



DEFENCE AND DIPLOMACY

IN PURSUIT OF NATIONAL SECURITY

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- Book Review*

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➤ EDITOR'S NOTE

As we come to the end of 2019, it is worth recounting the significant events of the year that saw the world on the edge of a precipice for more reasons than one.

Floods, rain, tornadoes, extreme heat, forest fires (Amazon, and now Australia), extreme winter, et al. – the entire range of natural, and also man-made, calamities shook the world like never before. There could not have been a clearer divine signal – so to speak – for mankind to stop abusing the environment for its selfish needs. The dangers of climate change have manifest themselves in the starkest manner, as if signalling to humanity what lies in store if corrective actions are not taken.

Our immediate and extended neighbourhood saw the continuance of the pot boiling in West Asia.

But, first, a word about the spat between the erstwhile Cold War rivals – the US and Russia – that led both countries to abandon the 1987 Intermediate Range Nuclear Forces (INF) Treaty in 2019. While the US [along with its North Atlantic Treaty Organisation (NATO) allies] blamed Russia to be in violation of the INF Treaty – that limits either side to field ground launched ballistic/cruise missiles with ranges between 500-5,500 km – Russia denied the accusation (NATO and the US had accused Russia of fielding the 9M729 missile, known to NATO as the SSC-8). Russia, while denying the accusation, was of the view that the US had, in fact, been in violation of the INF Treaty since 1999 when it began trials of its Unmanned Combat Aerial Vehicles (UCAVs), and also with its positioning of launch pads for its Tomahawk cruise missiles on European soil.

Although the INF Treaty had been successful in seeing the elimination of 2,700 Russian and American missiles, the recent withdrawal from the treaty by both signatories portends another arms race; this time, however, with a new player – China – that already has a major portion of its nuclear arsenal falling within the ranges that had been banned by the now-dead INF Treaty. Did the US and Russia feel threatened by China on this count? While for the US, it was a matter of its forces' access to the South China Sea being threatened, as also its bases in the Western Pacific coming under direct threat with the availability of these shore-based land-attack/anti-ship cruise/ballistic missiles with China; for Russia, it was a different threat altogether – Russia shares a land border with China! With China as the bigger threat for both the US and Russia, moving out of the 'self-imposed' restrictions of the INF Treaty appeared to be a pragmatic way for both to ensure parity – and stability – especially vis-à-vis China in the region.

On August 2 – the deadline given by the US to Russia to roll back its deployments of the 9M729 missiles deployed against NATO partners of the US – the US withdrew from the INF Treaty; Russia followed suit. Would an arms race ensue? NATO clearly is not inclined to enter into one, nor would the 'cash-strapped' Russians, but would the US start developing weapons to counter the threat it faces from the deployment of cruise/ballistic missiles by China that threaten US assets – afloat as well as land-based – that venture/fall within the ranges laid out by the INF Treaty? Early indications are that this is very likely.

The display of China's missile capability during the 70th Anniversary Parade on October 1, must surely have sent a chill down many a US Navy admiral's spine, as the US presently has no defence against the DF-17 hypersonic glide vehicle, or the supersonic cruise missile, the DF/CJ-100. If China's purpose of showcasing its military might was to get strategists across the world to take note of its military might, the objective appears to have been achieved in good measure, as the frequency of debates and writings – on the evolving threat from China – certainly seems to have gone up since then.

Coming back to West Asia, we had seen the world poised on the brink of war when on June 20, 2019, a US Air Force (USAF) Global Hawk high altitude long endurance drone was shot down by the Iranian Revolutionary Guards Corps (IRGC) – also known as the Quds Force – as it purportedly entered the Iranian air space. In response, the US had launched retaliatory strikes by fighter aircraft that were, however, recalled by President Trump when they were barely ten minutes from their target area. Why was the strike not permitted to go through? President Trump felt that the certain death of approximately 150 Iranians in the planned strike would be an unfair exchange ratio for the loss of one (very expensive) drone.

The tensions between the US and Iran have been mounting ever since the US withdrew from the Joint Comprehensive Plan of Action in June 2018. The additional weight of sanctions by the US was playing heavily on Iran as it needed to continue its exports of oil and gas to sustain its economy. While China has continued to rely on Iran for its energy needs – including arrangements for payments for oil/gas in renminbi instead of the US dollar – India has stopped importing oil from Iran under the threat of unilateral US sanctions. The dynamics for India's continuance of its development of the Chabahar port in Iran are, however, different. The US considers that for geo-strategic reasons, India's development of the Chabahar port should be permitted without any hindrance as this would allow India's assistance to Afghanistan from where the US is seeking to withdraw. The effort towards full exploitation of Chabahar port by India, therefore, needs to be sustained. This becomes ever more crucial in view the recent reports of China's likely construction of military facilities at Jiwani (near Gwadar).

The third quarter of the year saw an entirely new paradigm for sub-conventional warfare being written in West Asia – once again, linking Iran to the events. On September 14, the attacks on the Aramco facilities at Abqaiq and Khurais oil fields were so accurate and so devastating that more than 50 per cent of the oil production was affected – almost 5 per cent of global oil production. The spike in oil prices by almost 15 per cent was, however, prevented due to timely intervention by the US. The

attacks were the result of Qasef-1 drones (a clone of the Iranian Ababeel drone) being fired by Houthi rebels from Yemen who had carried out attacks against Saudi oil fields/pipelines/airfields in the past also. Although the Houthis claimed responsibility, Saudi Arabia blamed Iran for carrying out the attacks, mainly on account of the large distance from Yemen and the accuracy of the attacks. Defence against Unmanned Aerial Vehicles (UAVs) proved to be unreliable, despite sophisticated air defence systems like the MIM-104 Patriot, along with several short-range air defence systems for point defence at the oil fields. If the Houthi claim is true, then this points to an entirely novel way of holding a superior power (in terms of military and economic might) at risk by a determined – though impoverished – neighbour.

It would be worth recounting that around the same timeframe – mid-September – the Indian subcontinent also saw the use of drones for ‘smuggling’ AK-47s, narcotics and fake currency into the Tarn Taran area of Punjab by Pakistan-based Khalistani terror groups.

After the above incidents, investment in counter-drone equipment and capabilities has seen a renewed interest – with all seriousness – by security forces around the world.

China’s continued interest in the Indian Ocean Region (IOR) and its increasing footprint in the region have been prompted by its economic considerations. As its trade with West Asia – largely for oil and gas – increases (an almost 50 per cent increase seen in 2018), it requires greater security of its Sea Lines of Communication (SLOCs). Expansion of the People’s Liberation Army Navy (PLAN) in recent years has been aimed at fulfilling its maritime security obligations. In the bargain, the PLAN has, as of date, already surpassed the US Navy in the number of capital ships that the PLAN holds as compared with the US Navy. The events in West Asia during the year just gone by would certainly have set the leadership in China thinking about the vulnerability of its maritime shipping in the region. The renewed interest in building military facilities at Jiwani (west of Gwadar) could have been prompted by the deteriorating situation in the region. In the future, a permanent presence of PLAN ships in the vicinity of Chabahar port – which is barely 150 km west of Jiwani – could pose challenges for the

Indian Navy carrying out patrolling to protect Indian merchant shipping in the strategic Straits of Hormuz/Chabahar port region. A strong presence of MR aircraft-Su-30MKI/Rafale duo could provide the necessary deterrence not only on India's west coast but in the entire Indian peninsular region. With their range, this duo could command/dominate the approaches to the Lombok/Sunda Straits in the Southeast IOR and the Straits of Hormuz in the Western Indian Ocean region. The Straits of Malacca are already adequately 'covered' by the Indian Navy operating out of the Andaman Nicobar Command. Co-development of a deep-sea port at Sabang in Indonesia would serve to further address India's strategy in the Indo-Pacific.

The suicide attack on the convoy on February 14, at Pulwama (near Avantipora) that killed 40 Central Reserve Police Force (CRPF) personnel was the deadliest in the Kashmir Valley since militancy began almost three decades ago. It set in motion events that have changed the very manner in which the Indian leadership could address future terror attacks against India, perpetrated by militant groups being harboured and nourished on Pakistani soil. The response by India on February 26 [the strike by the Indian Air Force (IAF) against the Jaish-e-Mohamed (JeM) training camp at Jabba Top near Balakot in Khyber Pakhtunkhwa province of Pakistan] showed to the world how India challenged Pakistan's projection of a low nuclear threshold. What was most encouraging to note after the strike by the IAF against the militant JeM training facilities at Balakot was the complete absence of international condemnation against India for the attacks. During his speech at the UN General Assembly on September 27, the Pakistani prime minister's threat of unleashing nuclear devastation was an attempt at brinkmanship and created unnecessary war hysteria in the region.

This response strategy by India had the desired effect for almost six months, as the acts of cross-border terrorism abated. However, after the abrogation of Article 370 by the government on August 5, there was an increase in terror activities and ceasefire violations by Pakistan. The Indian security forces have come down heavily against all such terror activities since then.

Despite the heightened tensions between the two countries, the Kartarpur corridor was opened on November 9.

The year closed with the announcement of the first Chief of Defence Staff (CDS) for the armed forces of India. Our congratulations to Gen Bipin Rawat for this singular honour; we wish him a successful and meaningful tenure.

To our readers, the very best in the New Year.

Happy reading

A handwritten signature in black ink, appearing to be 'Jama' with a small mark below it.

AN INSIDIOUS FUTURE THREAT

MANMOHAN BAHADUR

An essay, titled “War is Not Over,” in the *Foreign Affairs* magazine,¹ reasons that contrary to popular thinking, war is as prevalent as before. While people are generally more prosperous and the likelihood of big powers going to war is close to negligible, conflict has become less lethal, with the ratio of three to one between the wounded to dead having changed to ten to one; from the deaths of 5,000 and 7,000 per day in the two World Wars, it now averages at around 50 per day (in the Indian scenario too it has been similar). Though the essay speaks of improvements in medical science, fast transportation of the wounded, and the two World Wars not being representative of modern-day conflicts, as being the major reasons for the reduction in the statistics, it has omitted the arrival of precision weaponry as one of the major reasons for the reduced bloodshed. Cautioning that there is actually now “a great deal of belligerent behaviour” of nations, the authors point to the fact that while there were less than ten border walls post the collapse of the Berlin Wall, there are close to 70 worldwide now. “It strains credulity that the better angels of our nature are winning when humanity is armed to the teeth” the essay concludes.² This is factually true, and even as this is being written,

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1. Tanisha M Fazal and Paul Poast, “War is not Over,” *Foreign Affairs*, November/December 2019. <https://www.foreignaffairs.com/articles/2019-10-15/war-not-over>. Accessed on December 7, 2019.
2. Ibid.

man is moving down the path of looking at new mechanisms to gain the upper hand in conflict and devise new ways to inflict punishment.

This essay looks at an ongoing scientific programme of the Defence Advanced Research Projects Agency (DARPA) of the United States' Department of Defence called Insect Allies, that claims to be a project to protect agricultural crops but has an insidious aim that can also get it the tag of being an agriculture warfare venture. The programme was launched in 2016 with \$27 million funding and a four-year timeframe. Various consortia responded to the offer, mostly academic ones, of which three were selected. The critique of the project would be done via three steps. First, the stated 'noble' aim of the programme would be discussed along with the Research and Development (R&D) path that it was going to take. That the 'path,' or mechanism, of the project violates the universally accepted Biological Weapons Convention (BWC) would be underscored in the second part of the essay; this would be followed by an analysis of its effect on the larger issue of the failure of deterrence in the food security arena (that has not been meddled with in modern times by any nation) as it impinges heavily on the overall security of a nation.

INSECT ALLIES PROGRAMME

The Insect Allies programme was launched by DARPA on November 1, 2016, in which it asked for proposals to:

... develop integrated systems of modified viral agents that can be delivered to specific plants of interest via insects and can confer traits for combating biological and environmental threats. Agricultural threats of concern to the Department of Defense (DoD) include, but are not limited to, invasive pest or pathogen species, accidental or intended release of natural or engineered harmful biological agents, severe water (drought, flooding) or heat stress, and prolonged exposure to toxic compounds. Proposals aimed at addressing these issues in annual, perennial, and subsistence plant systems of high food biosecurity importance are especially encouraged.³

3. DARPA announcement of Insect Allies programme vide, <http://web.evolbio.mpg.de/HEGAAs/files/links-to-information-source/hr001117s0002-copy.pdf>. Accessed on December 1, 2019.

DARPA further asked the project teams to,

... select a target crop species and identify the genes required for enhancement of traits of mature plants within a single growing season. Target crop must be an important annual, perennial, or subsistence plant. Crops of U.S. importance (including maize, wheat, potato, tree fruits, etc.), global agricultural importance (including rice, cassava, cowpea, tree fruits, etc.), and other plants of similar importance are encouraged. Proposals to work solely with model plants (e.g., *Arabidopsis*, *Nicotiana*, etc.), will not (emphasis added) be considered.⁴

In a nutshell, the aim of the Insect Allies programme is to create genetically modified viruses and use insects as vectors to carry them to fully mature crops of *agricultural importance*; this implies that the target crops would be staple agricultural produce whose non-availability would affect the food supply of a country. The genes of the crops would be modified by the viruses so carried and offer protection to them from man-made or natural vagaries like drought, salinity, flooding, etc; this, on paper, is the aim of the programme, as explained in Fig 1.⁵

Fig 1: Insect Allies-Programme: Insects as Allies or as Weapons



4. Ibid.

5. Image reproduced after due permission of 'MPG/D. Duneka.' Originally printed in Dr Guy Reeves, "A Step Towards Biological Warfare with Insects?". <https://science.sciencemag.org/content/362/6410/35>. Accessed on December 20, 2019.

An analysis of the statement of intent brings out the following three requirements, termed technical areas, expected from the researchers.⁶

- **Technical Area 1:** The development of a virus through genetic modification that has the capability to modify the genetic DNA of the plant which it infects on delivery; DARPA has termed it a *genetic cargo container*.
- **Technical Area 2:** The “creation” of an “optimised insect vector system with built-in safeguards.” It is instructive to read that the researchers have been asked to look into vector competence in terms of longevity, dispersal ability, and safeguards that deal with light and temperature sensitivity, “diet regulated survival” and time of life. Metrics for each of these systems have been given out and basically mean that the insects too would have some modifications done in their genetic structure to meet the stated requirements.
- **Technical Area 3:** The final step is the demonstration of the end product by proving, in an insulated greenhouse environment, the “plant’s gain function,” implying gene modification of *only* the plant species which have been selected as targets for gene modification. The success metrics of the research would be if “*greater than 50% of targeted plant population is successfully genetically modified within ≤1 week with no detection of off-target effects to other community organisms.*”

The Insect Allies, *a priori*, has a very noble intention of safeguarding the *standing and mature crops of the US*, since the effect of the genetic modification is required to be demonstrated in one growing (or maturing) season. While this may be true, experts have seen a disturbing angle to the project, made more ominous due to the responses of DARPA to the objections raised by scientists in a *Science* magazine article. Five scientists, two from the Max Planck Institute in Germany, two from the University of Freiburg, Germany, and another from the University of Montpellier, France, wrote this

6. Justin Sanchez, “Briefing Prepared for Insect Allies Proposer’s Day.” <https://www.darpa.mil/attachments/IA%20Proposers%20Day.pdf>. Accessed on December 6, 2019.

critique in October 2018⁷ in which they drew attention to the fact that the Insect Allies programme was in violation of the universally adopted Biological Weapons Convention, 1972.

VIOLATION OF BIOLOGICAL WEAPONS CONVENTION (BWC)

The objections have been on the following counts:

- It is a fact that genetic modification of agricultural plants is already happening; however, it is normally done by transfer of modified chromosomes 'vertically,' i.e., from one generation of seeds to the next. There is, thus, an element of 'time control' as large scale modification takes decades; the Insect Allies programme, on the other hand, plans to do the transfer 'horizontally', by direct transfer in the fields. This can result in uncontrolled changes, which could be accidental, inadvertent or deliberate, as would be discussed later.
- There is a question on the intent of DARPA since its claim of adhering to existing regulatory mechanisms is not backed up by any public discussion on such vital issues where gene editing of food crops is involved, and in such a novel way. Additionally, the target plants specified are staple crops like maize, tomatoes, rice, etc that constitute the food security of a nation, and those like tobacco and Arabidopsis are prohibited by name. Once again, the intent behind the programme becomes questionable as these, especially maize, are the staple crops of Africa, the Americas and many countries in Asia.
- The use of insects as dispersal vectors is inexplicable as the gene edited viruses could well be dispersed by spraying; when this question was put to DARPA, it said that spraying would require a large infrastructure – an explanation that does not match up to the monetary and infrastructural strength of the farmers of United States.⁸
- DARPA mentions that one of the driving factors behind the programme is to meet "threats from state and non-state

7. R. G. Reeves, S. Voeneky, D. Caetano-Anollés, F. Beck and C Boëte, "Agricultural Research, or a New Bioweapon System?," *Science*, vol 362, issue 6410, October 5, 2018, pp. 35-37. <https://science.sciencemag.org/content/362/6410/35>. Accessed on December 20, 2019.

8. *Ibid.*, pp. 35-37.

actors.”⁹ This points to the deduction that the US is aware of, or is concerned about, an adversary having or developing such a programme. And, as the authors of the *Science* article state, since the US has not come forward with a scientifically valid explanation, “... *the Insect Allies risks being widely perceived as an attempt to develop a means of ... offensive purposes.*”

- The BWC, 1972, prohibits the development of agents that have no peaceful use. And since DARPA has come up with no explanations that point to the Insect Allies programme being *only* for peaceful purposes, a violation of the BWC is alleged.
- The programme also runs foul of the BWC, 1972, since insects are planned to be used as delivery vectors – the relevant part of the BWC requires, “... never in any circumstances to develop, produce, stockpile or otherwise acquire or retain ... weapons, equipment or *means of delivery* designed to use such agents or toxins for hostile purposes or in armed conflict.”¹⁰

For sure, the programme has some in-built kill switches that are to be incorporated; for example, the life of the insect vectors is mandated not to exceed two weeks – so as to limit the area of coverage of the insects once released. However, the flip side to this is that it would be very simple for any person or a group or even a state, with a devious intent, to manipulate the switches for enhancing the damage during an offensive use against an adversary. This threat, or perceived threat, has multiple fallouts in the security paradigm.

As brought out earlier, one of the reasons for DARPA embarking on this type of research programme is the ‘perceived’ threat from state and non-state actors. One, thus, sees an instability in the domain of food security between two (or more) countries in an adversarial relationship; this needs further examination.

FALLOUT IN SECURITY SECTOR

In conflict, the use of force is governed by the principle of proportionality. Similarly, in scientific research, proportionality is demanded by technology ethics. Here, the rule is that “the good

9. Ibid.

10. Ibid.

achieved by the technology must outweigh the harm or the risk; moreover, *there must be no alternative that achieves the same or comparable benefits with less harm or risk* (emphasis added).¹¹ The choice of insects as delivery vectors in the Insect Allies programme falls foul of this yardstick; the dispersal of the genetically modified viruses can well be done by spraying through aerial means – manned and unmanned aircraft – where there would be no danger of unintentional or accidental expansion of the ‘target’ zone (as with insects) – in this case, food crops in unassigned fields.

One of the primary duties of any nation’s leadership is to ensure that there is no threat to the food supplies for its nationals. Thus, every nation ensures a buffer stock to tide over any lean agricultural season that may occur, as non-availability would ensure restlessness and disturbances in its civil society. Take the case of India itself, when, in the 1960s, due to successive droughts compounded by the diversion of funds for military purchases due the 1965 Indo-Pak War, there was a severe shortage of food. The shortage was made up by food supplies (primarily wheat) from the US under that nation’s Public Law 480. The situation was so grim during those years that it is referred to as India living from ship (bringing the supplies) to mouth. It was during this period, when India was strategically very vulnerable, that the US attempted to coerce New Delhi to make changes to its agricultural policy;¹² another reason was that Washington was ‘irritated’ by India’s criticism of the US policy in Vietnam. That the nation withstood the pressure is to the credit of the then leadership, but the episode demonstrates the important position that food security occupies in the strategic autonomy of a nation.

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11. James A O’Brien and George M Marakas, “Management Information Systems 10”. <https://epdf.pub/management-information-systems-10th-edition.html> pp. 532. Accessed on January 6, 2020.
 12. Dr Stephen P. Cohen, “India and America: An Emerging Relationship,” Paper presented to the conference on “The Nation-State System”. <https://www.brookings.edu/wp-content/uploads/2016/06/kyoto.pdf>. Accessed on December 28, 2019. Forces in South Asia December 8-10, 2000, Kyoto, Japan. Also see Manoj Joshi, “Political and Diplomatic Overview of the Run up to the 1965 India-Pakistan War.” <https://www.orfonline.org/research/political-and-diplomatic-overview-of-the-run-up-to-the-1965-india-pakistan-war/>; and Richa Kumar, “Putting Wheat in Its Place, Or Why the Green Revolution Wasn’t Quite What It’s Made Out to Be”. <https://thewire.in/agriculture/green-revolution-borlaug-food-security>. All accessed on December 27, 2019.

Every nation guards its strategic autonomy zealously. What the Insect Allies programme does is to upset the unwritten acceptance between most nations not to interfere in each other's food security. Knowing that the US is on its way to getting a capability to genetically modify standing crops within one growing season, other nations would start similar projects, if they already do not have one underway – as has been alluded to by DARPA (stating that its research would counter threats from states and non-state actors). The resultant domino effect would result in a breakdown of deterrence in the social security sector where food assurance is a primary responsibility of a government. Drawing an analogy from the domain of nuclear strategic studies – just as the development of a ballistic missile defence shield is a destabilising step in the nuclear realm, as it upsets the stability brought about by the fear of mutual assured destruction, so would be the case here if an asymmetry of agricultural 'offence' capability develops. There would be no end to attempts of staying ahead of an adversary once this deterrence stability is adversely affected and an 'agricultural weapons race' would start, with more exotic methods and techniques being devised. In India's case, is one sure that China, with its exceptionally high R&D budget¹³ and the long strides it has taken in basic cutting edge research, is not doing a similar programme? How should India respond? The obvious answer would be to start a programme of its own – and, thus, would start an 'arms' race, with possibly Pakistan following suit.

Such programmes have an intangible fear factor associated with them. If crops get affected due to natural reasons, then the mere spread of a rumour that an adversarial country has something to do with it would introduce a 'fear' factor in the public discourse that would be difficult to dispel. In the case of a kinetic conflict, the populace 'accepts' the violent fallouts of war, but if there is a threat to food security, then the uncertainty that accompanies it would have

13. China's R&D budget was 0.72 per cent of its GDP in 1972 amounting to US\$ 13 billion. By 2017, it had jumped to 2.1 per cent of the GDP, amounting to US\$ 410 billion! "Presently, China spends more on R&D than Japan, Germany, and South Korea combined, and only trails the United States in terms of gross expenditure. In 2016, China's spending accounted for roughly 20 percent of global R&D expenditure. According to some estimates, China will overtake the US as the top R&D spender by 2020." For more see, "Is China a Global Leader in Research and Development?". <https://chinapower.csis.org/china-research-and-development-rnd/>. Accessed on December 20, 2019.

a slow smouldering effect of introducing insecurity in the nation's societal fabric.

To add to the grim portends brought out above, it is frightening to know that tinkering with genetic architecture is taking place at the level of school children. There is an International Genetically Engineered Machine competition¹⁴ that has been started, with the 2019 edition currently underway. The subjects are unique. For example, the project of a Chinese high school in 2018 was to make a new biological mosquito killer in an environmentally friendly way.¹⁵ The aim is very noble – to combat mosquito-borne diseases like zika and dengue; but the obverse is also true where the same technological capability can be used with malafide intent. The fact that school children are doing genetic engineering in their school laboratories is cause for initiation of urgent steps that bring some regulation in the area of genetic engineering, especially those like the Insect Allies programme that do not stand up to the scrutiny of existing regulations.

RECOMMENDATION

The horizon in the creation of weapons of war is vast, limited only by man's ingenuity. Man has used food as a weapon of war for centuries. However, the Insect Allies programme is different in that it opens up an avenue that makes it easier for implementation of a devious intent to squeeze an adversary on an immediate basis (one growing season) – in a *precisely* targeted way on crops of importance. It is incumbent on the government of the day to monitor whether similar activities are happening in the neighbourhood to prevent a surprise being sprung on the nation. If ever the cliché that 'capability takes time to build but intentions can change overnight,' is applicable, it is here and now. The 'precision' agricultural weapon, that seems to be on its way, would be deadly. The wounded to dead ratio, referred to in the beginning of this essay, would get skewed, albeit in an agonisingly long timeframe; this situation should not be acceptable to the civilised world.

14. International Genetically Engineered Machine Competition website, https://igem.org/Main_Page. Accessed on December 20, 2019.

15. See programme outline of the school from the Guangzhou province, China, <http://2018.igem.org/Team:GZHS-United/Description>. Accessed on December 28, 2019.

