanghai Cooperation Organisation: Opportunities and Challenges 125-144  
*Poonam Mann*
8. Evolution of Russia-China Bilateral Relations 145-177  
*Chandra Rekha*

### VOL. 11, NO. 3 MONSOON 2016 (JULY-SEPTEMBER)

1. Energising Indian Aerospace: The Changing Environment 1-8  
*Arup Raha*
2. Cruise Missiles: New Concerns in India's Threat Environment 9-30  
*Manpreet Sethi*
3. Enter The PLA Rocket Force: Assessing China's Missile Capabilities 31-46  
*Ravinder Singh Chhatwal*
4. China's Adiz: Enforcement in East China Sea and Prospects for South China Sea 47-72  
*Tannay Sharma*
5. On China's Soft Power 73-90  
*Temjenmeren Ao*
6. Disaster Management: Theory, Planning and Preparedness 91-112  
*Rajesh Isser*
7. Technological and Regulatory Challenges in Integration of UAVs in Non-Segregated Air Space 113-152  
*RK Narang*
8. Evolution of IAF Helicopters – I: Inception to 1971 Operations 153-180  
*BS Nijjar*
9. A Paradox of Shifting Sands: India's Relationship With The NPT 181-196  
*Jai Raina*

### VOL. 11, NO. 4 WINTER 2016 (OCTOBER DECEMBER)

1. Uri Attack, India's Response: What Next? 1-26  
*Shalini Chawla*
2. The South China Sea: Troubled and Turbulent Waters 27-54  
*Pradeep Chauhan*
3. Development of Aerospace Industry in China and Brazil 55-86  
*Vivek Kapur*
4. Evolution of Iaf Helicopters - II Consolidation Post-1971 War 87-114  
*BS Nijjar*
5. Nuclear Security Summits: Journey so Far and What Next? 115-134  
*Sitakanta Mishra*
6. Changing Contours of US-Iran Nuclear Relations 135-158  
*Hina Pandey*
7. Role of The Media in Cultivating Perceptions and Impacting Power Equations: Case Study of US Psyops 159-179  
*Kriti Singh*