BALUCHISTAN: THE HISTORICAL ROOTS OF ALIENATION

TILAK DEVASHER

INTRODUCTION

Balochistan is an ancient land though the history of its people and earliest inhabitation is shrouded in mist and debate. Its geographical location had given it a distinct position as a bridge between the Indian and Mesopotamian civilisations. Archaeological discoveries at Mehargarh in Balochistan date it among the earliest civilisations in the world; the Kech civilisation in central Makran dates back to 4000 BC; the buried city near Zahidan, the provincial capital in western Balochistan, now in Iran, dates back to 3000 BC.¹

During his retreat from India in 325 BC, Alexander was greatly harried by the Baloch. His biographer wrote, "I had never seen the Great Alexander so sad and dejected – filled with sorrow and

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Disclaimer: The article is based on the author's *Pakistan: The Balochistan Conundrum* (New Delhi: Indian Council of World Affairs & HarperCollins Publishers, India, NOIDA, 2019).

1. Taj Mohammad Breseeg, *Baloch Nationalism: Its Origin and Development*, (Karachi: Royal Book Company, 2004), pp. 74-77.

uncertainty ... The outcome [of fighting with the Baloch] was disastrous for Alexander's army and against himself."² Centuries later, the Baloch fought and harried the British during the Raj, Rudyard Kipling wrote. Prior to the partition of India, distinguished faculty members and graduates of the Staff College in Quetta included Field Marshals Bernard Law Montgomery, Sir Claude Auckinleck, Lord Slim of Burma, S.H.F.J Manekshaw, K. M. Cariappa and Ayub Khan.³

The one common thread that runs through the history of Pakistan since its creation is the Baloch frequently breaking out in rebellion against the state. Balochistan today is witnessing the fifth insurgency that began in the early 2000s. Every rebellion has lasted longer than the previous one; every rebellion has encompassed a wider geographical area than the previous one; and every rebellion has involved more Baloch than the previous one. This has to say something about the legitimacy of Pakistan for the Baloch.

The roots of Baloch alienation are multi-dimensional. The major cause goes back to the forcible accession in 1948 of the princely state of Kalat that the Baloch did not accept and considered illegal. This issue continues to be disputed even now. Such alienation has been exacerbated due to the feeling among many Baloch that since the creation of Pakistan, Balochistan has been increasingly "colonised" by the ethnically dominant Punjabis who control the central government.

BRITISH RULE

Prior to the arrival of the British, Balochistan was distributed into four princely states or regions. These were (1) Kalat; (2) Lasbela; (3) Makran; (4) Kharan. All of them were under the Khan of Kalat when the incumbent was strong enough to assert his control.

The British intervention in Balochistan, a process that would forever change its destiny, began due to the compulsions of the Great Game. The advance of the Tsarist Empire into Central Asia made the British apprehensive about the safety of their Indian Empire. To forestall the Russian advance towards India, the British used Afghanistan as a buffer between the two empires. For this, it became

2. Cited in *Balochistan: Denial of Destiny*, International Forum For Rights And Security (IFFRAS), (London: European Media Ltd, 2012).
3. Mary Anne Weaver, *Pakistan: In the Shadow of Jihad and Afghanistan* (USA: Straus And Girous, 2002; Indian Edition in Viking by Penguin Books India, 2003), p. 90.

necessary to control parts of Balochistan bordering Afghanistan so as to secure lines of communication and transportation through the Bolan Pass to Chaman and beyond. The effort to ensure that Afghanistan remained a buffer led to the First Afghan War (1838-42). This proved to be a disaster for the British. The one important lesson they learnt from the movement of the 'Army of the Indus', the name of the British Indian force that invaded Afghanistan in 1839, was that to keep the passage through the Bolan Pass to southern Afghanistan open and safe, they had to establish some sort of control over the adjoining areas of Balochistan.

Following the Second Afghan War and the Treaty of Gandamak (1879), the British annexed large parts of Pashtun territories north of the Bolan Pass that were grouped into a chief commissioner's province called British Balochistan even though they were predominantly Pashtun areas. To further stall the potential Russian advance towards India, the British demarcated their borders with Iran and Afghanistan, giving away large parts of the princely state of Kalat. This was an imperial tactic to befriend the rulers in these two countries to preempt them joining the Russians. Under the final outcome of the boundary settlements imposed on the Baloch: (i) Seistan and Western Makran, Sarhad, etc. became part of Iran; (ii) Outer Seistan and Registan came under the control of Afghanistan; (iii) Jacobabad, Derajat and Sibi were included in British India. In return, the Khanate of Balochistan was recognised as an independent state with the status of a protectorate.⁴

Thus, under the British, Balochistan had two main administrative units: Kalat state (75 per cent of the area and the three constituents states of Lasbela, Kharan and Makran), and areas under the British. The latter consisted of British Balochistan: the areas leased by the British from Kalat and the Marri and Bugti tribal areas;

The British made Quetta cantonment their base. It was the headquarters of the fourth division of the Western Command. In 1903, the troops consisted of three mountain batteries, two companies of garrison artillery, two British infantry regiments, three 'native' cavalry regiments, six 'native' infantry regiments and one company of sappers and miners. The total strength of troops on June 1, 1903,

4. Inayatullah Baloch, *The Problem of Greater Baluchistan: A Study of Baluch Nationalism* (Stuttgart: Steiner Verlag Wiesbaden GmbH, 1987), p. 31.

was 2,650 British and 7,121 'native' – total 9,771. The greater part of the garrison was quartered at Quetta and in a number of outposts; the remainder was distributed at Loralai, Fort Sandeman and Chaman, each of these stations being garrisoned by 'native' infantry and cavalry.⁵

EVENTS AROUND PARTITION OF INDIA

As the sun began to set on the British Empire in India, several questions arose about the status of Kalat and its future, questions that continue to have a resonance even today. The key questions were: what would be the status of the princely state of Kalat on the lapse of British paramountcy? What would be the status of British Balochistan? How would the leased areas of Quetta, Nushki and Nasirabad be treated and would they be restored to the Khan? And what would be the future of the tribal areas in Balochistan?

Historically, the legal status of Kalat was different from that of other princely states in the subcontinent. According to Martin Axmann, "The relations between the Government of India and the Khanate of Kalat were, theoretically and formally, up to August 1947, based on the long-standing treaty of 1876 which committed the British in Article 3 to recognise and respect Kalat's independence." He also cites the First Administrative Report of the Balochistan Agency of 1886 that stated that in 1877, Khudadad Khan (Khan of Kalat) "occupied a position of a Sovereign Prince entirely independent of the British Government with which he was connected only by his treaty engagements."⁶ Due to this position, the Khan did not join the Chamber of Princes in Delhi. He always maintained that Kalat was on a separate footing and not part of Britain's Indian Empire. Likewise, while the 560 odd princely states in India were clubbed as Category A under the Political Department, states like Kalat, together with Nepal, Bhutan, Sikkim were clubbed in Category B under the External Affairs Department of the Government of India.

Despite all the evidence, however, the Government of India Act of 1935 unilaterally included Kalat among the princely states

5. *Imperial Gazetteer of India, Provincial Series, Baluchistan* (London: Clarendon Press, this edition Lahore: Sang-e-Meel Publications, 1991).
6. Martin Axmann, *Back To The Future: The Khanate of Kalat & The Genesis of Baloch Nationalism 1915-1955* (Karachi: OUP, 2008), p. 176.

of India and sanctioned its right to be represented in the federal legislature. The Act also formally established the province of British Balochistan.⁷ In protest, the Khan issued several letters to the British government demanding the restoration of his powers that had been guaranteed under the Treaty of 1876. In one such letter in July 1938, the Khan demanded the framing of a fresh treaty that would put “into effect in letter, in spirit and in practice, the Treaty of 1876, which safeguarded the interests of the two Governments” and the “restrictions and conditions imposed, contrary to the terms of the Treaty of 1876 ... may be withdrawn and rescinded and the independence of the Kalat government may be honoured scrupulously in accordance with the Treaty of 1876.”⁸ However, all he got was a personal letter from the crown representative assuring him that such reaffirmation was unnecessary, and that the viceroy recognised the Treaty of 1876 as fully valid in every respect, and that it would henceforth form the basis of the relations between the British government and the Kalat state.⁹

The Khan had two memorandums formally submitted to the Cabinet Mission in March 1946 (prepared by barristers Sir Sayyid Sultan Ahmad and Sirdar D K Sen but presented by Jinnah in May 1946). The first titled “Memorandum of the Government of Kalat” dealt in detail with the future position of the Kalat claims in respect of Lasbela and Kharan, and claims in respect of the Marri and Bugti tribes.

The memo went to great pains to articulate why Kalat was not an Indian state. It argued:

On the transference of power in British India, the subsisting treaties between the Khan of Kalat and the British Government would come to an end, and whatever obligations have been imposed on the Khan by these treaties will *ipso facto* terminate. The consequence will be that the State of Kalat will become fully sovereign and independent in respect of both external and internal matters, and will be free to conclude treaties with any other Government or

7. Naseer Dashti, *The Baloch and Balochistan* (USA: Trafford Publishing, 2012), p. 326.

8. India Office Records IOR R/1/34/63, cited in n. 2.

9. IOR.LVP+S/13/1847 cited in Breesag, n. 1.

State. The Khan of Kalat and his people are most anxious that the completely independent status, which will emerge as a result of the transference of power in British India, should continue, and the State of Kalat should not be asked to come within the framework of the proposed Indian Union.¹⁰

As far as Lasbela and Kharan were concerned, the memo held that Lasbela was a district of Kalat state within the province of Jalawan, while Kharan was a part of the territories of the Kalat state, with its chief being one of the Sarawan sardars. Therefore, both were a part of the territories of Kalat.¹¹

The second memo was titled "Retrocession of Quetta, Nushki and Nasirabad," and concerned the return of these leased areas after the British departure. The memo stressed that although administration of these territories was vested in the British government and it was in actual possession of these areas, sovereignty of these areas remained with the Khanate of Kalat. Therefore, it was urged that before the British handed over power in India, they should formally declare that they relinquished or retroceded all their powers and authority in and over the *niabats* and districts of Quetta, Nushki and Nasirabad. This should be followed by the actual delivery of possession.¹²

As the Cabinet Mission could not find flaws with the legality of the demand, it left the issue unresolved.

As late as June 1947, Jinnah assured Kalat of the continuance and safeguard of its independent status. In a statement to the press that he issued on June 18, 1947, Jinnah said, "... I am of the firm opinion that the Memorandum of the Cabinet Mission of 12 May 1946 ... nowhere makes it obligatory upon them (Indian states) to merge themselves with any Legislative Assembly, be it Indian or Pakistani." He added, "It is my personal belief that if any State wants to remain aloof, it may do so without any pressure from any quarter, whether it be the British Parliament or any political organisation in the country."¹³

10. Mir Ahmed Yar Khan Baluch, *Inside Baluchistan: A Political Autobiography Of His Highness Baiglar Baigi: Khan-E-Azam-Xiii* (Karachi: Royal Book Company, 1975), pp. 255-56.

11. *Ibid.*, pp. 275-279.

12. *Ibid.*, p. 30.

13. *Ibid.*, p. 146.

Thus, Kalat in 1947, was not really obliged to join either India or Pakistan. When it was decided to partition India, Mir Ahmad Khan, the Khan of Kalat, with some justification, claimed that Kalat was never a part of India and made it clear that he sought independence.

ACCESSION

At a round table conference held in Delhi on August 4, 1947, and attended by Lord Mountbatten, the Khan of Kalat, the chief minister of Kalat and Jinnah, it was decided that “*Kalat State will be independent on 5th August 1947 enjoying the same status as it originally held in 1838 having friendly relations with its neighbours.*”¹⁴

As a corollary to the round table conference, a Standstill Agreement between Kalat and Pakistan was signed on August 4, 1947 (publicly announced a week later on August 11). Jinnah and Liaquat Ali signed on behalf of the future state of Pakistan, and Sultan Ahmed on behalf of the Khanate of Kalat. The operative portions of the communiqué dated August 11, 1947, are worth quoting from:

As a result of a meeting held between a delegation from Kalat and officials of the Pakistan States Department, presided over by the Crown Representative, and a series of meetings between the Crown Representative, HH the Khan of Kalat, and Mr Jinnah, the following was the situation:

The Government of Pakistan recognises Kalat as an independent sovereign state, in treaty relations with the British government, with a status different from that of Indian states. Legal opinion will be sought as to whether or not agreements of leases made between the British government and Kalat will be inherited by the Pakistan government.¹⁵

Separately, the British informed the rulers of Kharan and Lasbela that control of their regions had been transferred to Kalat state and the Marri and Bugti tribal regions which were under the British control

14. Ibid., p. 147.

15. Baloch, n. 4, p. 256.

were also returned into the Kalat fold, thereby bringing the whole of Balochistan under the suzerainty of the Khan of Kalat.¹⁶

Based on the August 4 agreement, the Khan declared the independence of Kalat in a formal proclamation on August 12, 1947, effective from August 15. The Kalat state flag was raised as prayers were read out for the Khan of Kalat. The Government of Kalat State Act 1947 was promulgated as the new Constitution of Balochistan. He established two Houses of Parliament to ascertain the will of the people concerning the future of the state. Elections were held shortly and though held on a non-political basis, the Kalat State National Party (KSNP) candidates won 39 out of 52 seats in the *Darul-Awam* (Lower House of the Parliament) While not 'democratic' in the modern sense, the *Darul Awam* (House of Commons) and *Darul Umra* (House of Lords) were broadly representative of public opinion in the state.¹⁷

The *Dar-ul Awam* held a session in mid-December 1947 when the issue of accession was debated. Ghous Buksh Bizenjo (later to be known as Baba-e-Balochistan) made his famous speech:

... We can survive without Pakistan. We can remain without Pakistan. We can prosper outside Pakistan. But the question is what Pakistan would be without us ...? If Pakistan wants to treat us as a sovereign people, we are ready to extend the hand of friendship and cooperation. If Pakistan does not agree to do so, flying in the face of democratic principles, such an attitude will be totally unacceptable to us, and if we are forced to accept this fate, then every Baloch son will sacrifice his life in defence of his national freedom.

A resolution was passed demanding that "relations with Pakistan should be established as between two sovereign states through a treaty based upon friendship and not by accession."¹⁸

On January 4, 1948, the *Dar-ul Umra*, the Upper House, comprising sardars, discussed the question of merger with Pakistan and reiterated the independence and sovereignty of Kalat, rejecting

16. *Balochis of Pakistan: On the Margins of History* (London: Foreign Policy Centre, November 2006).

17. Yaqoob Khan Bangash, "Recalling Baloch History", *Express Tribune*, June 14, 2011, <http://tribune.com.pk/story/188798/recalling-baloch-history/>.

18. Baloch, n. 4, p. 184.

accession to Pakistan.¹⁹ It declared: “*This House is not willing to accept a merger with Pakistan which will endanger the separate existence of the Baloch nation*”.

Bolstered by the resolutions of both Houses rejecting accession to Pakistan, the Khan dug in his heels. He expressed his reluctance to abandon the nominally achieved independent status but was ready to concede on defence, foreign affairs and communications. However, he was unwilling to sign either a treaty or an instrument, until and unless he had got a satisfactory agreement on the leased areas. As he prevaricated, the Government of Pakistan worked on the rulers of Lasbela and Kharan, who were feudatories of the Khan, and of Makran that was never more than a district of the state of Kalat.²⁰

By February 1948, the discussions between Kalat and the Government of Pakistan were coming to a head. On February 15, 1948, Jinnah visited Sibi, and addressed a Royal Durbar. The Khan failed to turn up for the final meeting with him, pleading illness. In his letter to Jinnah, he said that he had summoned both Houses of the Parliament, *Dar-ul-Umra* and *Dar-ul-Awam*, for their opinion about the future relations with Pakistan, and he would require two months to obtain their views. The *Dar-ul-Awam* of Kalat met on February 21, 1948, and decided not to accede, but to negotiate a treaty to determine Kalat’s future relations with Pakistan. The Upper House asked for three months for further consideration.

By now, relations between the Khan and Jinnah had deteriorated. On March 18, Pakistan announced the accession of Makran, Kharan and Lasbela to Pakistan.²¹ This deprived Kalat of more than half its territory and its access to the sea. The following day, the Khan of Kalat issued a statement refusing to believe that Pakistan as a champion of Muslim rights in the world would infringe on the rights of small Muslim neighbours, pointing out that Makran as a district of Kalat, had no separate status and that the foreign policy of Lasbela and Kharan was placed under Kalat by the Standstill Agreement.

19. Ibid.

20. Yogeena Veena, “How Balochistan Became a Part of Pakistan – A Historical Perspective”, *The Nation*, December 5, 2015, <http://nation.com.pk/blogs/05-Dec-2015/how-balochistan-became-a-part-of-pakistan-a-historical-perspective>.

21. Abdul Majeed Abid, “The Question of Kalat”, *The Nation*, December 21, 2015, <https://nation.com.pk/21-Dec-2015/the-question-of-kalat>.

Time had, however, run out for the Khan. The plans for the invasion of Kalat were finalised on March 22, 1948, when Pakistani Prime Minister Nawabzada Liaquat Ali Khan presided over a meeting of the three Services chiefs to oversee the military invasion. Despite the Standstill Agreement, on March 27, 1948, Lt Col Gulzar of the 7th Baloch Regiment under General Officer Commanding (GOC) Maj Gen Mohammad Akbar Khan, invaded the Khanate of Kalat. Gen Akbar escorted the Khan of Kalat to Karachi and forced him to sign the Instrument of Accession. Jinnah accepted the Instrument on March 30, 1948.

The Khan's signing of the Instrument was without obtaining formal sanction from the Baloch sardars and in opposition to the decision of the Baloch legislature (in October 1947 and January 1948).

While the Khan acquiesced in the accession of Kalat, his brother Abdul Karim Khan declared a revolt and launched guerrilla operations against the Pakistan Army in Jhalawan district. He managed to keep aloft the flag of nationalist defiance until 1950. According to Selig Harrison, Pakistani officers reportedly signed a safe conduct agreement with Abdul Karim's representatives in the Harboi mountains and swore an oath on the Koran to uphold it. However, the agreement was dishonoured and the prince was ambushed and arrested along with 102 of his followers on their way to Kalat.²² Karim and his followers were all sentenced to prison terms. Karim would spend several years in Pakistani prisons.

Karim Khan's was the first Baloch insurgency against Pakistan. Though militarily not very significant, it is important in Baloch history for two reasons. First, it established that the Baloch did not accept the accession of Kalat to Pakistan. Second, as Harrison notes, "it led to the widespread Baloch belief that Pakistan had betrayed the safe conduct agreement. The Baloch regard this as a first in the series of broken treaties that have cast an aura of distrust over relations with Islamabad."²³ Karim Khan was to become the first modern rallying symbol for the Baloch liberation movement. Subsequent

22. Selig S Harrison, *In Afghanistan's Shadow: Baluch Nationalism and Soviet Temptations*, (New York: Carnegie Endowment For International Peace, 1981), p. 26.

23. *Ibid.*, p. 27.

Baloch history would reinforce the impression of broken promises and repression by the government.

The forcible accession of Kalat was regarded, and continues to be regarded, as “illegal and oppressive” because it was only the two legislative chambers of Kalat that were authorised to decide the issue of accession. Both chambers had clearly decided against accession. The Baloch have never got over their anger at the way the accession of Kalat was manipulated and they continue to treat it as invalid. This is the root cause of Baloch alienation even today.

Martin Axmaan has written probably the best epitaph for Kalat: “The death of the state was the birth of the nation. The Baloch lost their ‘national homeland’ and turned into a marginal ethno-linguistic minority of Pakistan. This situational switching moulded the Baloch nation”.²⁴

Pakistan had signed a Standstill Agreement with Kalat on August 11, 1947. It had signed a similar Standstill Agreement with the Maharaja of Kashmir in August 1947. Pakistan broke both these agreements. Its subsequent history would show similar disdain for international commitments.

24. Axmann, n. 6.

IDEOLOGY OF THE ISLAMIC STATE

SAURAV SARKAR

INTRODUCTION

The Islamic State (IS) terror group continues to operate and endure five years after its founding in 2014 and after the loss of its caliphate in March this year. The IS has also endured the killings of its Caliph Abu Bakr al-Baghdadi in October and other senior leaders in the last few years. A factor in the resilience of the IS is the nature of its organisational structure – which is quite ambiguous, with no clear hierarchy – that is not severely affected by leadership decapitations or territorial losses. However, a larger force behind its survival is its ideological appeal and emphasis on using violence to achieve its ends. The IS has invested a lot of resources and expertise in propagating and micromanaging its ideological message across the *jihadist* landscape. The ideology of the IS – a mix of Salafi-*jihadism*, Sunni extremism and a nihilistic outlook – has found resonance among radical sympathisers worldwide and had managed to bridge the gap between *jihadist* thought and action by establishing a functioning Islamic caliphate in 2014, something that no other Islamist terror group had been able to do.

The IS continues to inspire individuals to carry on its *jihad* in their respective regions even if it does not have a physical presence in those

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areas. Apart from this, it has managed to gain a footing in places of conflict and religious tension such as West Africa and Southeast Asia. It poses a clear and present danger to nation states as its strategies have developed according to different regions. IS affiliates in Afghanistan, Pakistan, Bangladesh, Somalia, the Sinai Peninsula and Southeast Asia, among others, have already pledged allegiance to Baghdadi's successor.¹ Therefore, the possibility of continued attacks is always there and the losses the IS has suffered would just make it more determined to mount more attacks.

IDEOLOGICAL UNDERPINNINGS

The ideology of the Islamic State is grounded in Sunni Islamic supremacy and extremism, with the aim to establish a puritan theocratic state based on Salafi ideals and an ever continuous appetite for war and conquest against "infidels" and "apostates". Salafism, a mainly theological movement in Sunni Islam, is concerned with the purification of Islam.² Salafis view themselves as the sole true Muslims, labelling those who practise so-called "major idolatry" to be outside the bounds of Islam. Those worshiping saints, tombs, etc. are called apostates, and betraying Islam. These include Shias and, for many Salafis, those participating in a non-*Sharia*³ based political system. The Shias are guilty of *shirk* (idolatry) on account of their excessive reverence for the Prophet Muhammad's family, among other things, while political rulers go astray in assigning "partners" to God in legislation, deemed the prerogative of the Divine Legislator.

The IS depicts itself as true Muslims following the religion as practised by the early generations of Islam – Salafism – and is inspired by an especially hardcore brand of Salafism, in particular, Wahhabism.⁴ Salafi-*jihadism* is based on an extremist and minority

1. Jeff Seldin, "US Takes Notice as More Islamic State Branches Back New Leader", Voice of America, November 6, 2019, <https://www.voanews.com/south-central-asia/us-takes-notice-more-islamic-state-branches-back-new-leader>. Accessed on November 13, 2019.
2. Bernard Haykel, "On the Nature of Salafi Thought and Action," in Roel Meijer, ed., *Global Salafism: Islam's New Religious Movement* (London: Hurst, 2009).
3. A religious law forming part of the Islamic tradition. It is derived from the religious precepts of Islam, particularly the Quran and the Hadith.
4. Founded in the Arabian Peninsula by Muhammad ibn Abd al-Wahhab in the 18th century. In the late 18th century, Wahhabism was merged with the House of Saud that became the rulers of present day Saudi Arabia.

understanding of Islamic scriptures that is also textually serious, deeply rooted in a pre-modern theological tradition, and extensively elaborated by a recognised cadre of Islamic authorities.⁵

The most prominent of these state that all Muslims must associate exclusively with fellow “true” Muslims and dissociate from anyone not fitting this narrow definition; failure to rule in accordance with God’s law constitutes unbelief; fighting the Islamic State is tantamount to apostasy; all Shia Muslims are apostates, deserving of death; and Al-Qaida, the Muslim Brotherhood,⁶ Taliban and Hamas etc. are traitors against Islam, among many other things.

The Islamic State majorly took from Wahhabism the penal code that already exists in Saudi Arabia and is applied less systematically in other Muslim countries. Wahhabism’s biggest contribution to the IS, however, may be the concepts of *wala wal bara* (loyalty to Islam and rejection of unIslamic ways) and *tawhid* (oneness of God). While these concepts exist in conventional Salafism, they are interpreted and promoted more extremely by Wahhabi clerics. Muhammad ibn Abd al-Wahhab, the founder of Wahhabism, explained this when he wrote, “One’s Islam cannot be sound, even if they adhered to the oneness of God and worshipped none but God, without enmity to the polytheists and showing to them hate and hostility.”⁷

The IS also emphasises offensive *jihad*, which in the Wahhabi tradition is premised on the eradication of *shirk*, wherever it is present. Abu Omar al-Baghdadi (the deceased leader of the Islamic State of Iraq) explicitly highlighted the importance of “offensive *jihad*,” which he defined as “going after the apostate unbelievers by attacking [them] in their home territory, in order to make God’s word most high and until there is no persecution.” Consistent with the Wahhabi doctrine, “persecution” is understood to mean idolatry.

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5. Daniel Lav, *Radical Islam and the Revival of Medieval Theology* (Cambridge: Cambridge University Press, 2012); and Joas Wagemakers, *A Quietist Jihadi: The Ideology and Influence of Abu Muhammad al-Maqdisi* (Cambridge: Cambridge University Press, 2012).
 6. A transnational Sunni Islamist organisation founded in Egypt by Islamic scholar and school teacher Hassan al-Banna in 1928.
 7. Mohammed bin Saeed al-Qahtani, *Min mafahaemaqidat al-salaf al-salih, al-walawalbaraa fil Islam* [The Islamic concept of allegiance and disavowal as preached by the early noble generations of Muslims] (Saudi Arabia: Tayba Publishers, 2014), <http://islamhouse.com/ar/books/468544/>. Accessed on November 24, 2019.

EVOLUTION AND SPREAD OF THE ISLAMIC STATE'S IDEOLOGY: ITS APPEAL AND APPLICATION

The Islamic State's ideology is a chimera of regional Islamic influences, including Syrian, Egyptian and Palestinian, sprinkled over traditional Salafism during a period known as the Islamic Awakening, a period that saw the influx of multinational Arabs into the Gulf states, especially Kuwait and Saudi Arabia. It gave rise to most of the current generation of *jihadi* ideologues and theoreticians. There was a war of ideas between the Muslim Brotherhood and more reactionary Salafist competitors which led to figures such as Abdullah Azzam and Ayman al-Zawahiri, Osama bin Laden's first and second spiritual mentors, and Abu Muhammad al-Maqdisi, Abu Musab al-Zarqawi's initial mentor and fellow *jihadi*. Bin Laden was part of the Muslim Brotherhood in Saudi Arabia, Zawahiri was from the Egyptian Muslim Brotherhood and Abu Bakr al-Baghdadi was close to Muslim Brotherhood members in Iraq.

The Muslim Brotherhood's intent to change Arab politics gradually, through already existing institutions, clashed with the Salafists' rejection of the ruling order. In Egypt and Saudi Arabia, an awkward fusion was occurring between these Salafi ideologues and Brotherhood Islamists, leading to the Muslim Brotherhood's politics becoming further conservative, and Salafism more political. The Salafists undertook political *takfirism* under the banner of restoring the caliphate. The Muslim Brotherhood's chief philosopher Sayyid Qutb, took inspiration from some of the Salafists' radicalism. He stated that Muslim societies were living in a time of *jahiliyya* or pre-Islamic ignorance. All secular non-Islamic ideologies had failed, as per Qutb, and only Islam could succeed. Qutb advocated *ustadhiyyat al-alam*, or supremacy over the world. To achieve these transformative goals, a vanguard of Muslim youth would have to reject their societies and be the change through complete disassociation (*mufasala*) and having only Islam as their reference point (*hakimiyya*).

A chain-link progression of Islamist revolutionary thinking, from the Brotherhood to the caliphate, can be observed: the Islamic State was conceptualised by Qutb, preached by Azzam, internationalised by Bin Laden, made a reality by Al-Zarqawi and implemented by the Al-Baghdadis: Abu Omar and Abu Bakr. Qutb's concepts of *jahiliyya*,

hakimiyya, and *mufasala* determine how the IS deals with the other religions and communities it rules as they have to be “reconverted” to Islam.

The Islamic State’s precursor, the Islamic State of Iraq (IS-I), established in October 2006, was formed out of Al-Qaida in Iraq (AQI). The IS-I was also known as the Islamic State *in* Iraq, less commonly and unofficially.⁸ These seemingly minor titles signify the two ways in which the new ‘state’ was described to the Iraqi public and the larger Islamic world.⁹

The Islamic State of Iraq was depicted as a state for Iraqi Sunnis. The Kurdish and Shi’ite communities had carved out semi-autonomous regions after the U.S. invasion of Iraq in 2003; thus, the IS-I controlled areas were to be exclusively for Sunnis. Muharib al-Juburi, the IS-I’s spokesman, described the new state as: “After the Kurds have taken possession of a state in the north, and the Shias have been established in a federal state in the middle and south ... it has become necessary for the honorable and free Sunnis among the mujahidin and engaged scholars and notables to give something [comparable] to their brothers and their sons ... especially in the light of the farcical drama known as ‘Maliki’s (then pro-Shia Iraqi Prime Minister)state,’ in which, sadly, traitorous Sunnis have played roles.”¹⁰

However, the Islamic State *in* Iraq was showcased as a state for the world’s Muslims, the proto-caliphate promoted by Al-Zarqawi and Al-Qaida. In this regard, Juburi stated that the IS-I was “following the example of the Prophet when he left Mecca for Medina [in 622] and established the Islamic State there, notwithstanding the alliance of the idolaters and the People of the Book against him.” Juburi and many others in the IS-I further claimed that “the territories [under our control] equal in expanse the first state in Medina.”¹¹ Therefore, the IS-I was following the example of the state founded by the Prophet Muhammed – the caliphate. On balance, the Islamic concept prevailed

8. Examples of both usages exist. See, for example, Muh. ārib al-Jubūrī, “*al-Tashkiliyya al-wizāriyya al-ūlā li-Dawlat al-‘Irāq al-Islāmiyya*,” *Mu’assasat al-Furqān*, April 19, 2007.

9. Cole Bunzel, *From Paper State to Caliphate: The Ideology of the Islamic State*, The Brookings Project on U.S. Relations with the Islamic World, Analysis Paper, No. 19, March 2015, p. 17.

10. *Ibid.*, p. 18.

11. *Ibid.*

over the Iraqi notion in the group's propaganda, even though the Islamic State of Iraq was its official name. Territorial nationalism is not compatible with *jihadi* ideology, and this was evident in the early pronouncements of the group.

On November 10, 2006, Abu Hamza al-Muhajir, former war minister of the IS-I, announced, "We are not the sons of Sykes-Picot. We are the sons of [the Prophet Muhammad]." ¹² As Abu Omar al-Baghdadi said in his second public address, delivered on February 3, 2007, "We are fighting not for any patriotism but rather for God's word to be the most high." ¹³

Ideological Justification of the Islamic State

In January 2007, the IS-I's Sharia Council issued a detailed academic justification of its statehood claim called "Informing Mankind of the Birth of the Islamic State." ¹⁴ The document attempted to establish the IS-I's legitimacy of the *Sharia*. The document identified three traditionally legitimate paths for a ruler to assume power in Islam: (1) election by an elite group of electors known as the *ahl al-hall wa'l-'aqd* ("those who lose and bind"); (2) designation by the preceding ruler; (3) seizure of power by brute force. The treatise argued that the IS-I undertook the first path. ¹⁵

The document justified the Islamic State's statehood on the basis of its supposed political and military successes and promotion of Salafi theology and the *Sharia*. The U.S. military, the authors claimed, was almost done for in Iraq, and the Iraqi government was a fraud, creating a ripe moment for building a state. The Mujahidin held the real power in the Sunni areas of Iraq. The treatise argued that the territory of the newly formed Islamic state was actually larger than the original Islamic state founded by Muhammad in Medina. The treatise also claimed to have brought true *tawhid* to Iraq, cleansing the land of *shirk* and destroying shrines. It had also established *Sharia* courts and appointed Muslim judges to arbitrate. ¹⁶

12. Ibid., pp. 18-20.

13. Ibid.

14. This document was also found among Abu Bakr al-Baghdadi's possessions when he was killed by U.S. forces in Syria on October 27, 2019.

15. Brunzel, n. 9.

16. Ibid.

When the IS was established in 2014, after breaking up with Al-Qaida and conquering territories in both Iraq and Syria, it became a functioning state with bureaucratic, military, religious and political apparatuses. The proclamation of the caliphate was motivated by the group's military morale and takeover of Sunni Iraq, and by the coming of the holy month of Ramadan at the end of June.

Propaganda and Ideological Appeal

The ideology of the IS tends to getting muddled with that of Al-Qaida or Saudi Arabia's Wahhabism which eschews Islamic fundamentalism. However, it does not explain why tens of thousands of men and women, some of them not even Muslims but recent converts from Western nations, were so keen to join a violent religious cult of nihilistic tendencies. Battlefield commanders in Syria used to say that the ideology of the IS was a major obstacle in getting troops to fight as many fighters refused to fight fellow Muslims, particularly if they were fighting on the behest of a non-Muslim power.¹⁷ Hence, attempts at grassroots counter-insurgency campaigns were undermined due to the *takfiri*¹⁸ culture prevalent among the warring Islamist groups.

The training of IS recruits varies depending on their religious knowledge and devotion. Recruits are indoctrinated first; this process takes anything from two weeks to forty-five days to a year. Within the IS boot camps, the recruits receive a mix of military, political and *Sharia* orientation. *Sharia* training lasts for 29 days on average and military training for 25 days.¹⁹ The trainees are then sent to checkpoints, but not to the frontlines, to uphold martial discipline. After graduating from their boot camp, they remain under supervision and can be expelled or punished in case of non-compliance of rules and orders. If the brutality of the IS becomes too much to handle for a recruit, he is re-sent for further training. Recruits are also taught Arabic and are discouraged from all previous political notions. Issuing of *fatwas* is

17. Michael Weiss and Hassan Hassan, *ISIS: Inside the Army of Terror* (US: Reagan Arts, 2016), p. 217.

18. *Takfir* refers to the act of declaring another Muslim an apostate over differences in religious practices.

19. Daniel Milton, Julia Lodoen, Ryan O'Farrell, and Seth Loertscher, "Newly Released ISIS Files: Learning from the Islamic State's Long-Version Personnel Form", *CTC Sentinel*, Combating Terrorism Centre at West Point, October 2019, p. 17.

restricted to the clerics and nobody can kill without a *fatwa* unless in the battlefield.²⁰

The clerics who are in charge of religious indoctrination (*sharii*) are mostly scholars or have been with the IS for long. The IS relies more on younger clerics who have recently joined to compensate for a lack of *imams*. All mosques in IS controlled areas are fully staffed and religious services such as Friday prayers are strictly enforced. IS members refer to, and make literal interpretations of, the words of the Prophet, like: "I have been given victory by means of terror", and "deal with them in a way that strikes fear in those behind them", in defending their acts of slaughter.²¹

The IS does not usually expose recruits to non-*Sharia* teachings and cadets are given only religious books, while experienced members are allowed to study manuals such as *The Management of Savagery*.²² This compartmentalisation of religious indoctrination to purely religious scriptures is common in the Islamic State's distortive message that it is an extension of original Islam rather than a strain of competing factions of Islamic interpretation. The IS is so obsessed with its puritanical vision of Islam that it considers the "mainstream" Islam practised by Muslims today to be an "innovation" over the original Islam espoused by the Prophet.²³

To counter this mainstream narrative, the IS uses *Sharia* and history to find the most obscure teachings and then exaggerates them to show that they were the rule, rather than the exception. Recruits are, thus, exposed to a farcical version of Islam and made to believe that they are representing centuries of Islamic tradition. The obscurity of such practices is what makes it important for the IS, as it stands ready to counter any condemnation of these. The IS feels no compulsion to ignore certain marginal or embarrassing texts and rather refers to them wholeheartedly as if they were the word of God.

For instance, the IS practices throwing people off rooftops as a *Sharia*-based punishment for homosexuality, which is quite unheard

20. Weiss and Hassan, n. 17, pp. 217-219.

21. Ibid.

22. Ibid.

23. Graeme Wood, "What ISIS Really Wants", *The Atlantic*, March 2015, <https://www.theatlantic.com/magazine/archive/2015/03/what-isis-really-wants/384980/>. Accessed on December 16, 2019.

of in Islamic society. However, many people in the Middle East are unsure or unaware about the validity of the practice which is exactly why such practices are used by the IS to make its point. Another example being that the practice of killing captives is justified by the IS by referring to the story of the Prophet's Commander-in-Chief Khaled bin al-Walid, who killed hundreds of captives after the battle of Ullais in Iraq in the 7th century. Even though al-Walid's indiscriminate violence ran contrary to Islam, he had promised God that he would make a "river of blood" from the Persian Army in case of victory. For Al-Walid, keeping his promise to God took priority over the Islamic ruling against killing captives. The IS distorted this story for its own purposes by claiming that the Prophet's military commander, who was also lauded by the first Caliph Abu Bakr, could surely not be unIslamic despite the wanton violence.²⁴

IS' IDEOLOGY IN PRACTICE

The biggest strength of the Islamic State is its ideological propaganda and its continued ability to inspire and influence its followers to carry out attacks and recruitment. While its operational and strike capabilities are also quite hardened and resilient, the Islamic State's ability to endure stems from how its message is carried and received across the *jihadi* world. Apart from being a terrorist and insurgent group, it is also a zealous religious cult. It advocates slavery and many of its recruits are often more motivated by a sense of adventure, a desire to cause chaos, and a sense of belonging and group dynamics than by religious motivations. The group's propaganda is often theological and apocalyptic and it mixes its militant activities with religious fervour.²⁵

IS recruits are often fascinated by the sensationalism of the group which mixes violent spectacle with high quality and tech-savvy presentation and dissemination in both the online and offline spheres. The Western media has also contributed to this phenomenon with their stories about young Western women travelling to the caliphate to join the IS; such stories generate huge headlines. This leads to a

24. Weiss and Hassan, n. 17, pp. 219-220.

25. Robert Manne, "The Mind of the Islamic State", *The Monthly*, June 2016, <https://www.themonthly.com.au/issue/2016/june/1464703200/robert-manne/mind-islamic-state>. Accessed on December 12, 2019.

sense of awe for many others who want to leave their comfortable but dull lives back in their home countries and sign up for a life of violence and a higher purpose. The IS in its own sense has its own version of moral virtue similar to the terror of the French Revolution which framed violence as a means to achieve democracy. George Orwell, in a 1940 essay in which he reviewed *Mein Kampf*, observed that young men were following a leader who offered “struggle, danger and death”²⁶ and this is not too dissimilar to what the IS offers its followers.

The IS does not force feed its ideology to its recruits but gradually makes them accept it as the truth by using a mix of theological rhetoric and making them feel at home. Contrary to popular belief, the ranking members of the IS are not illiterate savages but former military and intelligence officers, clerics and religious scholars (albeit of dubious qualifications). IS recruiters dispel or glorify everything written about the IS in the mainstream media to the recruits and say that what they are doing is God’s work. The IS communicates with its recruits using an elaborate ideological narrative that includes a strong concoction of Islamic hermeneutics, history and politics. It has a way of convincing people, making them comfortable and influencing their psyche. Some recruits have been lured solely by its power of persuasion rather than religion. For example, the Sri Lankan serial bombers in April 2019 were inspired by the IS rather than being a formal part of the group or receiving any direct instructions or teachings.²⁷

Young people get drawn to the IS because they are educated, tech-savvy and energetic, which enables them to access the IS propaganda more easily, and to undertake actions on behalf of the group. The IS also represents a generational conflict within the wider global *jihadist* movement. Al-Zarqawi, thought to be the founding father of the IS and leader of the AQI, was just 38 years old when the AQI was established in 2004, and, in contrast, Bin Laden was 47 years old by then. When Abu Bakr al-Baghdadi became the leader of the Islamic

26. George Orwell, “Review of *Mein Kampf* by Adolf Hitler”, Project Gutenberg Australia, February 2016, <http://gutenberg.net.au/ebooks16/1600051h.html>. Accessed on November 25, 2019.

27. Asian News International, “Attackers of Sri Lanka Easter Sunday Bombings Inspired by Islamic State”, *India Today*, July 25, 2019, <https://www.indiatoday.in/world/story/sri-lanka-attack-isis-1573253-2019-07-25>. Accessed on December 14, 2019.

State of Iraq and the Levant, he was 43 years old and Al-Qaida leader Al-Zawahiri was 63 by then. The IS takes young men and women from different backgrounds who had their initial radicalisation in local mosques, out of sheer boredom or a lack of purpose, and then found their way to online *jihadi* forums. The IS' technical and media units then take over when they migrate to the war zones and photoshop them to look every bit like war veterans. Al-Zarqawi was a petty criminal/thug before he went to fight in the Afghan *jihad*, and his turn to Islam made him forsake a life of crime but he carried over the same violent qualities for his *jihadi* career.²⁸ The 2016 Holy Artisan Bakery attackers in Dhaka, Bangladesh, were all locals who were radicalised domestically and were religiously motivated, and the IS took credit for the attack by posting alleged pictures of the attackers online.²⁹

Some Foreign Terrorist Fighters (FTF) from the West come to seek martyrdom and engage in *fidayeen* attacks and the glorification of *fidayeen* (especially suicide bombers) has been a constant on *jihadi* forums ever since the AQI was founded. There are those who just want the thrill of the fight and the adrenaline rush that such a life provides. These are often not even devout Muslims but are drug users or criminals looking for a high and to go out with a bang, much like Al-Zarqawi. Violence is its own form of drug, and religion is its own mobilisation force for the people who flock to join the IS. Young recruits are turned into cannon fodder and suicide bombers while the veterans are made commanders.

CONCLUSION

A study of the IS ideology and its applications indicates that the ideology of the IS has managed to sustain its appeal and capabilities for the foreseeable future. Despite the symbolic and high-profile nature of Al-Baghdadi's killing, it will not significantly alter the threat that the IS poses. The IS continues to be active outside of Iraq and

28. Mary Weaver, "The Short, Violent Life of Abu Musab al-Zarqawi", *The Atlantic*, July-August 2006, <https://www.theatlantic.com/magazine/archive/2006/07/the-short-violent-life-of-abu-musab-al-zarqawi/304983/>. Accessed on December 15, 2019.

29. Nikhil Kumar, "Bangladesh Faces an Uncertain New Reality After the Dhaka Attack", *Time*, July 4, 2016, <https://time.com/4392553/bangladesh-dhaka-attack-isis-terrorism-hole-artisan-bakery/>. Accessed on December 16, 2019.

Syria, in Afghanistan, Pakistan, the Indian subcontinent, Southeast Asia, North Africa, West Africa, the Sinai Peninsula, Yemen and other places. Its provinces worldwide indicate an attempt at decoupling from IS-central in Iraq and Syria to start simultaneous regional *jihad*s across the world, using its network of members, sympathisers and cyber-*jihadists*. IS terrorists continue to circulate images and videos of their members and operations worldwide to show an image of strength.³⁰

Almost five years after the IS first came onto the scene, it has undergone significant changes in its methods and operations but its ideological basis has been largely uncompromising and its propaganda machinery remains constant. The period from 2014 to early 2016 represents the height of the IS' power and prestige when it controlled large swaths of territory in two countries in the Middle East and was able to form a functioning state and military. It was also around this time that IS affiliates were starting to take shape worldwide. Some of the most sensational overseas attacks as well as the ingress of FTFs into Iraq and Syria took place during this time. The post-2016 period then represents an anomaly in the existence of the IS as, unlike other groups, it had its beginnings as a proto-state rather than an underground network.

The drivers behind the ideological appeal of the IS cannot be understated. It continues to present itself as having an edge over rival terrorist groups (not always true and even if so, only in tactical terms), being uncompromising in its *jihad*, and showcasing that it has never enjoyed any state support (not direct or tacit support, at least) unlike Al-Qaida, thus, keeping its agenda pure and fully Islamic in nature. It also feeds off of the prevailing anti-West sentiment among Muslims worldwide who feel anger at the continued strife and conflicts in places ranging from Afghanistan to the Middle East to Africa which they perceive are due to the West's interventionist policies.

The IS, therefore, continues to self-sustain itself off its ideology, its past successes, continued attacks, and international network of sympathisers. With regard to counter-terrorism, this is a major

30. Moustafa Ayad, "Twitter Has Been Flooded With ISIS Propaganda Since al Baghdadi's Death", *Vice*, November 4, 2019, https://www.vice.com/en_in/article/9kevpp/twitter-has-been-flooded-with-isis-propaganda-since-al-baghdadis-death. Accessed on December 17, 2019.

challenge as it is difficult to 'defeat' a threat that is not restricted by territory and leadership. The de-radicalisation discourse attempts to wean away extremists by treating them to more moderate versions of Islam but it does not give them the same appeal which they experience with an extremist group like the IS which promises a larger than normal life. A moderate religious cleric advocating Sufi ideas and thoughts to an audience that is already caught up on radical ideas will not have much success and, if anything, will only appear to be cooperating with, or appeasing, non-Muslims.

That narrative is difficult to defeat without addressing the root causes of the wider radicalism which are not singular or concrete. It is easy to say that certain countries practise and advocate radical strains of Islam like Wahhabism and, hence, are responsible for giving room for these ideas to propagate. However, levelling accusations at these countries only gives them less incentive to cooperate in terms of counter-terrorism and will, if anything, prevent the dissemination of counter-narratives. Targeting the source of the radicalism and violence will require a large overhaul of the existing counter-terror mechanism. Denying terrorists their territory will restrict their finances and operational space but the minds of radicals and the cyber space of the 21st century will prove difficult to sanitise.

AIRCRAFT CARRIERS: A DEBATE ON THEIR CONTINUITY

DHIRAJ KUKREJA

INTRODUCTION

The legendary carrier battles of World War II symbolise the utility and varied missions of sea-based aviation. The aircraft carrier has played a vital role in naval affairs ever since, continuing to demonstrate its diverse capabilities in various combat operations since 1945. The carrier has retained its standing, both as an operational requirement and as a symbol of national prestige, making it an essential component of navies and indispensable to their strategic interests.

The aircraft carrier is the largest and most complex of all warships and, in most cases, also the most expensive, which stirs the archetypical debate within policy circles over the advisability of continuing investment in new carriers. Cynics have been fashionably sounding the carrier's death-knell for a long time now, arguing that with the proliferation of numerous anti-access/area-denial integrated weapon systems with navies across the world, the world's biggest warships cannot hide in an era of precision-guided missiles and reconnaissance satellites. This criticism notwithstanding, navies continue to build, operate and exploit this lethal platform for a

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multitude of roles, including power projection, land attack from the sea, securing Sea Lines of Communication (SLOCs), security of island territories, and diplomacy with numerous non-combat missions.

Are these majestic ships, which are now more costly than ever, and also more vulnerable than before, in danger of being phased out, or have they become mere symbols of national identity?

WHY AN AIRCRAFT CARRIER?

Aircraft carriers, also known as floating runways, have signified the seriousness of naval power for most part of the last century. Originally seen as a means to provide air cover to other ships, World War II demonstrated other capabilities, primarily becoming the main mode that fleets fought each other with. That role, however, was largely transformed after 1945 since the USSR was not a major naval power; at the peak of the Cold War, the centre of gravity lay on the plains of Europe and in Third World hinterlands. Yet, without any serious competition on the high seas, the USA made its carriers more powerful to establish air superiority, wherever and whenever it chose to do so.

All major maritime powers possess aircraft carriers in their naval inventories, with the USA having the largest number. Its navy has to have on its books, by a law enacted in 2006, 12 carriers, to be able to fly fighters, bombers and reconnaissance aircraft, wherever it likes, without the need for nearby allies to provide air bases.¹ The US Navy has the intention of adding a twelfth carrier to its force in the coming years, although the clearance is under serious debate in the US Congress. Some other nations with carriers capable of launching fighter aircraft are Britain, China, France, India, Italy, Russia and Spain, but these are much smaller and less potent than the US carriers. The numbers are increasing with Britain, India, Japan and China, working towards getting new carriers; Britain is settling for two, while India aspires to have a three-carrier force; Japan is in the process of converting its two helicopter carriers into aircraft carriers. The Chinese People's Liberation Army Navy (PLAN) has

1. Tobin Harshaw, "The Navy's Sitting Ducks", Bloomberg Opinion, <https://www.bloomberg.com/opinion/articles/2015-10-22/aircraft-carriers-are-the-navy-s-sitting-ducks>. Accessed on November 26, 2019.

two operational aircraft carriers on its inventory and a third is under construction. China wants to have four operational aircraft carriers by 2028, with the eventual aim of having a 10-carrier navy by 2049.²

China's two aircraft carriers, however, are no match in size, power and endurance against those of the US Navy. Carrier planes flew 41 per cent of America's combat sorties in the Korean War and more than half of its raids over North Vietnam. In the first three months of the Afghan War in 2001, carrier-based aircraft mounted more than 75 per cent of all strike missions. Two years later, in 2003, when Turkey and Saudi Arabia refused permission for their airfields to be used for attacks on Iraq, the USA deployed the might of five aircraft carriers to mount a staggering 8,000 sorties in the first month of its invasion. When the Islamic State (IS) blitzed its way through Iraq in 2014, the USS *George W Bush* was ordered in from the Arabian Sea to the Gulf; for more than a month, the only air strikes against the IS were launched from its four catapults.³

China launched its first carrier, the *Liaoning*, in 2011, after buying and re-equipping its rusting Soviet-era hull, purchased from Ukraine in 1998.⁴ The new domestically-built carrier, launched in 2017, is built along similar lines, although it appears slightly larger and more advanced, as per some analysts; it would take another three years or so, before it is fully operational for missions. The launch was hailed as a milestone in President Xi Jinping's drive to extend China's military reach far beyond its shores and came at a time when tensions had risen over its activities in the South China Sea and North Korea's nuclear ambitions. China is involved in maritime disputes with several Asian countries, including Japan, the Philippines and Vietnam. India is also wary of China's growing presence in the Indian Ocean, and Australia is responding to China's naval build-up with its own. With the launch of its carrier, China also announced plans for more in the pipeline, to convey its

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2. Andrew S. Erickson, and Andrew R. Wilson, "China's Aircraft Carrier Dilemma," *Naval War College Review*, vol. 59, no. 4, 2006, Article 4, <https://digital-commons.usnwc.edu/nwc-review/vol59/iss4/4>. Accessed on November 27, 2019.
 3. Briefing, "Aircraft Carriers, Too Big to Fail", *The Economist*, November 16, 2019, p. 19.
 4. Chris Buckley, "China Sending a Signal, Launches a Home-Built Carrier", <https://www.nytimes.com/2017/04/25/world/asia/china-aircraft-carrier.html>, April 25, 2017. Accessed on November 25, 2019.

intentions to build a navy that could not be challenged by any other in Asia, and as symbol of overall national power.

India joined the select band of nations that had mastered the demanding task of carrier operations with the commissioning of the INS *Vikrant*, in 1961. A quarter-century later, in 1986, India became one of the few nations to operate two aircraft carriers with, the acquisition of the INS *Viraat*. Currently, it operates only one carrier, the INS *Vikramaditya* (the erstwhile *Admiral Gorshkov* of Russia), which was commissioned in 2013. India's first Indigenous Aircraft Carrier (IAC-I), to be named the INS *Vikrant*, is being manufactured by the Cochin Shipyard Limited (CSL) and is supposed to be completed in 2021; the engines onboard the carrier have been fired up and the navy is starting on the next step of basin trials, to meet the deadline of 2022 for operational use.⁵ It has also embarked on its follow-on induction, likely to be named the INS *Vishal* (IAC-II), which is expected to be much larger and more potent. A three-carrier force would allow the Indian Navy to operate one Carrier Task Force (CTF) comfortably on each seaboard.

India needs to maintain carrier capability due to being in a region of rapidly changing security dynamics. The Indo-Pacific region includes countries with some of the fastest growing economies as well as fastest increasing military expenditures. In future, it might also witness the fiercest competition over natural resources and possibly the gravest strategic exigencies and security threats. Adding to the volatility of the region is the fact that 90 per cent of India's trade by volume and 70 per cent by value transits through the seas. Furthermore, as 80 per cent of the global maritime oil trade passes through these waters, it is hardly a surprise that hundreds of military assets from many extra-regional countries maintain a near continuous presence in the region. To add to the security complexity are the forays of the PLAN since 2008 into the Indian Ocean Region (IOR), under the garb of protecting its own SLOCs. With a mix of naval vessels, including a nuclear-powered submarine, a military base in Djibouti and a presence in Gwadar, it can be assumed that soon a Chinese aircraft carrier would sail into the region! With big-power competition intensifying in the Indo-

5. "Engines Fired Up, Basin Trials Next for Aircraft Carrier", *Economic Times*, December 2, 2019.

Pacific, coupled with India's own expanding strategic interests, the future regional security environment does necessitate a strong capability for the Indian Navy.

ARE CARRIERS LOSING THEIR LUSTRE?

If the aircraft carrier is a symbol of national power, which has retained its standing over the years, the question then arises: why are doubts being raised about its continuity? Is the aircraft carrier of today more vulnerable, or, is it, as some US analysts have called it, "one of the safest places to be in, in war"! "The queen of the American fleet ... is in danger of becoming like the battleships it was originally designed to support: big, expensive, vulnerable – and surprisingly irrelevant to the conflicts of time," are the thoughts of Capt Jerry Hendrix, retired from the US Navy.⁶ Are the nations then, which are diverting huge sums from their budgets towards their carrier fleets, making a colossal mistake? If so, what does it mean for the way to project power, especially for a superpower like the USA?

Carriers have been vulnerable to attacks by submarines for long. During the Falklands War, Argentina's navy kept its only carrier, holed up in port for fear of British submarines. The carrier today is increasingly threatened by attacks from above the waterline too, by ever more sophisticated land and air-launched anti-ship missiles. To remain out of harm's way, the carrier, therefore, has to essentially stay even farther out at sea, its usefulness dropping with every nautical mile. Improvements in missile technology have also adversely affected the capability of the air-wing of carriers to do what is required of them, thus, nibbling away at the very reason of their being in existence.

A typical American carrier strike-group generally has more than 7,000 crew members; in addition to the carrier and its 60-plus aircraft, it usually consists of at least three large warships (missile cruisers, destroyers and frigates), a fast-attack submarine and a host of smaller support craft. It costs about \$6.5 million per day to keep the armada afloat. This is in addition to the \$4.5 billion each current Nimitz-class carrier costs to build, which now seems like a bargain compared to the next-generation Ford class, the first of which is coming in at

6. n. 3.

nearly \$13 billion – the US Navy plans to buy up to 10 of these to cater for the phasing out of the Nimitz class carriers over the next two decades!⁷ With Iran flexing its muscles due to the ongoing sanctions, the war in Yemen grinding on, and the Islamic State down, but not out, is then a ‘super-carrier’ really invulnerable to asymmetric attacks and anti-ship weaponry? A US Navy war-game in 2002 simulated a swarm attack by speedboats of the type Iran has in the Persian Gulf: the results, at least on the gaming board, were devastating – 16 major ships would be destroyed, including one carrier!⁸ Anti-ship missile technology has only improved after that; aircraft carriers increasingly seem like sitting ducks! Imagine the blow to the military and nation, if one was ever sunk, with thousands on board.

As the USA and China are locked in great power competition in the Indo-Pacific and beyond, another scenario the US Navy could face in the coming years is that of a Chinese bomber flying over the Western Pacific and launching hypersonic anti-ship missiles. The weapons would quickly surpass a speed of Mach 5 and manoeuvre unpredictably toward their target, thus, overwhelming US defensive systems, and crashing into the hull of the USS *Gerald R. Ford*, disabling the aircraft carrier and sending its crew scrambling for their lives. As per some US analysts, hypersonic missiles pose a unique threat compared to traditional ballistic and cruise missiles: although today’s ballistic missiles can achieve hypersonic speeds, they tend to follow a predictable flight path that is easier to track; and the major difference between a traditional ballistic missile and the hypersonic boost glides is the trajectory and the ability to manoeuvre. While some in the US Navy have downplayed such threats, others have taken them seriously and have initiated counter-measures, including accelerated air defence systems for quicker interceptions, direct energy weapons, electronic jamming, and spoofs and decoys, to ensure survivability.

Apart from the operational aspects that are threatening the survival of the aircraft carrier in the US Navy, the spiralling costs have also made the platform a punching bag for the US Congress, with delays and cost overruns associated with the new carrier, the

7. Harshaw, n. 1.

8. Ibid.

USS *Gerald R. Ford*, being the main cause. The US Navy had taken a gamble of integrating immature dual-band radar, catapult, arresting gear and weapons elevators on the new carrier, and the results have not been too encouraging.⁹ With mounting threats of land-based hypersonic missiles, the US Congress is alive to the dangers of air-launched missiles in the near future and wants the navy to find ways to deal with the new challenge.

Will the Indian Navy (IN) balk at the high costs and reported vulnerability against future missiles? Doubtful! It has been argued that aircraft carriers and the escort ships that form a battle group are a lucrative target, and losing a carrier, or for that matter, any of the ships, would be a cause for national trauma. It must, however, be remembered that the last carrier to be sunk was during World War II, the Japanese *Amagi* in Kure harbour in July 1945. Aircraft carriers have continued to proliferate worldwide since then, without any further loss. Arguments against aircraft carriers have been countered with arguments for, to convince about opening the purse strings for the induction of new vessels to meet strategic and operational needs.

For India, where the financial resources are limited, it has to be accepted that aircraft carriers are expensive assets, but only when one considers the initial cost of acquisition. When this cost is divided over the average life of an aircraft carrier, which could be anywhere from 40 to 45 years, it works out similar to two destroyers with an average life span of 25 years.¹⁰ During its lifespan, an aircraft carrier may have onboard squadrons from two different technological generations. Additionally, an indigenous aircraft carrier, like India's *Vikrant* and *Vishal*, gives a boost to the economy through job opportunities, and providing business to local industries, apart from giving a shot in the arm to national prestige. As for the other arguments of islands being better than carriers, or shore-based aircraft better capable of

9. David B. Larter and Joe Gould, "With Mounting Questions about Cost and Survivability, a Shifting Political Landscape for US Aircraft Carriers", *Defense News*, <https://www.defensenews.com/naval/2019/08/06/with-mounting-questions-about-cost-and-survivability-a-shifting-political-landscape-for-us-aircraft-carriers/>. Accessed on November 26, 2019.

10. Mark V. Arena, Irv Blickstein, Obaid Younossi and Clifford A. Grammich, "Why has the Cost of Navy Ships Risen?", RAND Corporation, 2006, pp. 2-3, as quoted in IDSA Issue Brief, "Aircraft Carriers – The Keystone to India's Maritime Security", October 2019.

undertaking missions, there are also counters of lack of mobility, flexibility, and surprise, besides weather restrictions, and other operational constraints.

WHAT DOES THE FUTURE HOLD?

The aircraft of the erstwhile era (remember Top Gun) in the US Navy had an average range of about 1,700 km; the Rafale aircraft onboard France's *Charles de Gaulle*, can still manage somewhat similar ranges, but the F-35 aircraft onboard the American, British, and Italian carriers of today, are designed more for stealth than stamina, and cannot match these figures. Should a conflict flare up in the South China Sea (SCS) or the East China Sea (ECS), a US carrier with its load of F-35 aircraft, armed with the Joint Air-to-Surface Standoff Missile (JASSM) cruise missiles of 500 km standoff range, would be well within the reach of the Chinese DF-21D/DF-26D missiles or other air/submarine launched sophisticated anti-ship missiles, before the aircraft even get into strike range; a scary thought for the US Navy.¹¹

This does not, however, mean that the era of aircraft carriers is over. As per Nick Childs of the London-based International Institute of Strategic Studies, "A lot of these [carrier-killing] systems are essentially unproven".¹² Missiles that can fly over the large distances required are only a part of a bigger system that needs 'eyes' to keep track of the manoeuvring target. Shore-based radars cannot locate targets hundreds of kilometres out in the open seas; satellites can be of help, but they cannot provide the necessary accuracy. Compiling data from satellites and drones to update manoeuvring-target information, while in flight, is not easy either. Moreover, satellites can also detect missile launches too and a carrier can travel almost four nautical miles in a different direction during the eight minutes it would take a DF-21D to reach it.¹³

America's 'super-carriers', surrounded by their protective battle-groups and watched over by satellites, are more likely to survive a serious assault than the smaller carriers of other nations. Smaller nations cannot afford such large fleets to protect their carriers; a typical

11. n. 3.

12. Ibid.

13. Ibid.

protection group might tie up four to five frigates and destroyers; the British Navy has only 19 such ships, the French even fewer, while India has 25 on its inventory.

While the US Navy is better able to defend its carriers, they are still becoming more vulnerable, and that matters more to America than any other nation. A detailed report published in August 2019, by the University of Sydney, concluded that Chinese “counter-intervention systems” had contributed significantly to a dramatic shift in the balance of power and America’s defence strategy in the Indo-Pacific¹⁴. Should Taiwan or Japanese outlying islands be attacked, or a serious skirmish develop in the disputed islands, the USA would perforce have to involve itself, for not doing so and watching from half an ocean away would be a loss of face for it; involvement, on the other hand, could lead to a loss of a carrier!

Apart from the counters being developed by the USA, another response could be to make the carriers smaller and more agile. Such a solution, however, would mean a change of the aircraft onboard! Stealthy unmanned planes could fly longer, undertake more dangerous missions than human pilots, withstand higher acceleration, and give a chance for the mother ship to stay well out of harm’s way. It is also possible to respond with missiles launched from lesser ships; the Tomahawk cruise missile launched from the vertical tubes of the USS *Carney*, a destroyer, can hit targets over 1,600 km away; unlike carriers, however, such vessels do not have any integral air protection, for which the carrier is needed. Perhaps, in time, energy from the nuclear power-plants of aircraft carriers could power the direct energy weapons, or onboard high-powered lasers, to take up the task of self-defence

As yet, such weapons are only in the realm of wishful thinking! The carrier, however, is here to stay, notwithstanding the substantial investment of resources, and its perceived vulnerability, as a formidable instrument of national power.

14. Ibid.

DECODING THE CHINESE MINDSET: THE RISE OF GREAT POWERS

SR SINGH

China, as a late coming great nation, should learn from, and draw upon, the historical experiences of the leading nations of the world in their modernization processes, as this will certainly be very beneficial to realizing the strategy of catching up and overtaking the leaders in modernization and achieving the great rejuvenation of the Chinese nation.

— Hu Jintao

INTRODUCTION

At the behest of Hu Jintao, the president of the People's Republic of China (PRC), top Chinese scholars carried out a study on factors that had enabled the major powers to grow very rapidly since the 15th century.¹ The study was ordered on November 24, 2003, during the Communist Party of China (CPC) Central Committee Political Bureau's group session and the final work was completed in 2006 and submitted under the title *Daguo Jueqi (The Rise of Great Powers)*. It is a comprehensive study and research on the rise of nine nations and

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1. Irene Wang, "Hu Jintao's Directive", South China Morning Post, November 27, 2006.

drew popular attention in the electronic as well as print media. The China Central Television (CCTV) broadcast the 12 part programme twice a week and the first 10,000 copies of the book were sold out immediately.² This speaks of the enormous impact the study has had on the minds of the Politburo, the military as well as the common man in China. *The Rise of Great Powers* sums up that national power thrives on economic development propelled by foreign trade and commerce under the protection and support of a strong navy. The lessons drawn from this study will goad the Chinese thinking and the path they tread for a long time. The present phase of economic and military development towards the achievement of laid down goals, with no brazen act of defiance that can hinder this progress, speaks volumes of the impact that the study has had on to the Chinese course of action. The change in the Chinese stance from land to sea and distant places around the globe depicts the fresh appetite of the Chinese for economic prominence through the capture of markets and search for resources. The lessons drawn from the study comprise an important tool to assess the Chinese intentions and actions, an answer to “What will China do?” The present state of the “hide and bide” policy validates this approach of China.

STUDY OF THE SEA POWERS

Portugal: Portugal and Spain became global powers by achieving internal unity that the rest of the Europe lacked at that time.³ When the land-focussed Ottoman Empire blocked Iberian access to the spice trade, the sea route became the next alternative. Portugal became the first global power in modern history to take the sea route in 1415 when it conquered Cueta, an important place for transportation between the Mediterranean Sea and the Atlantic Ocean.⁴ Through technological breakthroughs like inventing new boats and developing navigational science, Portugal managed to wrest control of the trade from Italy and circumnavigate the Cape of Good Hope in 1487. Portugal appreciated

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2. Jiang Shengxin, “Why has the ‘Rise of Great Powers’ Attracted Such Widespread Attention?”, *Wen Hui Bao*, December 11, 2006.
 3. “Part 1: The Age of Sea-Introduction Portugal and Spain”, CCTV International, November 14, 2006, www.cctv.com.
 4. Col Dai Xu, PLAAF, “The Rise of World Powers Cannot do Without Military Transformation,” *Global Times*, March 15, 2007.

that the future lay in taking “the sea road” and embarked upon a well conceived and well organised national strategy which also became the prime national project. This was at the time when the Chinese influence was disappearing from the seas.

Spain: Stimulated by Portugal, Spain likewise embarked on maritime expansion. Spain withdrew from the endless conquest over the European continent and took the free sea route, devoid of any opposition that time.⁵ Spain also provided the requisite internal unity, “strength” and “determination”. However, this quest for sea domination between the contemporary powers, Portugal and Spain, led to them becoming staunch enemies. Spain valued Columbus’ efforts which paid great dividends for its national power. His navigational plans were accepted and the Spanish royal court financed his sea-faring trip to the extent that Queen Isabella sold the jewellery on her crown for a common man.⁶ Like Portugal, innovation in science and technology was also encouraged by Spain.

The Netherlands: While Spain and Portugal depended on military force as a key element of their rise as maritime powers, Holland relied on commerce and became a “global commercial empire”. This propelled an infrastructure renaissance, with Rotterdam becoming the world’s premier port, and allowed the Dutch to serve as middlemen in trade (e.g., of Portuguese gold and spices). More than 1,800 unarmed Dutch ships – lighter, cheaper, and of higher capacity than their British counterparts – ferried goods through Europe. However, military technological innovations (e.g., gunpowder) made it impossible for the Netherlands to escape the intra-European power struggles. The Dutch East India Company had captured half of the world’s trade. The 17th century Holland, with its incomparable “Chariots on the Sea” opened up colonial regions that spanned as far as Asia, Africa, America and Oceania, controlling sea channels and four-fifths of the world trade volume.⁷ The Chinese interpreted this as for the Dutch, “the great interest was making money”, and that this venture was not ably supported by

5. Ibid.

6. “Part 12: The Big Way – Final Part”, CCTV programme, The Rise of Great Powers, November 25, 2006. www.cctv.com.cn.

7. Ye Zicheng, “China’s Peaceful Development: The Return and Development of Land Power,” *World Economics and Politics*, February 2007, pp. 23-31.

the naval forces. The Dutch Empire declined as it could not match the inter-colonial military rivalry.

China Learns: However, all these powers went astray and lost focus mid-course which resulted in their downfall. The valuable lessons drawn by the Chinese from their decline were as follows:

- By the late 1500s, Spain and Portugal squandered their great power status by waging wars in the defence of far-flung colonial empires.
- They imported expensive products and did not focus on internal economic development and raising the living standards of their people, leading to unrest amongst the people. The internal tranquillity was lost.
- Naval development in the absence of robust maritime commerce and internal growth was unsustainable.
- Sea power was neglected by Portugal and Spain and no military theories of maritime control were developed due to their shallow knowledge of sea power.
- The Portugese and Spanish Empires declined as their naval power failed.⁸ It is also opined that without the able support of land power, a sea power cannot assume an international status of a leading power for long.
- For China, the Dutch experience showed that trade produces wealth and power but that some degree of naval force is necessary to safeguard it.

United Kingdom: Britain is assessed to have achieved a rapid accretion of power due to its economic growth driven by innovation. The United Kingdom's powerful navy defeated Holland through three wars and the Anglo-Spanish religious wars ended with the British victory in 1588 when Spain's armada was defeated by lighter ships with better firepower.⁹ Britain's internal consolidation facilitated by such political innovations as the Magna Carta, helped in sustaining its great power rise and facilitated its rapid economic development. Overseas trade expansion was facilitated by the use of both naval power and the clever interpretation of the 18th century

8. Senior Col Zhang Wei, "Exploring National Sea Security Theories", *China Military Science*, January 2007, pp. 84-91.

9. Ibid.

“navigational acts” which gave preference to the British commercial shipping to eliminate the Dutch and French competition. Britain, thus, won both “the competition for sea power” and “the competition among the great powers” to become a “world power”. The industrial revolution, scientific and technical innovations, patents (rule of law), and *laissez faire* capitalism made Britain the “workshop of the world” and enabled it to defeat the rival Napoleonic France, whose military uniforms and other provisions were British-made. The Chinese study gives credit to the great revolution, the industrial revolution, and surprisingly to the parliamentary democracy system in England’s land space to achieve the status of a great world power.

China Learns: The decline of the British Empire is accredited to the following reasons:

- The slow decline was due to large unprofitable colonial acquisitions that produced imperial overstretch. This resulted in Britain, after World War II, relinquishing its territories to improve national living standards.
- Britain still holds the status of a strong sea power today, but due to its limitations in the development of its land space, it certainly cannot become a powerful land power. In other words, the strong points of its land power development are not as strong as those of other land powers. Hence, Britain is losing and is bound to lose its world power status.¹⁰

Japan: The study brings out that Japan’s constitutional monarchy-led internal modernisation following the Meiji Restoration of 1868, enabled it to avoid Western domination until imperial overstretch provoked war with the United States. The Japanese high official team which visited America and Europe in 1871 found the German system to be suitable in which the government led industrialisation is promoted to catch up with earlier modernisers. The team was also impressed by the ideology of Bismarck who declared that despite all diplomatic niceties, the world was still a place where the strong oppressed the weak. During the Meiji Restoration period, Japan paid attention to science and technology by importing substantial commercial and military technology. Japan supported small businesses. In spite of wide ranging internal reforms, in

10. Zicheng, n. 7, pp. 23-31.

the quest for resources, in 1889, Tokyo began to “develop through war”. This “militaristic emphasis” occurred under the rubric of “Enrich the Country, Strengthen the Military”. The naval development was central to Japan’s expansion. The outcome was beneficial in the Russo-Japanese War of 1905 and subsequent colonisation of the Korean peninsula and during the initial phase of the expansion of World War II into the Pacific and Indian Oceans.

China Learns: Japan is seen as a model for “what not to do?” While the United Kingdom and United States are viewed as success stories with valuable lessons for China, Japan’s aggressive attempt to rise rapidly on the seas, despite its undeniable achievements, is viewed as a terrible failure. The lessons drawn are as follows:

- Japan suffered from institutional defects that compromised its ability to succeed as a late moderniser. The policy of external aggression is cited as a major reason for Japan’s failure to realise its imperial ambitions.
- The study also points out that coordinated containment by other nations can also hinder the rise of a great power.¹¹
- Japan’s downfall was, to a large extent, the result of taking on the United States at sea. Once Japan lost control of the sea in the Pacific, it was doomed to suffer defeat.¹² Japan failed disastrously in World War II because, as a natural sea power, it tried to become a land power.
- Due to lack of resources and its independent nature, Japan early on, refused to join the East Asian system **centred on China**. Japan also took to a deviant path in the process of developing sea power, becoming a big scourge for Asian and world peace, especially China, and North and South Korea.
- In 1907, Japan decided to develop both sea and land power simultaneously to repulse Russia, the land power of Eurasia, and the United States, the sea power, as the imaginary enemy at the sea. Japan’s continental strategy and misplaced priorities of turning itself into a continental country led to its final defeat. The switch ended in failure.

11. “Part 7: One Hundred Years of Reform and Modernization(Japan)”, CCTV International, November 20, 2006.

12. Zhang Wenmu, “Modern China Needs a New Concept of Sea Power”, *Global Times*, January 12, 2007.

United States: The United States has been a role model of China for “what to do? The study marvels at how the United States became a great power in only 230 years since its founding. This achievement stemmed from the base of the European civilisation, enriched with contributions by immigrants from all over the world, protected by a foresighted Constitution, and driven by a culture of industry and self-reliance.¹³ **The peaceful environment that the United States enjoyed following the civil war is credited with providing the conditions necessary for it to develop into a superpower.** A culture of invention during the second industrial revolution transformed the United States from a student of European technology to an innovator in its own right.¹⁴ By 1894, 118 years after its founding, the United States was already the world’s largest economy and number one power. The Chinese have gleaned valuable lessons from ‘Mahan’s sea power’ theory which is considered the benchmark that supported the US’ abrupt rise in the 20th century.¹⁵ He introduced the secret of ‘sea power’ which enabled America to become a superpower, accomplishing world hegemony.¹⁶ Mahan is credited with inspiring Congress to appropriate funds for naval construction in 1890, such that within five years, the US Navy was the fifth largest in the world. By 1898, the US vanquished the Spanish fleet in Manila harbour and captured the Philippines, Guam and Puerto Rico. This made America’s ascension to sea power dominance indisputable. World War I further stimulated the US economy by generating large scale European weapons and steel orders that gave the US 40 per cent of the world’s wealth. The participation of the US as the number one economic and military power in World War II was the decisive factor in the victory against the fascist forces. Post World War II, a new world order unfolded, with the US accounting for more than half of the world’s industrial output and establishment of the dollar-centric international financial system. Washington also sent troops to 50 countries and territories around the world and had them stationed

13. “Part 10: New Country New Dream – U.S. First Part”, Part 11: Dangerous Time, New Politics”, CCTV International, November 24, 2006.

14. Yuan Zhengming, et al., *Rise of Great Powers Book Series*, vol. 8 (United States), p. 150.

15. Zhang wei, n. 8, pp. 84-91.

16. Dai Xu, n. 4.

there.¹⁷ The US achieved leadership status and became an indomitable superpower.

China Learns: The achievement of American supremacy in the world order is due to the following initiatives:

- The United States first embarked on the power road by land power expansion and scientific innovations and development. It first established a strong political foundation and domestic stability.¹⁸ It used the period of peace and tranquillity for nation build-up and did not venture into any untoward adventures that could have hindered its progress.
- The United States was mainly a land power from its founding up to the 1890s, when it started its switch the process and developed sea power. The United States then became a world power with strong land as well as sea power.
- However, the study emphasises the basic principle that nations must develop within their natural endowments and not stretch too far in basking in glory as earlier powers had done. The study speculates that the United States today seems to starting a second switch. It is not content with possessing only land power on the American continent, but also wants to possess land power on the Eurasian continent. It wants to become a sea and land power, with land power on both the American and Eurasian continents. However, **now doubts are being expressed on the continued success of the US. This is because U.S. actions have gone far beyond the strategic potential given to it by its natural endowment.**¹⁹ The study adds a rider that “if its land power does not develop well, U.S. influence abroad is bound to shrink, and the so-called US hegemony will ebb away; but if no major problems emerge in US land power development, its international influence may be maintained for a very long time”.

17. “Focus Program: ‘Rise of Great Powers’-Episode 11: A New Deal in a Time of Crisis (U.S. Part 2),” CCTV, November 24, 2006.

18. Ye Zicheng, “China’s Peaceful Development: The Return and Development of Land Power,” *World Economics and Politics*, February 2007, pp. 23-31.

19. *Ibid.*

STUDY OF LAND POWERS

France: The study focusses on how the land powers were, or not, able to transition into sea powers. The Chinese survey conceptualises sea power as an element in the rise of great powers and their prospects for transition. The first case study is that of France. The study refers to France as a “continental power”. Louis XIV is credited with building up France’s science, technology and national power to the point that it played a role in the international system at that time, comparable to the role played by the United States today.²⁰ During the Napoleonic era, Britain was gravely troubled when France closed the Dutch and Italian ports to British trade and set its shipyards to work to double the size of the French Navy.²¹ The Trafalgar victory for England in 1805 spelt the end of France’s quest to match the British at sea. However, neither could decisively defeat each other and their war became one of blockade and counter-blockade – in essence, economic warfare.²² Napoleon is quoted as saying to his brother that he intended to “use land to conquer the sea” by cutting it off from the crucial continental market. At the end of the 18th century, Napoleon advanced into the Mediterranean on the southern flank to cut England off from its foreign markets and natural resources by way of the Persian Gulf.²³ However, finally, it was Britain that overcame the French generated impediments and emerged victorious.

China Learns: The lessons drawn are similar to the previous ones and they are as follows:

- British sea power was decisive in routing the continental system of France. Napoleon’s strategy was defeated because Britain had strong naval power that relied on its mighty fleets in the region, that resulted in the defeat of Napoleon despite his conquering much of Europe.
- France once again was a dominant continental power in Europe after World War I. However, it no longer had the will to dominate and got surpassed easily. Its rapid defeat at the hands of Hitler’s

20. Yuan Zhengming et al., *Rise of Great Powers, Book Series, France*, vol. 4, p. 39.

21. Tang pu, ed., *The Rise of Great Powers*, p. 214.

22. *Ibid.*, p. 217.

23. Xu Qi, *Maritime Geostrategy and the Development of the Chinese Navy*, pp. 75-81.

Germany in World War II brings out its deleterious national sense of being “in no hurry to fight”.²⁴

- Post World War II, China has some similarity with the growth of France. Both embarked on an independent road in developing an independent industrial system, complete with aviation and nuclear industries.

Germany: The study highlights the imperative of national unification, and caution regarding the use of force. The cold calculations of Fredrick the Great in the national interest are logical in justifying the breaking of any treaty, and launching of attacks for territorial unification.²⁵ This can form the basis of the Chinese agenda of territorial unification in the future. Later on, Bismarck is described as the main architect of German unification. In a depiction with possible significance for Beijing’s evaluation of Taiwan’s future, it is emphasised that Bismarck succeeded with “iron and blood” where the peaceful revolutionaries of 1848 failed. This assumption of the Chinese study is noteworthy. While Germany’s military focus started with Bismarck, he preserved peace in Europe by maintaining a balance of power, and not over-expanding. However, Germany turned toward a wayward and self-destructive path in the late 19th and early 12th centuries. The German leadership desired “living space,” viewed their existing territory as being too small and also sought a “place in the sun” for Germany. The German government continuously increased its military expenditure. The earlier wars of German unification made them erroneously believe that another war too would be short.²⁶ Hitler’s ambition finally led to the downfall of Germany.

China Learns: The study does not focus on Germany’s shortcomings in the maritime domain but brings about other valuable lessons, worth imbibing for posterity. These are as follows:

- China derives rich experience from Germany’s economic development, especially its education and technological development.

24. Tang pu, ed., n. 21, p. 232.

25. Ibid., p. 250.

26. Ibid., p. 266.

- Once Germany became powerful, its excess power was channelled into a path of expansion, belligerence and destruction.²⁷ The lesson for China from Germany's travails is to "always choose the path of peaceful development".
- The larger lesson for China from the German legacy: "So far there is yet to be any precedence of any emerging big power defeating a hegemonic power directly". It should be contemplated deeply that when Germany, as an emerging big power, adopted the parity principle that the big European powers were following, it developed rapidly in a peaceful environment and became a leading economic power in Europe. However, when it attempted to assert its turf under the sun, it met with disastrous defeat.²⁸

Russia: Modern Russian history provides the most focussed assessment of maritime transformation by a traditional continental power. Peter the Great is described as being fully dedicated to establishing Russia as a maritime power. Russia's agrarian economy, of a "landlocked country", was restricted by limited transport routes and so it remained backward. "The only way to alter this situation was to capture ports, and for this, war was the only option."²⁹ Peter achieved progress in military development at a rapid pace. He insisted that Russia open up to foreign ideas and influences. He encouraged people to study foreign militaries, to import foreign military equipment and consult foreign experts. Russian students were also sent abroad to study the foreign military methods. He created a foreign policy that complemented his military strategy. A component of Peter's broadly successful strategy was the building of Russia's first navy, with its own academy. He imported modern ship building and navigation technology. With naval power, the Russian state had two hands (land and sea power) to fulfil its ambitions.³⁰ Russia initiated a military struggle to gain access to the sea. It successfully achieved access to sea ports along its northern flank and expanded its influence to the Black Sea and the Persian Gulf as well the Balkan

27. Ibid., p. 265.

28. n. 6.

29. n. 21, p. 335.

30. Yuan Zhengming et al., *Rise of Great Powers, Book Series, Russia*, vol. 7, p. 38.

Peninsula.³¹ The study also observes that the Russian Navy all but disappeared after Peter's death because its capabilities were not maintained.³² Russia again emerged as a dominant continental power in the wake of Napoleon's demise. Catherine, who assumed power in 1762, embraced much of Peter's ideology as a proponent and turned to military conquest to expand Russia's power and influence. However, Russia suffered defeat at the hands of Britain and France in the 1856 Crimean War as it confronted powerful armoured fleets as against its wooden ships. Russia also suffered "catastrophic vanquishment" at the hands of an upstart Japan in 1905.³³ Like Russia, the USSR as a power was continuously striving toward the sea. In the years following the revolution of 1917, Moscow used not "military power" but "national power" to further internal development.

China Learns: The decline of the Soviet Union is also self-created and a typical example of how a great power loses focus and goes off track. The reasons for the collapse of the Soviet Union are assessed as follows:

- The Soviet Union reached the apex of its power in the 1970s but failed to pay attention to its own people's standard of living, preferring instead to lavish resources on its military rivalry with the United States.³⁴ This rivalry outgrew the economic prowess, and resulted in its downfall. **China is determined not to repeat this mistake.** If a country is economically undeveloped, it will find it very hard to rise.
- The Russian case is especially interesting for Beijing because it is a case of a land power, with a similar governmental system, making a concerted but ineffectual effort to transform into a maritime power. Following the collapse of the Soviet Union in 1991, "Russia painfully realized that no country can be a long-term power without sea power."³⁵ And China realises that no sea power can be achieved without the overwhelming support of economic power.

31. Xi Qi, n. 23, pp. 75-81.

32. Zhenming et al., n. 30, p. 15.

33. Tang Pu, ed., n. 21, p. 359.

34. Ibid., p. 371.

35. Dai Xu, n. 4.

STUDYING CHINA'S INTENTIONS

This is a burning topic of studies across the world. The rise of China has rekindled the minds of many scholars and strategists to immerse into deep research and figure out, "What will China do?" The Americans have gone into a trance to find an answer to the question. Scholars at the 127-year-old American Naval War College where the Americans have practised war-gaming since 1887 have become professional worriers about Asia, meaning China. China's naval doctrines, procurement and deployments invite inferences about its geo-political intentions. From scraps of evidence, scholars try to solve the puzzle, "How should the U.S. Navy be configured for a world in which China's maritime capabilities and intentions will be ... what?" They also note that America has not always been good at predicting its next adversary. In Iraq and Afghanistan, the course of action did not take place as it was gamed. China has no foreign bases, but a myriad oceanborne needs. It is ravenous for imported raw materials – oil, coal, minerals – and its economic dynamism is built on exports. It has huge domestic constituencies – oil refineries, shippers and ship builders, among others – utterly dependent on certainty in global transportation. Today, China is a free-rider on a global maritime order built upon a network of treaties enforced by the U.S. Navy. But the fundamental question plaguing the American scholars is: "Will China, for the next three to five decades, concentrate on economic growth – on prospering from globalization's unimpeded flow of raw materials, goods and services – and be content to let America bear the burden of policing this?" The answer will be yes – if China makes a purely economic calculation. But nations usually have deeper and stronger motivations. This is particularly true of ascendant nations feeling their oats and spurred by long memories of impotence and humiliation. China's intentions and naval purposes comprise a subject which is more interesting and potentially more ominous.³⁶

ANALYSIS

The study – *The Rise of Great Powers* – is the benchmark of the Chinese thought process that will influence its intentions for a long time to

36. George Will, "Studying China's Intentions, Opinion", *The Japan Times*, March 19, 2011.

come. China has learned from the study, and now, it is for the world to learn what China has learned from the study. The probable answer to the million dollar question, "What will China do?" is as follows:

- China will stay focussed on its vision of a "strong and prosperous nation" by developing its overall "Comprehensive National Power" as per the laid down timeframe.
- China will never resort to any misadventure or act that will jeopardise its economic growth. It will maintain a peaceful environment and never display a strong confrontational approach to any major power. It will follow the policy of "friendship with the strong and overbearing on the weak".
- It will endeavour to make inroads into all the major multilateral organisations and mechanisms to prevent any self-isolation and formation of anti-China groups. It will spread Chinese culture, human resource and goodwill to enhance its 'soft power' through its 'charm diplomacy'. China will prevent any coordinated containment by other nations and endeavour to merge in the international order, especially in the Asia-Pacific region. China will use its presence in these fora to manipulate and swing laws, rules and policies in its favour, especially the interpretation of the United Nations Convention on the Law of the Sea (UNCLOS) and the Chinese nine-dash line in the South China Sea in its quest for marine and energy resources.
- It will not grow beyond its endowment and will not stretch beyond its means. China will not enter any wasteful rivalry in the military or any other field that will adversely affect its economic growth. China will grow in other fields commensurate with its economic rise.
- It will not create hegemony for itself but will maintain an upper edge in its dealings. Rather than becoming a global power, first, it would like to be a responsible and acceptable regional power. China's expansionism will grow commensurate with the growth of its Comprehensive National Power (CNP). Once it has established a firm grip and achieved the status of a power of reckoning in the region, China will watchfully spread its influence across the world. China will compete on all fronts with a soft friendly approach and hard resolve, with one hand

stretched in friendship and the other hidden behind, ready to strike in case of a threat on its path of self-declared 'peaceful rise'.

- China has embarked upon all round modernisation with science, technology and innovations as the key components of national growth.
- China will develop maritime power, inclusive of naval and commercial might, to complement each other's growth. China will look for resources and markets across the world. It will not follow the path of expansion to occupy a distant land and colonise it but will have access to port facilities and protect its Sea Lines of Communication (SLOCs). China will support its sea power and land power with equal impetus to become a strong nation.
- China will prevent internal unrest and maintain domestic stability at all costs, by all means. It will give adequate attention to improving the living standards of its people, and infuse nationalism amongst them to divert them from internal discord.
- China will follow the strategy it followed in the past, of creating peripheral buffer regions to keep trouble at a distance, and wait for an opportune for territorial unification.
- For some time to come, it is not possible for China to match the CNP and hegemonic stature of the United States unless, like other powers in the past, the United States succumbs to self-created pitfalls. China will be watching and following the US minutely. The U.S. factor will govern the extent of China aggressive's posturing in the future. The crisis in the Arab countries in early 2011 had shown that the United States was going through the third switch – back to domestic matters. The hegemonic power has shown its reluctance to actively participate, and take the lead, in the Arab world crisis, much to the dismay of its North Atlantic Treaty Organisation (NATO) allies. It has understood that it has been overstretched and has to now concentrate on domestic compulsions to prevent any unforeseen collapse. China will follow the policy of appeasement embedded with a display of strength with the United States: 'one hand open for friendship and the other hidden behind'. It will display its assertiveness

towards other regional powers as a probing mission to check the response. This subtle aggressive stance will also enable it to display and maintain its importance in the region.

- Finally, the question arises, “Who are the players wary about China’s rise in the region?” The inbuilt mechanisms in trade and commerce and multilateral institutions will prevent any military confrontation due to economic rivalry. But the bottom line is that the territorial disputes will have to be resolved bilaterally and this can be done either peacefully or through war. China does not plan any far-flung territorial expansion but will not forego its territorial claims. It will be happy to maintain the status quo till it is in a position to grab the disputed territories. It is the countries that harbour territorial disputes with China that have to be wary of China and not distant powers like the United States that are mere competitors. This implies that in spite of having good economic relations, tranquillity cannot be guaranteed and countries like India and Japan have to be prepared for all eventualities.

CHINA'S INCREASING CYBER SOVEREIGNTY: DRAGON DEMARCATING ITS VIRTUAL TERRITORY

E. DILIPRAJ

The perception that cyber space is a borderless domain has become a myth in recent years. Virtual borders have cropped up delineating the jurisdiction of operations in this complicated networked space. As the magnitude of this virtual space expands rapidly, sovereign countries around the world feel the need for demarcating boundaries in their respective cyber space mainly for able governance and enhanced security. In this direction, many countries are busy implementing cyber space regulations, internet policies, cyber laws and other regulatory frameworks, thereby giving rise to their respective sovereign cyber space. One of the pioneers/world leaders in this aspect is the People's Republic of China (PRC), which is a vociferous advocate of cyber sovereignty.

China's control over its domestic cyber space is an open secret and the country has followed this policy undeterred by Western opinions for a very long time. The internet, especially, is completely under state control and the Chinese government takes stringent measures to monitor, control and regulate this virtual space constantly. Since most of the technologies related to the cyber domain, including the internet,

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were invented by Western countries during the initial years, China considers its reliance on these technologies as a weakness for its national security. Hence, within the purview of national interest, China has been developing technologies indigenously in the recent years to reduce foreign dependence as well as to increase export of such products to add more value to its Gross Domestic Product (GDP). The success story of several multinational technology companies such as Huawei Technologies Co. Ltd., Tencent Holdings Ltd., Alibaba Group Holding Ltd., etc. are some examples of the same.

Besides, China's policies in managing its domestic cyber space as well as its cyber laws have garnered massive opposition from the rest of the world, especially from the Western countries. China, along with Russia, whose policies on global internet governance favour the multilateral model, have also been criticised by the Western countries that have accused both of trying to create a 'splinternet'. Recently, when China implemented its cyber security law in 2017, the law received widespread criticism from foreign companies, foreign network providers and internet service providers operating in China, who teemed it an act of "protectionism".¹ Despite the opposition, China, has moved ahead with its agenda on cyber sovereignty, with regular support for the policy from the topmost leadership of the country. For instance, Chinese President Xi Jinping, while addressing the second World Internet Conference on December 16, 2015, held in the city of Wuzhen, stated, "Sovereign equality, a principle established by the Charter of the United Nations, is a basic norm of modern international relations, and it covers all aspects of state-to-state relations, including cyber space ... Countries have the right to independently choose how they will tread the path of cyber development, as well as issue their own regulations and public policies ... The right for countries to participate in international cyber space governance as equals should be respected by all".² He also urged "all nations to respect each other's cyber sovereignty," and said that "there should be no internet hegemony."

1. Josh Chin and Eva Dou, "China's New Cybersecurity Law Rattles Foreign Tech Firms", *Wall Street Journal*, November 7, 2016, <http://www.wsj.com/articles/china-approves-cybersecurity-law-1478491064>. Accessed on December 27, 2016.
2. "Chinese President Underscores Cyber Sovereignty, Rejects Internet Hegemony", *Xinhuanet*, December 12, 2015, http://www.xinhuanet.com/english/2015-12/16/c_134922689.htm. Accessed on August 10, 2018.

THE DRAGON'S SOVEREIGN INTERNET

The Asian giant is not only the largest populated country in the world but also has the largest number of internet users, with more than 854.49 million subscribers of the internet as of August 2019.³ The penetration of the internet among the total population of China is estimated to be 61.2 per cent. The number of people using the internet in their mobile phones is 846.81 million and the mobile netizens accounted for 99.1 per cent of the total netizen population.⁴ In other words, mobile phones have been the driving force for the growth of the internet in China. The internet is utilised by the common public in China mainly for the following purposes: personal and business communications; entertainment by watching and downloading videos, listening to, and downloading, music; social networking; online shopping; and gaming. With more and more new applications being introduced in mobile phones on an everyday basis, the creation of new websites for shopping, gaming and social networking, along with increase in the number of videos and music files being uploaded on the internet, the number of users of the internet in China is growing at an alarming pace.

As the user base of the internet in China is ever increasing, the government's effort to keep the space under constant check is also work in progress. China has, over the years, stepped up its internet censorship regime vigorously, thereby attracting opposition for its intrusive surveillance and censorship practices from international organisations, internet companies, privacy advocates, as well as the Western countries, especially the US. However, China's mission to rule its domestic cyber space has only progressed over the years, for which the country has established a number of agencies under a structural framework.

The lead organisation, 'Central Leading Group for Cyber Security and Informatisation' is an elite high level group consisting of around 22 members and headed by the President of the PRC, Xi Jinping, as the chairman. Under the overseeing guidance of this elite high-level grouping functions the most important agency: the Cyber Space Administration of China (CAC).

3 "44th Statistical Report on Internet Development in China", China Internet Network Information Centre, August 2019, <https://cnnic.com.cn/IDR/ReportDownloads/201911/P020191112539794960687.pdf>. Accessed on September 21, 2019.

4 Ibid.

The CAC, which functions with nine different offices and three subordinate centres, plays an important role in the governance and management of the internet as well as cyber space in China. The CAC carries forward the Communist Party of China's (CPC's) effort to adapt the propaganda system to the digital age. By way of using animated videos and cartoons, the CAC tries to reach out to China's 802 million netizens with the Party's propaganda. The CAC also utilises new digital magazines such as *The Paper* and its English-language sister publication *Sixth Tone*. At the global level, the CAC actively advocates for the concept of cyber sovereignty with the notion that each country should have the right to draft and enact its own internet regulations, however it sees fit.⁵

In fact, the need for the creation of the CAC was realised by President Xi, as in the past, regulatory responsibilities for cyber space were divided among 15 Party and state authorities.⁶ Xi believed that since too many authorities were involved, it became difficult for them to make effective political decisions. Hence, the CAC was established in 2014 to put an end to the cyber space regulatory chaos in China. It could be stated that propaganda and censorship are the two most important missions of the CAC. In this direction, the CAC is responsible for deleting "undesirable" Chinese websites and blocking foreign websites.⁷ The provincial cyber space administration offices play an important role in implementing the job of censorship. For instance, in 2015, the cyber space administration of Shandong province removed approximately 7,600 "illegal" online postings, deleted 110 blogs and closed 760 digital user accounts.⁸ The cyber space administration of the city of Changsha, in turn, closed a "rumour portal" called Voice of Changsha (长沙说). The cyber space administration of Anhui province organised a workshop in February 2016 to pass down new restrictive propaganda guidelines.⁹

5. Nabil Alsabah, "Information Control 2.0", *MERICs China Monitor*, September 15, 2016.

6. Jun Liu, "网络"整治"背后的权力机构互联网管理20年变迁", 2014, <http://www.infzm.com/content/99098>. Accessed on August 19, 2018.

7. n. 3.

8. "山东省网信办主任李建军: 引导广大网民依法上网文明上网", 2016, http://www.cac.gov.cn/2016-01/05/c_1117667641.htm. Accessed on August 19, 2018.

9. "安徽网信办组织新闻网站学习贯彻习近平总书记重要讲话精神", *Anhui News*, February 25, 2016, <http://ah.anhuinews.com/system/2016/02/25/007235287.shtml>. Accessed on August 19, 2016.

Fig 1: Cyber Space Governance Structural Framework of China



Source: Data compiled and chart prepared by the author.

The CAC enjoys a free hand in executing its censorship mission and has high authority over the internet service providers and technology providers inside China. A classic case in this direction would be that in February 2016, under the CAC's order, the social media accounts of real estate tycoon Ren Zhiqiang were deleted. With more than 38 million followers in Weibo, Ren was not only one of the best-known voices in China's social media, but he used his popularity to criticise the Communist Party of China as well as President Xi Jinping, which attracted offensive action from the government.¹⁰ This is the sort of power the CAC enjoys in curtailing and controlling the cyber space in China. Also, in upholding the national concept of cyber sovereignty, the CAC involves successful domestic Information Technology (IT) companies such as Baidu and Tencent in its efforts: these companies are expected to propagate the Party line of internet censorship and information control within their respective operating procedures and policies.¹¹

The Great Firewall

While the CAC and other provincial organisations are responsible for regulating the domestic cyber space, especially the internet, in China, this task is enforced by employing certain tools and techniques at the grassroots level. The emergence of China's internet surveillance and censorship programmes can be traced back to 1998 when the Chinese government initiated the "Golden Shield Project" (金盾工程). The project became fully operational in November 2003 and since then there has been no looking back for China's censorship technologies. The intrusive censorship methods and the intricate network of censorship technologies of China are generally dubbed as "The Great Firewall of China" by the Western countries. With the great firewall, China can analyse and manipulate internet traffic and control the internet gateways for internet traffic between China and the rest of the world. China also uses a combination of firewalls and

10. Manya Koetse, "How Ren Zhiqiang Disappeared From China's Social Media", *What's on Weibo*, February 28, 2016, <https://www.whatsonweibo.com/renzhiqiangdisappearedfromsocialmedia/>. Accessed on August 22, 2018.

11. "互联网企业签署社会责任宣言作出十大承诺", *Xinhua*, November 11, 2015, http://news.xinhuanet.com/info/2015-11/24/c_134850062.htm. Accessed on August 22, 2018.

proxy servers at these gateways. The basic rules which China applies while monitoring and controlling the internet are:

- do not jeopardise social stability;
- do not organise; and
- do not threaten the Party.¹²

These three rules were made as a result of the 'Tiananmen Square Protest of 1989' to ensure that no such incident happens again. When the cyber domain became popular, the same set of rules was applied to maintain order in this domain too. Therefore, these three rules form the foundation of all the rules that have been formulated to govern the internet and cyber space in China. Any online content which directly or indirectly violates these rules, faces censorship. Whenever there is a violation of any of these rules, the golden shield activates its censorship methods on that particular Internet Protocol (IP) address, which is requesting the information on the officially banned keywords or websites. The methods followed under the great firewall to censor information are as given below.

DNS: Poisoning/Spoofing: Whenever a user requests for a connection to a website, the usual process is that the computer contacts its DNS (Domain Naming System) server asking for the IP address of that particular website and when obtained, connects the user's system to that IP address to give access to the website. But, in China, when a user requests for a connection with a website, the system contacts its DNS server and the server checks from the list of banned websites. If the user had asked for any of the banned websites, the server feeds its DNS caches with wrong addresses for the website which either take the user to a different website or will show an error on the user's computer.

Blocking Access to IPs: In order to prevent people from accessing the banned websites by using direct IPs or by using some private DNS servers, which are not poisoned, the tools in Golden Shield block access to the IP addresses of certain banned websites.

Analysing and Filtering URLs: The firewalls in the servers scan URLs for certain sensitive keywords such as "Tiananmen Square"

12. "How Does China Censor the Internet?", *The Economist*, April 21, 2013, in <http://www.economist.com/blogs/economist-explains/2013/04/economist-explains-how-china-censors-internet>. Accessed on July 2, 2014.

in URLs like 'http://en.wikipedia.org/wiki/Tiananmen_Square_protests_of_1989'. When it is found, the firewall blocks the webpages associated with these URLs.

Inspecting and Filtering Packets: A technique called "Deep Packet Inspection" is used to examine the unencrypted packets, looking for politically controversial keywords. Whenever a user tries to look for information on such sensitive keywords, the packets associated with the search are examined and blocked.

Resetting Connections: Whenever a particular website or some web pages are blocked by the great firewall, the communication between the user's computer and the computer at the destination is reset automatically by the firewall. This happens because the firewall sends a "reset packet" to both the user's computer and the desired destination computer with the misinformation that the connection was reset and, therefore, it cannot connect during that time. Every time there is a reset, the user loses his connectivity for 30 minutes.¹³

Blocking VPNs: During the 18th Communist Party Congress in November 2012, the Chinese cyber security authorities enhanced the abilities of the great firewall by expanding its capacity to block the VPNs (Virtual Private Networks). These VPNs were earlier used by the users to escape the great firewall. After the enhancement of the firewall's ability, the encrypted VPN traffic is also monitored and killed when being used.¹⁴

Apart from the above measures to impose censorship, Chinese officials also effectively conduct monitoring of the internet, and surveillance programmes by employing "Internet Opinion Analysts" across the country to monitor and analyse public opinion on Chinese social media. Specially designed software is used by these internet opinion analysts, who are mostly government employees to rummage around through various blogs, micro-blog posts and social networks, and dissect public opinion on local issues by identifying accusations of corruption and poor governance. The extracted information is then analysed and reports are forwarded daily to the local leadership from

13. "HTG Explains: How the Great Firewall of China Works", *How To Geek*, in <http://www.howtogeek.com/162092/htg-explains-how-the-great-firewall-of-china-works/>. Accessed on July 5, 2014.

14. "The Internet in China", *The Enemies of Internet*, <http://surveillance.rsf.org/en/china/>. Accessed on July 5, 2014.

the countryside to the province via text messages.¹⁵ Given the huge numbers, it is a logical assumption that all these internet opinion analysts may not be exclusively recruited for this purpose, but are assigned this additional work, apart from their regular business.

Moreover, in certain cases, where a netizen is found to be vocal against Chinese politics or the Party or any of its leaders, or in general violates the basic rules of China's censorship and monitoring, then, the officials keep a special watch on the particular user's online activity. The police will also tap all his/her phone lines, read his/her mails and other social media posts and also monitor his/her other online activity. Thus, the targeted user loses his/her privacy in the cyber space and is forced to live a transparent life.¹⁶ Also, there are regular instances of arrests of users who are found to be violating the strict cyber censorship rules. Those who are found to be vocal against the state or the Party, especially in the Autonomous Xinjiang province where, under the pretext of curbing the spread of *jihadi* ideas, authorities arrest people who share their dissatisfaction in the online social media.¹⁷

THE DRAGON'S INDIGENOUS INTERNET UNIVERSE

Apart from creating a controlled and constantly monitored cyber environment in the country through the CAC and its related agencies, China has been able to speak out openly about cyber sovereignty mainly because of the fact that the country has succeeded in reducing its reliance on foreign internet companies and technologies by virtue of creating a parallel internet universe domestically. It can be stated that if the rest of the world searches on Google, the Chinese search on Baidu. The reliance on Western countries' internet companies' platforms, especially of those of the US, in China, is so miniscule

15. "Two Million 'Internet Opinion Analysts' Employed to Monitor China's Vast Online Population", *South China Morning Post*, October 3, 2013, <http://www.scmp.com/news/china-insider/article/1323529/two-million-employed-monitor-chinese-public-opinion>. Accessed on July 6, 2014.

16. "The Transparent Chinese", *The New York Times*, November 17, 2013, http://www.nytimes.com/2013/11/18/opinion/xuecun-the-transparent-chinese.html?_r=1&. Accessed on July 6, 2014.

17. "Uyghur Muslims in China Arrested For 'Online Jihad'", *International Business Times*, October 28, 2013, <http://au.ibtimes.com/articles/517429/20131028/china-internet-jihad-online-xinjiang-province-muslim.htm#.U7pmzMbgtgj>. Accessed on July 6, 2014.

that China even chased Google out of the mainland in 2010 when the company refused to comply with the country's censorship rules.

The is not the case only with Google as many other US based popular internet companies have very little or no user base in China. Several popular social media giants like Facebook, Twitter, Instagram, SnapChat, etc. are officially banned in the country, apart from Google and its other services. However, the Chinese people are not deprived of the joy and knowledge of the internet for which the country has established a series of domestic internet platforms and applications which are in many ways counterparts to their US companies' operations.

By December 2017, China had 5.33 million websites, representing a yearly increase of 10.6 per cent of which 3.15 million websites were with the domain name of “.CN”, representing a yearly increase of 21.8 per cent. As of December 2017, the number of Chinese listed internet companies, both at home and abroad, reached 102, with a total market value of RMB 8.97 trillion (\$1.3 trillion). Among them, the market value of Tencent, Alibaba and Baidu accounted for 73.9 per cent of the total. The proportion of companies conducting business online, viz. e-commerce, games, culture and media, internet finance, and software tools accounted for 14.7, 28.4, 10.8, 9.8 and 5.9 per cent respectively of the total number of listed internet companies.¹⁸ In fact, the Chinese internet companies have made an impressive mark in the global financial market as nine Chinese companies are listed among the top 20 global internet companies (see Table 1).

Table 1: Top 20 Global Internet Companies

Rank	Company	Country	Market Value (\$ billion)
1	Apple	USA	924
2	Amazon	USA	783
3	Microsoft	USA	753
4	Alphabet [Google]	USA	739
5	Facebook	USA	538
6	Alibaba	China	509
7	Tencent	China	483

18. n. 3.

8.	Netflix	USA	152
9.	Ant Financial	China	150
10.	e-bay+PayPal	USA	133
11.	Booking Holdings	USA	100
12.	Salesforce.com	USA	94
13.	Baidu	China	84
14.	Xiaomi	China	75
15.	Uber	USA	72
16.	DidiChuxing	China	56
17.	JD.com	China	52
18.	Airbnb	USA	31
19.	Meituan-Dianping	China	30
20.	Toutiao	China	30

Source: Mary Meeker, "Internet Trends-2018", *Kleiner Perkins Report*, May 30, 2018.

Moreover, three Chinese internet companies, namely, JD.com, Alibaba and Tencent are also listed among the Fortune 500 list of companies at 181, 300 and 331 ranks respectively.¹⁹

Due to the overpopularity of the indigenous websites and other internet platforms, the maximum amount of internet data travels on these indigenous built internet applications and websites which are also effectively controlled and manipulated by the Chinese government. Apart from this, the Chinese government also utilises the plethora of indigenous technology available in order to provide e-government services to the people. For instance, up to December 2017, 485 million internet users received e-government services in China. Specifically, the utilisation rate of e-government services based on the Alipay or WeChat Pay civic service platform was 44.0 percent, up 26.8 percentage points over the end of 2016, and this service platform became the most popular way of using e-government services.²⁰

Specifically, 'Wechat' from 'Tencent Holdings' and 'Weibo' from 'Sina' have taken a huge step forward over the years towards

19. "Fortune 500 List Rankings 2018, <http://fortune.com/global500/>. Accessed on September 12, 2018.

20. n. 3.

collaboration with local governments entering the realm of public services. Apart from providing a platform for e-payment, social networking applications, sites such as Weibo allow public departments to create official accounts to publish information to citizens directly, including government news, announcements, mayors' mailboxes, local issues, online polls, and legislative consultations. This roughly corresponds to established e-government service items in e-information, e-consultation, e-discussion and e-decision-making. The respective departments can gather public opinion and interact with citizens directly via the Weibo platform.²¹

WeChat, on the other hand, provides more services to the users apart from e-government services and regular social media applications. According to an introductory video about WeChat it is described as the following:

WeChat is an example of, for lack of a better word, a super-app. It's a Swiss Army knife that basically does everything for you, it's your WhatsApp, Facebook, Skype, Uber, Amazon, Instagram, Venmo and Tinder. But it's other things we don't even have apps for. There are hospitals that have built out whole appointment booking systems, investment services, there are even heat maps that show how crowded a place is, be it your favourite shopping mall or a popular tourist site. The list of services goes on basically forever. But it's not the variety of things you can do on WeChat that makes it so powerful, it's the fact that they're all in one app ...²²

Therefore, due to the inaccessibility or least popularity of foreign internet companies' products in China, the country's netizens are in a way forced to rely on the indigenous internet company products and platforms for their usage. This environment helps the Chinese government to ably streamline the maximum amount of internet traffic as well as easily monitor the data and content flowing within the domestic network. This least dependence environment in China

21. Yao Yang, "Towards a New Digital Era: Observing Local E-Government Services Adoption in a Chinese Municipality", *Future Internet*, vol. 9, no. 3, 2017.

22. Kessel M Jonah, "How China Is Changing Your Internet", *Asia Pacific New York Times*, 2016, <https://www.yahoo.com/news/york-times-china-changing-internet-081310832.html>. Accessed on September 20, 2018.

on foreign internet companies' products gives confidence to the country's law-makers to propagate the concept of cyber sovereignty with great vigour.

CHINA'S CYBER SECURITY LAW

Apart from establishing a national level surveillance and censorship mechanism through the CAC and also by creating an indigenous internet technology environment, the most important step by the Chinese government in favouring the concept of cyber sovereignty was through passing the cyber security law. On November 7, 2016, the 24th Session of the Standing Committee of the 12th National People's Congress of China passed the country's Cyber Security Law which came into effect from June 1, 2017. The critics of the law term it as a vaguely drafted document which could be exploited by the Chinese authorities in the future to impose their will on foreign companies. China, on the other hand, justifies the need for this new law to bolster data security at a time of multiple threats.

From an external observer's point of view, knowing China's nature of authoritarianism in its domestic policies, this new cyber security law should not come as a surprise. In fact, with this new law, China has now legalised its already existing practices of controlling its domestic cyber space.

The new law has 79 Articles divided into seven different chapters. Some of the highlights of the law are:

- The network operators are to adopt technological measures for monitoring and recording network operational statuses, security incidents, and follow relevant provisions to store network logs for at least six months.

Such measures would require enormous investments from the network operators and companies would suffer a setback as a result of the financial crunch and would end up increasing tariffs for the users.

- The network operators are required to provide technical support and assistance to public and state security organs to preserve national security and investigate crimes.

This clause again could be exploited by the Chinese authorities to extract the foreign companies' technologies on the

pretext of gathering evidence for investigating crimes. Although it is believed that the authorities would not go to the extent of requesting the disclosure of the source code from every service provider, the vaguely worded clause makes it uncertain.

- According to the law, a plethora of infrastructure such as public communication and information services, power, traffic, water, finance, public service, electronic governance, and more fall under the category of Critical Information Infrastructure (CII). And in order to avoid any data leak from these CIIs, the Security Council would formulate specific scope and security protection measures.

The categorisation of almost all public infrastructures as CIIs clearly exhibits the protectionist attitude of the state. Also, the law has not defined what constitutes a CII; it keeps open the possibility for any infrastructure in China to be termed as one by the state authorities in the future if the need arises.

- An important aspect of the law is that it also favours localisation of data. According to the law, any personal information or other data gathered or produced by the CII operators inside China must be stored in servers physically located inside the country. But if the operators require the data to be transferred outside the country's territory, they have to attain prior permission from the authorities, i.e. from the relevant departments in the State Council.

This clause in the law is a direct blow to the Western promoted global cyber governance model, which promotes global free flow of data that is currently in existence around the world. It also restricts the operations of foreign operators associated with China's CIIs and puts their operations at the behest of China's state authorities. At the same time, China upholds this section of the law citing its cyber sovereignty and national interest.

- The law also prohibits persons or organisations from subverting national sovereignty or overthrowing the socialist system which is also a very important aspect of China's 2015 National Security Law. Also, the law gives authority to the State Council and other government entities to temporarily restrict internet access in a particular region as required by national security or to preserve social order.

This clause in particular could be used to virtually cut off communications in parts of the controversial Xinjiang province or any other region inside China in case of a crisis or whenever the state authorities feel the need for it. The same clause can also be used to sever connectivity to infrastructures of foreign companies operating in China.

- The law also details the list of punishments for violators which range from fines to prison terms for individuals and hefty fines to freezing of assets for organisations.
- One of the highlighting positive aspects of the law is the provision to restrict the amount of personally identifiable information that can be collected, limit how it can be treated, and give an individual the right to request that information be deleted if mishandled.

This aspect of the law has been well received among the Chinese community, especially the privacy advocates.

Being the country with the largest number of internet subscribers, China has been able to utilise the business it gives to the network and internet operators to its advantage and has legally asserted its will over these operators from around the world through this new law to establish its sovereignty over the country's cyber space. In fact China's National Security Law, which came into effect in July 2015, also mandates that the Chinese government must take measures to protect national sovereignty, security and development interests in cyber space. This only reiterates the fact that China's effort to claim sovereignty over its domestic cyber space is a national interest for the Party and, hence, the push for achieving the agenda would be constant in the future.

CONCLUSION

China has succeeded in establishing a domestic cyber environment that can be ably monitored, controlled, manipulated and moderated by the government. Due to this extremely controlled environment, China is able to move forward with its agenda of cyber sovereignty. In future, China wants to make this push for cyber sovereignty in the global internet and cyber governance as well. On the other hand,

the US and other Western powers accuse China of splitting the internet and destroying the fabric of openness in the current internet governance model; while they themselves, often manipulate their hold over internet companies to conduct intrusive surveillance on internet users around the world – the Snowden revelations being a case in point.

In fact, it can be stated that the US will propagate a open internet and free flow of data only till the time the majority of the world depends on Silicon Valley companies for internet platforms due to the business benefits. As countries across the world become more indigenously dependent for internet products, sovereignty would slowly creep into the system of governance, and China's case is a classic example. As China's reliance on Silicon Valley companies reduces and, at the same time, while its indigenous companies make a long march in the global market, the US companies face an existential threat; this forces the US to reject the concept of cyber sovereignty outright.

Finally, if cyber space is the fifth domain of warfare, some sort of sovereignty is required to be maintained by every country at its domestic level to safeguard the domain and also for able governance.

INDIA-CHINA BORDER DISPUTES: A STUDY OF AGREEMENTS

MANISH

INTRODUCTION

A row triggered off after the Indian Army resisted the construction of a road by China in Doklam – a disputed territory between China and Bhutan also known in Chinese as Donglong. Since India and Bhutan enjoy a close relationship, including military-to-military cooperation on issues of mutual national interest, the Indian Army's response was inevitable. Doklam, covering around 89 sq. km, is strategically located towards the northwestern sector of Bhutan, close to Chumbi Valley, which is the vital intersection of the tri-junction of Sikkim, Bhutan and China, and, thus, concerns New Delhi.¹ Chumbi Valley became part of China after the Chinese occupation of Tibet in 1950, however, this valley had historically been part of Sikkim, when Sikkim, Bhutan and Tibet were independent principalities. The Sikkim King Guru Tashi used to have a house in Chumbi Valley where he resided for most of the year. It is no geographical coincidence that Nathu La is

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1. Ankit Panda, "What's Driving the India-China Stand-off at Doklam?", *The Diplomat*, July 18, 2017, <https://thediplomat.com/2017/07/whats-driving-the-india-china-standoff-at-doklam/>. Accessed on January 20, 2019.

the main gateway from Sikkim into Chumbi Valley. Predictably, as the military standoff continued at the Doklam sector, the officially backed Chinese media upped the increasingly negative anti-India rhetoric. There were writings suggesting even “fuelling” of a pro-independence movement in Sikkim, which had since 1975 become the 22nd state of India after the Sikkimese people chose to merge through a resoundingly pro-India verdict in a historic referendum.²

Since then, there has been marked unease and strain in India-China relations over issues ranging from India’s entry into the Nuclear Suppliers Group (NSG), Masood Azhar’s United Nations listing as a terrorist, the China-Pakistan Economic Corridor (CPEC) passing through Pakistan-occupied-Kashmir (PoK), India’s growing strategic proximity with the United States, its principled position over the South China Sea dispute, and so on. More recently, New Delhi’s decision to abrogate Article 370 in the Indian state of Jammu and Kashmir (J&K) in August 2019 agitated Beijing. This particular decision created turmoil in Pakistan for apparent reasons but was also referred to as “unacceptable” by China. Not only Pakistan, but China has also been entangled in the J&K dispute due to its occupation of Aksai Chin. China termed India’s move a violation of its territorial integrity and sovereignty and a decision that has the potential to further complicate the border issues between both nations. China has used the ‘Kashmir’ card several times against India and, has on several occasions, questioned Indian sovereignty on J&K. The closed-door United Nations Security Council (UNSC) informal meeting on August 16, 2019, was a result of this attempt by China to put pressure on India. Chinese Foreign Minister Wang Yi also raised the issue in the United Nations General Assembly (UNGA). India reiterated its position that J&K is an integral part of India, and that India is free to amend its domestic laws and policies.

However, China’s aggressive posturing softened gradually. Before Chinese President Xi Jinping’s informal visit to India in October 2019, Geng Shuang, the spokesperson for the Chinese

2. Jayadeva Ranade and Manish, “A Treacherous Faultline”, *The Pioneer*, July 16, 2017, <https://www.dailypioneer.com/2017/sunday-edition/a-treacherous-faultline.html>. Accessed on December 20, 2018.

Foreign Ministry, stated that the Kashmir issue should be resolved peacefully between India and Pakistan. The issue of Kashmir was not discussed during the second informal Modi-Xi meeting that was held on October 11-13, 2019, at Mamallapuram (Chennai). New Delhi raised 'terrorism' as one of the major concerns which affect both India and China, and is linked to terrorist organisations based in Pakistan. Nonetheless, the Kashmir issue loomed large in the background as seen from Pakistani Prime Minister Imran Khan's visit to China just before Xi travelled to India.

Since the 1950s, the year when India and China established diplomatic relations, there have been cycles of cooperation and conflict between the two. The territorial issue between the two, which ironically predates the independence era, has continuously posed a challenge(s) to their relationship. Scholars of international relations believe that territorial disputes are most often the fundamental cause of inter-state wars. At the time of its establishment in 1949, the People's Republic of China (PRC) had recorded at least 119 border problems with its neighbours. In most of the cases, the first territorial claims were made by China and that too through cartographic aggression. Not surprisingly, therefore, there is a definite pattern in China's behaviour. Undoubtedly, Doklam has once again brought long-pending border disputes between India and China to the forefront. During the latter half of the 20th century, the India-China relationship has seen more suspicion than trust and friendship. Such mutual mistrust and suspicion grew over the years and at times reached its nadir. The real challenge for both countries is to bridge the differences and reach a common understanding on several sensitive issues, including the border issues.³ Of late, some sincere attempts have been made by both India and China to resolve the differences, particularly related to the border issues. This paper argues that both India and China should explore various mechanisms – a process which has already begun – in the form of border management agreements, generally referred to as 'Confidence-Building Measures' (CBMs), for the effective management of the border and to boost cooperation

3. Yang Lu, "Doklam Standoff: China's Understanding of India has Increased", *The Indian Express*, September 1, 2017, <https://indianexpress.com/article/opinion/doklam-standoff-china-understanding-of-india-has-increased-4823264/>. Accessed on January 10, 2019.

between two of the biggest armies in the world.⁴ The paper is divided into four sections. The first section gives a brief historical overview of India-China relations. The second then identifies major boundary disputes between India and China. The third section lists the India-China border conflicts. Lastly, the fourth section highlights India-China border management agreements which have served as major CBMs between the two countries and contributed towards preventing military crises.

HISTORICAL OVERVIEW OF INDIA-CHINA RELATIONS

India and China share a peculiar relationship which predominantly converges at economic interests and often masks the deep-rooted strategic differences. Both have a lot in common, yet they are very different in many aspects. Both countries have shared warm cultural, academic and religious exchanges from times immemorial. They achieved independence almost at the same time, however, Chinese independence was a result of a prolonged armed civil war, whereas India won its freedom from colonial rule after a long but non-violent struggle. An ancient Chinese belief that a subdued neighbour is a primary prerequisite for its stability drives the Chinese quest for dominance over its neighbours. China has consistently pursued the strategy of “encroachment and negotiation” throughout history by employing various dominance and expansion practices towards its neighbouring states. Although successive regimes in China have always emphasised that the primary goal of the Chinese foreign policy and growing economic and military power is to promote world peace and development, incidents such as Doklam tend to expose China’s long-range hegemonic ambitions. This also augments well the principle that nations, particularly neighbouring states, will always remain in a state of protracted conflict to assert their political and economic hegemony.

As we debate the differences between the two Asian giants, protracted India-China territorial and boundary disputes are crucial and have the potential of upstaging bilateral ties at any point of time.

4. Rajat Pandit, “A Year After Doklam, India and China to Discuss Border CBMs, Hotline, Combat Exercise”, *The Times of India*, August 21, 2018, <https://timesofindia.indiatimes.com/india/a-year-after-doklam-india-china-to-discuss-border-cbms-hotline-exercise/articleshow/65491148.cms>. Accessed on January 18, 2019.

It is in this context that the understanding of border management mechanisms and various border management agreements is of paramount importance.⁵

India and China are two Asian giants, account for 35 per cent of the total world population and 15 per cent of the total geographical area of the world. Historically, the two have been identified as trans-Himalayan twins. There have been references of China and its people in much of India's ancient literature. For example, the Indian epics, the *Mahabharata* and *Ramayana*, and the treatise on statecraft, the *Arthashastra*, mention China (*Cina*) at several places.⁶ But it was Buddhism which took relations between these two countries to a new level and saw the migration of Buddhist monks from India to China and vice-versa. Fa Xian, Xuan Zang and Yi Jing were three of the most famous Chinese monks who travelled to, and stayed in, India during ancient times.⁷

The PRC came into existence under the leadership of the Communist Party of China (CPC) after a prolonged armed struggle in the year 1949. India was the first non-Communist country to recognise the PRC on January 1, 1950. Both countries signed the Panchsheel Agreement ("Five Principles of Peaceful Coexistence") in 1954 to strengthen peaceful cooperation and coexistence. Even as China was struggling with the task of nation-building, India visualised it as an ally, thanks to its socialist ideology. Indian Prime Minister Jawaharlal Nehru, being a staunch believer in socialist ideology, went out of the way to help China at international fora, much to the angst of his political contemporaries.⁸ However, bilateral relations started to deteriorate soon over boundary disputes. When China decided to annex Tibet, Nehru (though he recognised Tibet to be a part of the PRC), chose to provide asylum to the Dalai Lama and countless other

5. Hemant Adlakha, "China is Starting to See India as a Major Threat", *The Diplomat*, January 11, 2018, <https://thediplomat.com/2018/01/china-is-starting-to-see-india-as-a-major-threat/>. Accessed on September 29, 2018.

6. Ji Xianlin, *History of China- India Cultural Exchanges* (Beijing: China Social Sciences Press, 2008).

7. P Stobdan, "Asia's Buddhist Connectivity and India's Role", IDSA Issue Brief, February 19, 2016, https://idsa.in/issuebrief/asias-buddhist-connectivity-and-indias-role_pstobdan_190216. Accessed on January 20, 2019.

8. "India-China Bilateral Relations", Ministry of External Affairs, Government of India, 2012, <https://mea.gov.in/Portal/ForeignRelation/China-January-2012.pdf>. Accessed on August 25, 2019.

Buddhist followers. Prolonged border issues along with Tibet issue resulted in the India-China War of 1962.⁹

BOUNDARY DISPUTES

The India-China border is approximately 3,488-km-long and divided into the Eastern, Middle and Western Sectors. This border is almost entirely disputed except in Sikkim and smaller segments in the Western and Middle Sectors. The total disputed area between the two countries is approximately 1,35,000 sq. km. Sector-wise, the disputed territory is as follows:

- Eastern Sector: The northeastern Indian state of Arunachal Pradesh (approximately 90,000 sq. km).
- Middle Sector: 1,820 sq. km in the Indian states of Uttarakhand and Himachal Pradesh.
- Western Sector: Most of Aksai Chin and portions of Leh and Ladakh (approximately 38,000 sq. km) and the Shaksgam Valley (approximately 5,180 sq. km).¹⁰

India's border problem with China has its roots in the British demarcation of the border. The earliest treaties regarding the boundaries' demarcation in the Western Sector were signed by the Chinese and the Sikhs in September 1842, which stipulated no transgressions or interference in each other's frontiers. Later, in the year 1846, when the British Empire defeated the Sikhs, resulting in the transfer of sovereignty over Ladakh to British India, many attempts were made by British India to demarcate the boundary with China but without any success. However, the boundaries at the two extremities, i.e. Pangong Lake and Karakoram Pass were reasonably well-defined, but the Aksai Chin area was left undefined.¹¹

9. Achal Malhotra, "India's Relationship with its Neighbours: Conflict and Cooperation", *MEA*, March 6, 2014, <https://mea.gov.in/conflict-cooperation.htm>. Accessed on January 21, 2019.

10. Sushant Singh, "Simply Put: Where Things Stand on the Dolam Plateau", *The Indian Express*, August 5, 2017, <https://indianexpress.com/article/explained/india-china-standoff-sikkim-doka-la-simply-put-where-things-stand-on-the-dolam-plateau-4763892/>. Accessed on January 22, 2019.

11. Mihir Bhonsale, "Understanding Sino-Indian Border Issues: An Analysis of Incidents Reported in the Indian Media", *ORF Occasional Paper 143*, February 2018, https://www.orfonline.org/wp-content/uploads/2018/02/ORF_Occasional_Paper_143_India-China.pdf. Accessed on January 22, 2019.

In 1865, W. H. Johnson, a civil servant with the Survey of India, proposed the “Johnson Line” which put Aksai Chin in Jammu and Kashmir.¹² At this point, China did not have control over the Xinjiang region. As a result, this proposal was never presented to the Chinese. The *Postal Atlas of China*, published by the Government of China from 1917 to 1933, had shown the boundary in Aksai Chin as per the Johnson Line, which runs along the Kunlun mountains.

The representatives of Britain, China, and Tibet attended a conference in Shimla in the year 1914 and came up with a broader agreement on the Indo-Tibet border. The McMahon Line was proposed as a boundary between Tibet and India. All three representatives initially agreed to the proposal, but China later objected to the proposed Sino-Tibet boundary and refused to sign the final agreement. China’s claim on areas south of the McMahon Line in the NEFA region¹³ is based on the traditional boundaries (Imperial Qing dynasty boundaries). However, India’s claim line in the Eastern Sector follows the McMahon Line. The line drawn by McMahon on the Shimla Treaty maps starts at the tri-junction among Bhutan, China, and India and extends eastwards. As per India, the principle of the watershed ridge should be the basis of the boundary and more than 90 per cent of the McMahon Line follows the main watershed ridge.¹⁴

During the 1950s, China built a road connecting Xinjiang and western Tibet, approximately 179 km of which goes through the Aksai Chin region of India. India strongly objected to the construction of the road. Based on an agreement between Nehru and Zhou Enlai in the year 1960, officials from both sides held discussions to settle the boundary dispute. But both China and India disagreed on the major issue of the watershed that defined the boundary.¹⁵

12. S. K. Shah, *India and Its Neighbours: Renewed Threats and New Directions* (Alpha Editions, 2017).

13. NEFA refers to ‘North-East Frontier Agency’. It was one of the political divisions in British India and later the Republic of India. It became the Union Territory of Arunachal Pradesh on January 20, 1972 and a state on February 20, 1987.

14. Karunakar Gupta, “The McMahon Line 1911-45: The British Legacy”, *The China Quarterly*, no. 47, July-September 1971, pp. 521-545, https://www.jstor.org/stable/652324?seq=1#metadata_info_tab_contents. Accessed on June 22, 2019.

15. Lorenz M. Luthi, “Sino-Indian Relations, 1954-1962”, *Eurasia Border Review* 3, Special Issue, 2012, pp. 95-119, http://src-h.slav.hokudai.ac.jp/publicn/eurasia_border_review/Vol3SI/luthi.pdf. Accessed on June 22, 2019.

In the absence of a mutually accepted border, a Line of Actual Control (LAC) is used by India and China to claim the area up to which each side has effective military control. In the Eastern Sector, the LAC roughly corresponds to the McMahon Line while in the Western Sector, the two sides have failed to agree to a single LAC.¹⁶

Long pending border issues and Tibet were the main pretexts for the 1962 War, but other issues also played a crucial role. There had been a series of violent border incidents after the 1959 Tibetan uprising. To counter this, India initiated a "Forward Policy" and placed outposts all along the border. Irked by these developments, the Chinese launched simultaneous offensives in Ladakh and across the McMahon Line in the Eastern Sector on October 20, 1962. During the ensuing battle, Chinese troops captured Rezang La in Chushul in the western theatre and Tawang in the eastern theatre. The war ended when China declared a ceasefire on November 20, 1962, and withdrew to its claimed "Line of Actual Control".

Military clashes occurred again between India and China in 1967 and 1987. The competition to control the strategically important Chumbi Valley is seen as a major cause for the Nathu La and Cho La incidents in 1967. The 1967 military clashes happened between India and China along the border of the Himalayan Kingdom of Sikkim, then an Indian protectorate. The Nathu La clashes started on September 11, 1967 – when the People's Liberation Army (PLA) launched an attack on Indian posts at Nathu La – and lasted till September 15, 1967. In October 1967, another military duel took place at Cho La and ended on the same day. According to independent sources, the Indian forces achieved a "decisive tactical advantage" and defeated the Chinese forces in these clashes.

The 1987 Sino-Indian skirmish at the Sumdorong Chu Valley in Arunachal Pradesh was the third major military conflict between the PLA and the Indian Army. The conflict started in the year 1986 when the PLA preemptively occupied the sensitive pasturage of Sumdorong Chu, which is on the Indian side of the LAC. The Indian side responded with "Operation Falcon" and landed a brigade of

16. Bijoy Das, "Border Defence Cooperation Agreement: The Icebreaker in Making?", *Journal of Defence Studies*, vol. 8, no. 1, January–March 2014, pp. 35–48, https://idsa.in/system/files/8_1_2014_BorderDefenceCooperationAgreement.pdf. Accessed on June 26, 2019.

troops at Zimithaung, south of Hathung La, using its new heavy-lift Mi-26 helicopters. The Chinese moved up their forces to take up positions all along the LAC. After hectic diplomatic efforts, the situation was diffused.¹⁷

The Chinese PLA has been regularly carrying out small skirmishes and transgressions throughout the LAC in the Western and Eastern Sectors since the Sumdorong Chu incident. However, the faceoff at Daulat Beg Oldi sector in April 2013, the standoff at Demchok in September 2014, and the faceoff in the Burtse region of northern Ladakh in September 2015 lasted for more than three weeks and further added fuel to the growing differences.¹⁸

The Doklam military standoff in the year 2017 was the latest flashpoint between the two armies. The Chinese attempt to alter the status quo at the tri-junction area through road construction activities in the disputed territory of Doklam, near the Doka La Pass was the root cause of the conflict. Although India does not have any border dispute with China in the region, both Bhutan and China claim Doklam. Since India and Bhutan share a 'special relationship' through the Indo-Bhutanese Friendship Treaty of 1949 (amended in 2007), India has an official obligation to intervene on behalf of Bhutan. Also, the geo-strategic implications of Doklam on the "Siliguri Corridor" played a crucial role in India's intervention in Doklam. The standoff lasted for more than 70 days and ended after hectic diplomatic efforts.¹⁹

BORDER MANAGEMENT AGREEMENTS

After the 1962 War, relations between both countries remained strained and during the Indo-Pak War of 1965, China supported Pakistan. When India signed the Treaty of Peace, Friendship and Cooperation with the USSR in 1971, the bilateral relations between India and

17. Mandip Singh, "Lessons from Somdurong Chu Incident", *IDS Comments*, April 26, 2013, https://idsa.in/idsacomments/CurrentChineseincursionLessonsfromSomdurongChuIncident_msingh_260413. Accessed on June 29, 2019.

18. Rakesh Ahuja, "India-China Face-off Over Canal Work in Ladakh? Army says 'no Incursion'", *The Hindustan Times*, November 4, 2016, <https://www.hindustantimes.com/india-news/chinese-troops-stop-canal-work-along-border-in-ladakh/story-XwdMdyGy3rG3EBwnXrVRO.html>. Accessed on June 29, 2019.

19. Prakash Menon and Anirudh Kaniseti, "The Doklam Imbroglio", *Takshashila Discussion Document*, March 2018, <http://takshashila.org.in/wp-content/uploads/2018/09/TDD-The-Doklam-Imbroglio-GPM-AK-2018-03.pdf>. Accessed on June 24, 2019.

China hit rock bottom.²⁰ Although, both countries time and again expressed the desire to restore harmony in their bilateral relations, it was only after K.R. Narayanan was appointed as India's ambassador to China in 1976 that official diplomatic ties resumed. Later, Atal Bihari Vajpayee's visit to China in 1979 as minister of external affairs helped in breaking the ice between India and China. Rajiv Gandhi's visit to China in December 1988 was a watershed moment which ushered the bilateral relations towards a new direction.²¹ During the Rajiv Gandhi visit, the two sides agreed to hold annual diplomatic consultations between their foreign ministers, set up a joint committee on economic and scientific cooperation, and a joint working group on the boundary issue. Since then, both the countries have been engaged in a series of CBMs on border management in the form of bilateral agreements signed in 1993, 1996, 2005, 2012 and 2013. During Prime Minister Atal Bihari Vajpayee's visit to China in 2003, the two sides decided to appoint special representatives for consultations to arrive at a framework for a boundary settlement that would provide the basis for the delineation and demarcation of the border.²²

Maintenance of Peace and Tranquillity along the Line of Actual Control in the India-China Border Agreement, 1993

The Agreement on the Maintenance of Peace and Tranquillity along the Line of Actual Control in the India-China Border Areas signed on September 7, 1993, is the first major conventional CBM between the two countries. It advocates that the India-China boundary question should be resolved peacefully, through friendly consultations. Neither side shall use or threaten to use force against the other by any means. Article II of the agreement specifies that each side shall keep its military forces in the areas along the Line of Actual Control at a minimum level and also reduce the military forces along the

20. Takenori Horimoto, "India's Wars: The Indo-Pakistani Wars and the India-China Border Conflict", *The Termination of Wars in Historical Perspective: 2015 International Forum on War History: Proceedings*, September 30, 2015, <http://www.nids.mod.go.jp/english/event/forum/pdf/2015/07.pdf>. Accessed on July 24, 2019.

21. "Post-1976 Trend of India's China Policy", *The Frontline*, vol. 17, issue 12, June 10-23, 2000. <https://frontline.thehindu.com/static/html/fl1712/17120220.htm>. Accessed on September 24, 2019.

22. Manoj Joshi, "The Wuhan Summit and the India-China Border Dispute", ORF Special Report 62, June 2018, https://www.orfonline.org/wp-content/uploads/2018/06/ORF_Special_Report_62_Wuhan.pdf. Accessed on September 24, 2019.

LAC in conformity with the requirements of the principle of mutual and equal security. But even today, the India-China border in both the Western and Eastern Sectors remains the world's most heavily militarised region. Article V of the agreement deals with air intrusions across the Line of Actual Control. Lastly, but most importantly, both sides decided to appoint diplomatic and military experts in the India-China Joint Working Group on the boundary question to formulate implementation measures under Article VIII. These experts were supposed to advise the Joint Working Group on the resolution of differences between the two sides on the alignment of the Line of Actual Control and address issues relating to redeployment with an objective of reduction of military forces along the Line of Actual Control.²³

Confidence Building Measures in the Military Field along the Line of Actual Control in the India-China Border Agreement, 1996

The second agreement, signed in the year 1996, pertains to the CBMs in the military field along the Line of Actual Control in the India-China border areas. This agreement was primarily aimed at fulfilling the agenda of the first CBM agreement of 1993. Article X of this agreement again affirmed the commitment of both sides to the LAC while fully recognising the “different perceptions” on certain pockets for which the two sides agreed “to speed up the process of clarification” and also agreed “to exchange maps indicating their respective perceptions”. It is interesting to mention here that the LAC between India and China has not yet been physically demarcated/delineated on the ground or in military maps. This has led to both sides drawing their own perceptions of the LAC. This ambiguity has resulted in several transgressions/intrusions. According to Article III of the agreement, all future restrictions are to be based on “parameters such as the nature of the terrain, road communications and other infrastructure and time taken to induct/de-induct troops and armaments.” The agreement stressed that both sides shall “avoid holding large scale military exercises involving more than one

23. “Agreement on the Maintenance of Peace along the Line of Actual Control in the India-China Border”, September 7, 1993, <https://www.stimson.org/agreement-on-the-maintenance-of-peace-along-the-line-of-actual-control-in-t>. Accessed on September 25, 2019.

division (15,000 troops) in proximity to the LAC" and shall inform the other side about the "type, level, planned duration and areas of the exercise" in case it involves more than a brigade (5,000 troops). Article V states that no combat aircraft – which include "fighter, bomber, reconnaissance, military trainer, armed helicopter and other armed aircraft" – shall be allowed to fly "within ten km" of the LAC "except by prior permission" from the other side.²⁴

Implementation of Confidence-Building Measures in the Military Field along the Line of Actual Control in India-China Border Agreement, 2005

This agreement was hailed as a game-changer by many scholars but it failed to live up to the expectations. It was signed to reaffirm the Declaration of Principles for Relations and Comprehensive Cooperation between India and China, signed in June 2003. Both sides stressed on the fact that they are seeking a political settlement of the boundary question in the context of their overall and long-term interests. Article I of the agreement specifies that an early settlement of the boundary question should be pursued as a strategic objective and the political parameters and guiding principles for a boundary settlement should ensure that differences on the boundary question should not be allowed to affect the overall development of bilateral relations. Article V of the agreement states that the two sides will take into account, *inter alia*, historical evidence, national sentiments, practical difficulties and reasonable concerns and sensitivities of both sides, and the actual state of border areas. The most crucial clause in this agreement is Article VII which was perceived as a departure in the Chinese hard stand on Arunachal Pradesh. This Article stipulates that in the process of reaching a boundary settlement, the two sides shall "safeguard due interests of their settled populations" in the

24. "Protocol between the Government of the Republic of India and the Government of the People's Republic of China on Modalities for the Implementation of Confidence Building Measures in the Military Field Along the Line of Actual Control in the India-China Border Areas", April 11, 2005, <https://www.mea.gov.in/bilateral-documents.htm?dtl/6539/Protocol+between+the+Government+of+the+Republic+of+India+and+the+Government+of+the+Peoples+Republic+of+China+on+Modalities+for+the+Implementation+of+Confidence+Building+Measures+in+the+Military+Field+Along+the+Line+of+Actual+Control+in+the+IndiaChina+Border+Areas>. Accessed on June 26, 2019.

border areas. However, Chinese Foreign Minister Yang Jiechi shot down all hopes by asserting that “the mere presence of populated areas in Arunachal Pradesh would not affect Chinese claims on the boundary.” Article VIII proposes the use of means such as modern cartographic and surveying practices and joint surveys for the delineation of the boundary.²⁵

Establishment of a Working Mechanism for Consultation and Coordination on India-China Border Agreement, 2012

Mr Dai Bingguo, state councillor of the People’s Republic of China tried to set a positive tone during the negotiations, but in the end, it did not translate into any substantial shift in the Chinese policy on the issue. The mechanism proposed in the agreement turned out to be mere symbolism, and no tangible progress on the ground. It only offered a desire to materialise the spirit of similar agreements signed earlier, in the years 1993, 1996 and 2005 and numerous meetings of the Joint Working Group. The agreement, in the form of a working mechanism, aims to only facilitate timely communication of information on the border situation for the appropriate handling of border incidents.²⁶

Border Defence Cooperation Agreement, 2013

The Border Defence Cooperation Agreement (BDCA) was negotiated in the backdrop of the Depsang/Chumar incident, where India and China were involved in a bitter faceoff for more than three weeks before the visit of Chinese Premier Li Keqiang. Many believe that the incident was, in fact, a Chinese plot to arm-twist India to sign the BDCA. This mechanism was proposed by Premier Li Keqiang who termed it as a strategic benchmark. But actually, the BDCA is nothing but a rehash of earlier border agreements. While the agreement seems to have set a positive tone for future talks between New Delhi and Beijing, it does not translate into any substantial

25. Ibid.

26. “India-China Agreement on the Establishment of a Working Mechanism for Consultation and Coordination on India-China Border Affairs”, January 17, 2012. <https://mea.gov.in/bilateral-documents.htm?dtl/17963/IndiaChina+Agreement+on+the+Establishment+of+a+Working+Mechanism+for+Consultation+and+Coordination+on+IndiaChina+Border+Affairs>. Accessed on June 26, 2019.

shift in the Chinese policy, and skirts the primary issue of resolving the boundary dispute.

Article II of the BDCA is, in a sense, a path-breaking clause that says the two sides shall implement the agreement *inter alia* by jointly combating smuggling of arms, wildlife, wildlife articles and other contraband. Our porous northeast region shares borders with Bangladesh, Myanmar and China and has, for long, been affected by smuggling of small arms, drugs and wildlife articles. If this Article is implemented in letter and spirit, it may help India to curb terrorist activities in the northeast. Articles III to V aim to regularise and expand interactions, exchanges, meetings and exercises between the two militaries and elaborate on the process through which the BDCA shall be implemented, namely, through meetings between border personnel, military officers, and other departments of the Military Regions of China and Army Commands of India.

Articles VI to VIII of the Border Defence Cooperation Agreement state that no face-to-face situation should escalate into an incident involving military force. Another important aspect of this agreement is Article VI which states that there would be “no tailing” of each other’s patrols in disputed forward areas. Tactically, all armed forces in the world tail or follow the patrol parties of another country within an area which it claims to be its own. It is necessary for an armed force to ‘tail’ the intruding patrol party of another country to ensure that the transgressing patrol returns to its territory. However, in the absence of a mutually agreed LAC, tailing of patrols can lead to a serious faceoff between the two forces. This clause tries to negate that. Article IX of the Border Defence Cooperation Agreement stipulates that the agreement shall be implemented by the two sides “without prejudice to their respective positions on the alignment of the line of actual control as well as on the boundary question”.²⁷

27. “Agreement between the Government of the Republic of India and the Government of the People’s Republic of China on Border Defence Cooperation”, October 23, 2013, <https://www.mea.gov.in/bilateral-documents.htm?dtl/22366/Agreement+between+the+Government+of+the+Republic+of+India+and+the+Government+of+the+Peopl+es+Republic+of+China+on+Border+Defence+Cooperation>. Accessed on June 26, 2019.

CONCLUSION

India and China are the only two big countries in the world which are not separated by a mutually defined frontline. The spirit of various border management agreements between India and China is to serve as a new template to boost military interface and resolve incidents locally. It is evident that these pacts will not be able to prevent incidents like Doklam. Military transgression is only one approach of the Chinese assertions along the border. China has long been using several non-military intrusive approaches, viz. technological, economic, etc. These intrusions, if not countered, may become more threatening to the sovereignty of India. Considering the asymmetric nature of these challenges, managing the border only through military force is not enough. However, in the absence of a more robust and nuanced management strategy, we need to continue to rely on the border management agreements to maintain peace and tranquillity along the borders.

TURKEY'S S-400 DEAL: DEEPER INTO THE RUSSIAN ORBIT?

YATHARTH KACHJAR AND ANJALI GUPTA

INTRODUCTION

In September 2019, Turkey received the delivery of a second battery of the Russian S-400 air defence system. Despite repeated warnings from the US, Turkey's foreign minister indicated that the S-400 air defence system will be activated by April 2020.¹ Earlier, in July 2019, Turkey had received the initial parts of the system from Russia despite repeated threats about possible US sanctions under Section 231 of the Countering America's Adversaries through Sanctions Act (CAATSA) over the purchase. The US has already expelled Ankara from the F-35 programme under which it was the co-manufacturer of the components of the US-origin F-35 Joint Strike Fighter (JSF) aircraft and was supposed to acquire 100 of these aircraft. As a member of the international consortium that has developed the F-35, Turkey had already contributed over \$1 billion to the programme.²

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1. "Turkey says Delivery of Second S-400 Battery Complete, *Reuters*", September 15, 2019, <https://www.reuters.com/article/us-turkey-security-usa-defense-russia/turkey-says-delivery-of-second-s-400-battery-complete-idUSKBN1W00AQ>. Accessed on November 5, 2019.
2. *Ibid.*

In this background, the article tries to analyse the reasons behind the rift in the relations between Turkey and the West, the strengthening of Turkey-Russia relations and its possible impact on the security of the North Atlantic Treaty Organisation's (NATO's) security architecture. The article argues that the rift between Turkey and the US over the S-400 issue and Ankara's tilt towards Russia could have broad implications for Turkey-US defence cooperation, their bilateral relations and Turkey's role in NATO.

TURKEY'S QUEST FOR AN AIR DEFENCE SYSTEM

Turkey's geo-strategic location in one of the most volatile regions of the world makes it vulnerable to the perpetual threat posed by the missile and aircraft capabilities of the countries in its neighbourhood. At present, F-16 fighter aircraft in the possession of the Turkish Air Force patrol Turkey's air space to protect it from any air space violation by enemy aircraft as well as a possible missile attack. The other extant air defence missile systems available in the country such as Stingers, Rapiers, and Hawks are ageing fast and have limited range, i.e. short and medium. The air and missile defence systems of Turkey "include only short-range Rapier, FIM-92 Stinger missiles, along with medium-range MIM-23 I-Hawk missiles."³

Also, Turkey's reliance on the F-16 aircraft to protect the Turkish air space has certain limitations. First, the superior technology used in land-based anti-ballistic missile defence systems is far more adept in engaging enemy missiles and aircraft "while they are still hundreds of kilometers away from the homeland".⁴ Second, the fighter aircraft such as the F-16 used by Turkey to protect its air space run the risk of ageing more rapidly due to excessively long hours of patrolling which result in metal fatigue. In addition, the long hours of flying also put excessive strain on the air force personnel who fly these aircraft. Although the Turkish Air Force has tried to manage this excessive stress on its personnel by incorporating Unmanned Aerial Vehicles (UAV) into its inventory, these UAVs are still "far less effective than a

3. "Turkey Seeks Longer-Range Missile Defenses", *Nuclear Threat Initiative*, June 22, 2010, <https://www.nti.org/gsn/article/turkey-seeks-longer-range-missile-defenses/>. Accessed on November 5, 2019.
4. Mustafa Kibaroglu, "On Turkey's Missile Defense Strategy: The Four Faces of S-400 Deal Between Turkey and Russia", Centre for Strategic Research, SAM Papers, No. 16, p. 4.

land-based system would be.”⁵ Therefore, Turkish policy-makers are incessantly stressing on the need for the country to deploy a superior air defence system to safeguard its territorial integrity in a hostile neighbourhood.

Fig 1: Air and Missile Defence System available in Turkey

	FIM-92 Stinger	Rapier	MIM-23 Hawk
Specifications			
Manufacturer In Service	Raytheon Company 1981–present	British Aircraft Corporation 1971–present	Raytheon Company August 1960–present
Cost	U.S.\$38,000 Per Unit		\$250,000 per missile, \$15 million per fire unit, \$30 million per battery
Type	Portable, Surface-to-air missile.	Surface-to-air missile	Surface-to-air missile
Effective Against	Fixed-wing aircraft, helicopters, un-manned aerial vehicles, and cruise missiles	Supersonic, low level, high maneuverability aircraft	Fixed and rotary wing aircraft, cruise missiles, and short-range tactical ballistic missiles
Deployments	Afghan Mujahideen, Bangladesh, Bosnia & Herzegovina, Chad, Chile, Columbia, Egypt, Finland, Georgia, Germany, Greece, Iran, Israel, India, Italy, Japan, South Korea, North Korea, Latvia, Lithuania, Netherlands, Norway, Pakistan, Portugal, Taiwan, Slovenia, Switzerland, Turkey, UNITA, United Kingdom, United States	Brunei, Indonesia, Iran, Oman Qatar, Singapore, Switzerland, Turkey, United Kingdom, United Arab Emirates	France, Greece, Iran, Israel, Italy, Japan, Kuwait, Netherlands, Egypt, Jordan, Morocco, Romania, Saudi Arabia, Singapore, Spain, South Korea, Sweden, Taiwan, Turkey, United Arab Emirates
Range	Short Range	500 - 7,000 m	40,000 meter (21.6 nautical mile)
Speed	Mach 2.54 (750 m/s)	650 m/s	Mach 2.7

Source: Data compiled by the author from various sources.

Turkey’s aspiration to acquire air defence capability goes back to the first Gulf War when the missile threat from Saddam Hussein’s Iraq threatened the country’s security. Since then, “Turkey has made several attempts to reduce its vulnerability in air and missile defence through foreign acquisition, co-production, and finally indigenous development of low-to-medium altitude, short-to-medium range systems.”⁶ However, the matter gained more prominence in the

5. Ibid., p. 4.

6. Gonul Tol and Nilsu Goren, “Turkey’s Quest for Air Defense: Is the S-400 Deal a Pivot to Russia?”, Middle East Institute, *Policy Focus*, 2017, p. 3.

background of the deteriorating security situation in Turkey's neighbourhood, especially in the backdrop of the Syrian civil war. Also, NATO's existing missile defence architecture doesn't completely satisfy Turkey's heightened security needs as it "doesn't provide total protection to Turkish territory, leaving out the eastern provinces."⁷ In addition, the supercilious approach adopted by NATO and the US towards Turkey's security concerns, especially the delay in the deployment of Patriot batteries in 2012, has further convinced the Turkish policy-makers to acquire self-reliance in terms of air defence capabilities. Turkey sought the deployment of Patriot batteries from the NATO council in response to any future threat from Syria. In June 2012, Syria had shot down Turkey's military reconnaissance aircraft in the international space of the eastern Mediterranean after which Turkey had raised the issue in the NATO council. However, NATO delayed the deployment of Patriot batteries till December 2012, creating a furor within the Turkish establishment about the lack of urgency within NATO with regard to Turkey's security needs.

In this backdrop, Turkey's defence industry and procurement authority, in accordance with the demand of the political establishment, concluded in 2006 that the country has the capability of developing shorter range air defence systems; however, the long-range air defence system which is technologically far superior should be purchased from abroad.⁸ In 2009, Turkey issued a call to procure the "Long-Range Air and Missile Defence System" (T-LORAMIDS). After a few extensions, in 2011, Turkey received proposals for a long-range air defence system which included the Patriots by the US, S-300V by Russia, FD-2000 by China, and SAMP-T by Eurosam (a joint venture of France and Italy).

Due to the political leadership's insistence on developing indigenous technology, Turkey asked the competitors to include technology transfer in their proposals that would help the Turkish industry to develop more advanced air and missile defence systems. The Chinese firm China Precision Machinery Import-Export Corporation (CPMIEC), with its offer of the FD-2000, was finally selected for the procurement of the air missile defence system. However, the decision

7. *Ibid.*, p. 3.

8. S. Egeli, "Making Sense of Turkey's Air Defense System Merry go Around", *All Azimuth*, vol. 8, no. 1, 2019, p. 72.

raised immense outcry and criticism in the Western capitals with regard to the possibility of jeopardising the “integrity of NATO’s sensitive command, control, and communication systems as well as its intelligence collecting capability.”⁹ The pressure exerted by the allies in the Western world caused reluctance on Turkey’s part to finalise the deal, which, in turn, resulted in the withdrawal of the offer by CPMIEC.

The withdrawal of the offer by the Chinese firm led to a new round of negotiations and, finally, the Russian firm Almaz-Antey, with its S-400 missile system, was shortlisted. The decision to acquire Russian S-400 missiles raised an alarm among Turkey’s NATO allies. With the onset of the Arab uprisings in 2011, and later with the failed military coup in Turkey, the domestic and foreign policies of Turkey became fundamentally divergent from Western values and interests. Turkey’s drift towards authoritarianism under the AKP (Justice and Development Party) and its foreign policy goals in places such as Syria began conflicting with those of its Western allies. This, in turn, created deep mistrust of each other, to a point that Turkey accused Washington of supporting the mastermind behind the failed military coup of 2016, Fethullah Gulen. What further deteriorated the relations between the West and Turkey was the American alliance with the Kurds in Syria. These circumstances pushed Turkey further into the Russian orbit, despite these countries sharing a deep historical mistrust towards each other. It is interesting that Turkey’s proximity with Russia has improved in recent years even after hitting an all-time low in 2015 when Turkey shot down a Russian aircraft.

Apart from political considerations, the major point of concern which the West conveyed to Turkey with regard to its S-400 deal with Russia was the issue of interoperability which such a deal would cause within the NATO command, control and communication system. In simple terms, interoperability means that the systems acquired and deployed by the NATO countries can operate, and work together with, similar systems in other allied nations. It would mean the integration of the Turkish acquired S-400 with NATO’s existing electronic and digital architecture.

9. Kibaroglu, n. 4, p. 6.

What is interesting to mention here is that Greece, another NATO country, also owns the Russian origin S-300 missile system. However, due to similar NATO measures, the Greek S-300s have never been fully linked to the NATO system for operations in a dynamic coalition environment.¹⁰ Without complete integration, the S-400 air defence system will not be able to benefit from the existing NATO security architecture such as NATO's air and ballistic missile defence architecture or NATO's Network-based Air Defence Ground Environment (NADGE) and satellite detection capabilities.¹¹ Moreover, the deployment in a NATO country of a Russian strategic system would require Russian soldiers and personnel to train their Turkish counterparts, posing serious security concerns for the NATO member states. The decision to acquire the Russian made S-400 air defence system involves more political and security risks for Turkey than benefits.

TURKEY'S DEEPENING RELATIONS WITH RUSSIA

Despite increasing pressure from Washington, Turkey (a NATO member country) has gone ahead with signing the S-400 air defence system deal with Russia. Washington has been warning Turkey that moving forward with the agreement could attract sanctions under CAATSA, 2017. Turkey, on the other hand, argues that it is its sovereign right to decide on matters of national interest.¹² This outward decision is not new and the relationship between Turkey and Russia has undergone a transformation in the post-Cold War era.

Traditionally, the history of Turkey-Russia relations has been long, complex and characterised by conflict. Ottoman Turkey and Tsarist Russia fought a number of wars in the course of four centuries stretching from the 17th till the 20th century. However, during Turkey's War of Independence in the early 1920s, both cooperated closely. The cooperation was conditioned on mutual hostility towards the European powers; this lasted only until World War II.¹³ During

10. Egeli, n. 8, p. 77.

11. Tol and Goren, n. 6, p. 5.

12. Rfe/rl. "Turkey Says Not Giving Up On Russian Missile Deal Despite U.S. Pressure", April 8, 2019, www.rferl.org/a/turkey-erdogan-putin-meeting-moscow-s400-dispute/29867214.html. Accessed on August 20, 2019.

13. Bulent Gokay, *Clash of Empires: Turkey between Russian Bolshevism and British Imperialism, 1918-1923* (London: I.B. Tauris, 1997); and Yerasimos Stefanos, *Turkish-Soviet Relations during the Independence War* (Istanbul, 2000).

the World War II, Turkey opted for neutrality and abstained from joining the Allies. Turkey's hesitance was perceived as a betrayal and led to the harshening of ties between them.

Turkish–Russian relations softened with *détente* and the Soviet recognition that its aggressive policies had driven Turkey into the Western camp.¹⁴ Both were driven by the ambition of attaining a larger role in the global order and were frustrated with the West's refusal to give them a seat at the high table.¹⁵ By the end of the first decade after the dissolution of the Soviet Union, both countries understood the pragmatic needs of cooperation. The 21st century witnessed a long break in the confrontations. In fact, there has been the development of an unprecedented bond between Russia and Turkey due to a number of factors, with trade and energy being on the top of the list.

The sharp increase in bilateral trade, energy and defence cooperation has facilitated the strengthening of ties. The political dialogue has strengthened between the two countries, giving rise to a higher level of engagement. Observing a crisis in Turkey-Russia relations in November 2015, when Turkey shot down a Russian fighter jet on the Syrian border, a rapprochement between the two countries has been witnessed since late June 2016. One must note that the West gradually gave up on regime change in Syria and the Kurdistan Workers Party (PKK)-affiliated Syrian Kurdish People's Protection Units (YPG) started gaining political influence in Syria. This eventually made Turkey change its goal of regime change in Syria, "mend relations with Russia, and focused on curtailing Syrian Kurdish gains instead".¹⁶

Hence, over the years, one can observe a steady development of trade relations between the two nations. As per the Turkey Statistical Institute, Germany, Italy, United Kingdom, Spain, Iraq, France and the United States of America were Turkey's major trading partners for exports; whereas China, Germany, Russian Federation, United

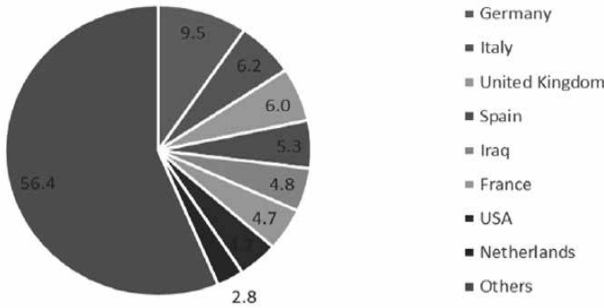
14. Strobe Talbot, ed., *Khrushchev Remembers* (Boston & Toronto: Little Brown & Co., 1974).

15. J. Mankoff, "Russia and Turkey's Rapprochement: Don't Expect an Equal Partnership", *Foreign Affairs*, July 20, 2016.

16. Galip Dalay, "Why is Turkey Betting on Russia?". Brookings, <https://www.brookings.edu/blog/order-from-chaos/2019/07/15/why-is-turkey-betting-on-russia/>. Accessed on August 20, 2019.

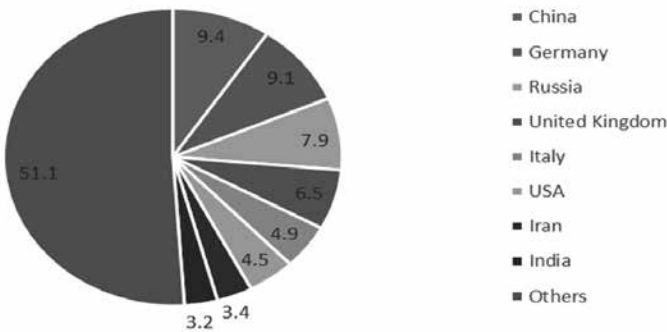
Kingdom, Italy, United States of America, Iran and India were major trading partners for imports in May 2018.

Fig 2: Major Export Partners of Turkey



Source: Turkish Statistical Institute, <http://www.turkstat.gov.tr>. Accessed on November 6, 2019.

Fig 3: Major Import Partners of Turkey



Source: Turkish Statistical Institute, <http://www.turkstat.gov.tr>. Accessed on November 6, 2019.

Turkey's total trade volume with Russia was \$25.3 billion in 2018. It made Russia, one among the five largest trading partners of Turkey. In terms of imports, Russia stands ahead of the United States of America. Imports from Russia accounted for about 7.9 per cent of overall imports in May 2018. Even in Russia's foreign trade, Turkey seems to have reached a significant level.¹⁷ As of

17. Ministry of Foreign Affairs, "Turkey's Commercial and Economic Relations With Russian Federation", http://www.mfa.gov.tr/turkey_s-commercial-and-economic-relations-with-russian-federation.en.mfa. Accessed on August 20, 2019.

2016, Turkey, with a share of about 5 per cent, was Russia's 5th largest export country. Russia's imports from Turkey are also increasing and reached \$2.9 billion in 2018. During his recent visit to Moscow, Erdogan said that he aimed to quadruple trade to around \$100 million with Russia.¹⁸

Table 1: Bilateral Trade between Turkey and Russia 2006-19

Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019r
USD	21.0	28.2	37.9	22.6	26.2	30.0	33.3	32.0	31.2	24.0	16.9	22.3	25.3	14.7
Million														

Source: Turkish Statistical Institute.¹⁹ r = Data Revised.

Some of the key sectors of economic and financial engagement between Russia and Turkey have been tourism, energy and infrastructure development. Turkey's second-largest source of tourists is from Russia after Germany. In fact, Turkey has visa-free travel with Russia. Nearly 4.5 million Russian tourists visited Turkey in 2014, and the decreases in 2015 and 2016 were left behind in 2017. A new record was broken in 2018, with 5.9 million Russian tourists.²⁰ So far as infrastructural investment is concerned, approximately 2,000 projects with a total value of over \$60 billion have been realised so far by Turkish contractors in Russia, while reciprocal investments have reached \$10 billion each.²¹

Another major sector of Russo-Turkish engagement is energy. The 1984 Natural Gas Trade Agreement is seen as a cornerstone in the economic relations between Turkey and the Russian Federation.²² Herein, Turkey promised to buy natural gas from the Russian Federation for 25 years starting from 1987. Turkey is a net energy consumer wherein the share of natural gas demand is around 35 percent. Currently, Turkey imports its natural gas essentially from Russia, Azerbaijan and Iran.

18. Ahval, "Turkey's Erdoğan Seeks Closer Ties, \$100 Billion Trade with Russia", <http://ahval.co/en-57029>. Accessed on August 20, 2019.

19. n.17.

20. Ministry of Foreign Affairs, Turkey, <http://www.mfa.gov.tr/reasons-between-turkey-and-the-russian-federation.en.mfa>. Accessed on August 20, 2019.

21. Ibid.

22. Arafat and Alnuaimy, "The Turkish-Russian Relations in the ERA of AKP", <https://dergipark.org.tr/download/article-file/18917>. Accessed on November 9, 2019.

Table 2: Amount of Imported Natural Gas by Source Country between 2008-17 (million sm³)

Countries Years	Russia		Iran		Azerbaijan		Algeria		Nigeria		Others		Total Amounts
	Amount	Share(%)	Amount	Share(%)	Amount	Share(%)	Amount	Share(%)	Amount	Share(%)	Amount	Share(%)	
2008	23159	62.01	4113	11.01	4580	12.26	4148	11.11	1017	2.72	333	0.89	37350
2009	19473	54.31	5252	14.65	4960	13.83	4487	12.51	903	2.52	781	2.18	35856
2010	17576	46.21	7765	20.41	4521	11.89	3905	10.27	1189	3.13	3079	8.09	38036
2011	25406	57.91	8190	18.67	3806	8.67	4156	9.47	1248	2.84	1069	2.44	43875
2012	26491	57.69	8215	17.89	3354	7.3	4076	8.88	1322	2.88	2464	5.37	45922
2013	26212	57.9	8730	19.28	4245	9.38	3917	8.65	1274	2.81	892	1.97	45270
2014	26975	54.76	8932	18.13	6074	12.33	4179	8.48	1414	2.87	1689	3.43	49263
2015	26783	55.31	7826	16.16	6169	12.74	3916	8.09	1240	2.56	2493	5.15	48427
2016	24540	52.94	7705	16.62	6480	13.98	4284	9.24	1220	2.63	2124	4.58	46353
2017	28690	51.93	9251	16.74	6544	11.85	4617	8.36	1344	2.43	4804	8.7	55250

Source: 2017 Natural Gas Sector Report, EMRA, Ankara, 2017, http://edam.org.tr/wp-content/uploads/2017/11/turkstream_report_eng.pdf.
 Accessed on November 9, 2019, p. 9.

Turkish energy imports from Russia have increased exponentially, especially after the completion of the Blue Stream pipeline and are expected to grow even further once the TurkStream pipeline is operationalised (see Fig 4); 51.93 per cent of the total share of imported natural gas in Turkey came from Russia in 2017. Enlargement of natural gas purchases has continued as part of other agreements signed with Russia. Thereby, in the current situation, Turkey imports natural gas from Russia via pipeline as part of long-term purchase agreements.²³

Fig 4: Map of Russia and Turkey Gas Pipelines



Source: European Data News Hub.

The pipeline has further increased Turkey's dependency on Russian gas imports, which is often debated in the Turkish Parliament. Also, these pipelines are prominent for the Russians, considering the fact that Turkey is Russia's second-biggest market after Germany. Along with that, Turkey's strategic location provides for a transit route from Russia to Europe. Therefore, Moscow and Ankara seek to develop Turkey as a transit route for Russian gas to Europe, avoiding Ukraine.²⁴

23. ENRA, Turkey, "TURKISH NATURAL GAS MARKET REPORT 2017", <https://erranet.org/wp-content/uploads/2016/11/Natural-Gas-Market-Report-2017.pdf>. Accessed on August 20, 2019.

24. Agence France-Presse, "TurkStream Pipeline Nearly Complete: Gazprom". September

Growing trade and commerce has also got reflected in the defence cooperation between the two countries. So far, it had been difficult for the Russian defence sector to penetrate the lucrative Turkish market, primarily due to the restrictions placed upon NATO countries. However, the two sides have established a regular military/defence working group that allows them to exchange views on military and defence issues. The Joint Declaration on the Deepening of Friendship and Multidimensional Partnership stipulates the special significance attached to more cooperation via the Intergovernmental Commission on Military, Technical and Defence Industry Cooperation.²⁵ Turkey was the first NATO country to sign a defence cooperation agreement with Russia in 1994, through which Ankara acquired military hardware it had difficulty obtaining from Western suppliers in order to fight terror activities led by the Kurdistan Workers' Party (PKK). Some scholars argue that it was only after Russian approval that Turkey undertook "military operations in northwestern Syria, driving YPG forces east of the Euphrates River".²⁶

Not just Syria, high-level talks have increased on other issues like the Israeli-Palestinian conflict, Iraq's political and territorial disputes, the Caucasus' issue of stability and the Black Sea's security, etc. Greater engagement on security and defence indicates a harmonious trend in their relationship. The deepening of Turkish-Russian relations is also reflected in the multilateral dealings of the two countries on a variety of platforms. Turkey continues to support Russia's bid to join the World Trade Organisation.²⁷ Presently, Russia has observer status in the Organisation of Islamic Conference (OIC). When Russia desired to obtain observer status, Ankara was one of its supporters.

Now, with the delivery of the S400, there are observations of deeper penetration of Russian defence sector in the Turkish market. Reports suggest that Turkey is even seeking alternatives for the new

5, 2019, <https://www.ednh.news/turkstream-pipeline-nearly-complete-gazprom/>. Accessed on August 20, 2019.

25. Ministry of Foreign Affairs, Declaration, February 13, 2009, <https://bit.ly/33pHEXW>. Accessed on August 20, 2019.

26. Ibid.

27. Mohammad Ali, "Turkey Backs Belarusian Bid To Join WTO: Foreign Minister", August 28, 2019, <https://www.urdupoint.com/en/world/turkey-backs-belarusian-bid-to-join-wto-for-699799.html>. Accessed on September 1, 2019.

generation F-35²⁸ fighter jet after being expelled from the programme for its S-400 purchase. During Erdogan's recent visit to Moscow, considerable attention was given to the Russian Su-57 fighter jet.²⁹

CONCLUSION

Turkey's decision to buy the S-400 missile defence system is a response to its growing security needs. At the same time, within Turkish policy circles, there is a mounting realisation that Turkey cannot completely rely on NATO and the US in order to protect its sovereignty and territorial integrity. The alliance which the US created with the Kurdish groups in Syria has not been well received by the Turks. In addition, the failure of the US to extradite Fethullah Gulen, the cleric who, according to President Erdogan, is responsible for the failed military coup of 2016, has further enhanced the rift between Turkey and the US. Moreover, the US' and NATO's slow response to Turkey's security needs has frustrated Ankara to a point that its recently strengthened relations with Russia are beginning to endanger its longstanding alliance with the West. The decision to acquire the Russian S-400 missile defence system is the culmination of the growing rift between Turkey and the West. Despite being heavily criticised in the US Congress and policy circles, the deal has not yet attracted sanctions under CAATSA from the US administration largely because of President Trump's amity with President Erdogan. The only penalty which Turkey has faced thus far for buying the Russian defence system is its exclusion from F-35 joint strike fighter programme.

Turkey's S-400 deal with Russia not only threatens its place in the Western security architecture but also makes it heavily reliant on Russia. In recent years, Russia has used trade as a point of leverage vis-à-vis Turkey to get various concessions. This tactic of Russian foreign policy first became visible during the 2008 Russia-Georgia War when Russia pressured Turkey to ask the US warships to leave the Black Sea region. Turkish trucks with traded goods were stranded at the Russian border for weeks, and Turkey could not retaliate in an

28. Ahval, n. 20.

29. Sputnik Türkiye, Twitter Account, August 27, 2019, <https://bit.ly/36AWFio>. Accessed on September 1, 2019.

equal manner. Again, in 2015, when Turkey shot down the Russian jet along the Syrian border, "Russia deployed S-400 anti-aircraft missiles at the Hmeimim air base in Syria, imposed trade sanctions, and suspended Russian package tours to Turkey, hurting Turkey's economy."³⁰ It took an apology from President Erdoğan to assuage the Russian hostility against Turkey. However, the incident was a clear indication that Russia had the leverage of threatening Turkey's security and economy and there was little Ankara could do about it. In this background, the current decision of the Turkish establishment to acquire the Russian S-400 air defence system further pushes Ankara into the Russian orbit and threatens any possible room for manoeuvring with the West.

30. Tol and Goren, n. 6, p. 2.

UNDERSTANDING CHINA'S INFLUENCE IN NUCLEAR NORTH KOREA

HINA PANDEY

Any understanding of North Korea's nuclear issue remains incomplete without addressing the Chinese linkages. It is often argued that China can solve the North Korean nuclear conundrum easily, as it counts for about 90 percent of the North Korean trade, thereby enjoying the maximum leverage and becoming the only country that can pressure North Korea effectively.¹ However, there are others who argue, "...Although China's influence on the Korean Peninsula, especially over the DPRK, is significant, it is wrong to imagine that China is able to determine Pyongyang's foreign policy and political decisions..."² Those who observe Democratic People's Republic of Korea's (DPRK's) nuclear conundrum, often tend to view the issue in this simplified binary. However, it is this binary that creates the dilemma, as none of the views represent the issue of China's influence over the DPRKs in its entirety.

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1. Uri Friedman, "Why China Isn't Doing More to Stop North Korea", *The Atlantic*, August 9, 2017, <https://www.theatlantic.com/international/archive/2017/08/north-korea-the-china-options/535440/>. Accessed on February 18, 2019.
2. Wang Jin, "Why China's Influence Over North Korea Is Limited", *The Diplomat*, March 2, 2017, <https://thediplomat.com/2017/03/why-chinas-influence-over-north-korea-is-limited/>. Accessed on February 18, 2019.

Additionally, by observing North Korea's synergetic nuclear association with China, one might find it easier to understand North Korea's nuclear behaviour. This can help to better understand North Korea's nuclear conundrum, especially in the recent times, when the agenda of denuclearisation of North Korea has been able to drag itself from Singapore (2018) to Hanoi (2019), without any substantive deliverables.

In this context, the article has attempted to unpack the Chinese influence on the North Korean nuclear issue. The article summarises how China has continued to influence North Korea's nuclear aspirations, either by direct nuclear assistance or by indirect support through economic engagement with the DPRK. Broadly, the Chinese influence on the North Korean nuclear issue can be categorised in two sets: (1) direct assistance for North Korea's nuclear capability or dual use capability that can be noted in the form of assisting North Korea's proliferation activities – vertical as well as horizontal; (2) indirect influence – in terms of 'active detachment' – whenever negotiations are required post crisis, China has continued to maintain that 'only the relevant parties'³ (US-DPRK) can resolve the nuclear conundrum. Thus, by actively remaining detached from the issue, China indirectly ends up supporting the DPRK's non-compliance or irregular behaviour of nuclear brinkmanship, thereby complicating a future course of action. This further weakens the likelihood of arriving at a consensus based approach for addressing the issue. Furthermore, China has been able to influence the North Korean nuclear conundrum by aiding the country economically each time sanctions are used to compel a change in its nuclear behaviour.

BEIJING'S DIRECT INFLUENCE

Nuclear Assistance and Illicit Transfers

While it is difficult to encapsulate the scope and extent of direct Chinese nuclear assistance (military and civilian) to the DPRK, as per the available literature, there is some information available, albeit sparsely, that connects China's nuclear assistance to North Korea. It

3. "Foreign Ministry Spokesperson Geng Shuang's Regular Press Conference ", PRC Ministry of Foreign Affairs. August 27, 2019, https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/t1692308.shtml, Accessed on September 26, 2019.

is through this direct and covert assistance that China continues to enjoy its influence on the DPRK's nuclear issues.

Historically, the Chinese-North Korean nuclear interaction goes back to the early 1950s. In fact, in the middle of the Korean War in 1952, "when the Chinese People's volunteers were holding the battle line along the 38th parallel, China sent Dr. Wang Gaochang to North Korea to search for, and collect, radioactive materials". Additionally, it was reported that in the late 1950s, the People's Republic of China (PRC) had received nuclear scientists from the DPRK at its nuclear-related facilities.⁴ In fact, in the mid-1960s, the former North Korean leader, Kim Il Sung, had asked Beijing "to share its nuclear weapons technology following China's first nuclear test in October 1964",⁵ which was denied by Mao Zedong himself.

Additionally, there has been speculation that many of the DPRK's experts have been trained in China on plutonium separation and other nuclear technologies. The period of the 1970s saw the DPRK approaching China with a proposal for joint development of a "single stage mobile tactical missile – DF61" with a range of 600 km. This was later abandoned. As per the estimates of the US intelligence community, the Chinese assistance had been instrumental in the DPRK's ballistic missile capability, including rocket engine design technology.⁶

Despite its claims of indigenous developments, North Korea shares the origin of its ballistic missile capability with the PRC and Soviet Russia. It has been established that China not only assisted in "reorganization and expansion of the Soviet manufactured Samlet missile's assembly facilities"⁷ for the DPRK in 1968-69, it also subsequently supplied the HY1 naval missile, providing Pyongyang with much needed technical expertise.⁸ In fact, specifically, since 1999, US intelligence reports have highlighted that "Chinese enterprises had supplied important components and raw materials for North

4. Alexandre Y. Mansourov, "The Origins, Evolution, and Current Politics of the North Korean Nuclear Program", *Non-Proliferation Review*, vol. 2, no. 3, 1995, pp. 25-38.

5. North Korea: Country Profile, Nuclear Threat Initiative (NTI), <https://www.nti.org/learn/countries/north-korea/nuclear/>. Accessed on December 11, 2019.

6. Monica Chansoria, "US China and North Korea Nuclear Triangle" in *Chinese WMD Proliferation in Asia: US Response* (New Delhi: Knowledge World Publishers, 2009), pp. 101-150.

7. Ibid.

8. Ibid.

Korea's missile program".⁹ Gordon Corera (2005) has claimed in his work that "key individuals from China have cooperated with North Korea and continue to operate through the Khan network. These individuals were suspected to have operated within the Khan network; whether with the knowledge of the Chinese government or without its sponsorship remains contested."¹⁰

The Chinese support towards transferring of military equipment via the Shenyang Aircraft's subsidiary (a Chinese entity that assembles fighter planes for its military) located in the city of Dadong, connected to North Korea by the Friendship Bridge across the Yalu river, has now been established. It was later known that some dual use goods were attempted to be transported to Dalian, a port in northwest China (near North Korea), in a French container *Vile De Virgo* (this was later prevented). However, it was through several of these transfers that North Korea was able to "successfully obtain 150 tons of aluminum tubing (enough for 2,700 centrifuges)". It was further reported that all this was being supported by the Namchongang Trading Company (NCG) headquartered in the Manyong district of Pyongyang. It is surprising to note that the NCG had been directly linked to a senior diplomat – Yo Ho Jin – who had represented the DPRK's mission in the International Atomic Energy Agency (IAEA) through the 1980s and 1990s. The possibility of establishing contacts for nuclear transfers through this cannot be ruled out. Additionally, the NCG's *modus operandi* was to conduct trade with third parties. In fact, it was able to successfully buy equipment from various suppliers via subsidiaries operating in China. It is to be noted that while conducting trade, the NCG would often purchase an item from a Chinese subsidiary located there, making the transaction look like a domestic sale, ultimately smuggling the item back to its final destination – North Korea. The NCG came under international sanctions only in the year 2009.¹¹

In the recent times, the most direct connection of the China-North Korea nuclear nexus is noted as "... 5,233 Chinese

9. Larry A. Niksch, "North Korea's Nuclear Weapons Program", Updated February 21, 2006, CRS Issue Brief For Congress, Order Code IB91141, <https://fas.org/sgp/crs/nuke/IB91141.pdf>. Accessed on January 9, 2020.

10. Gordon Corera, *Shopping for Bombs: Nuclear Proliferation, Global Insecurity, and the Rise and Fall of the A. Q. Khan Network* (New York: Oxford University Press, 2009).

11. David Albright, *Peddling Peril: How the Secret Nuclear Trade Arms America's Enemies* (New York: The Free Press Publishers, 2010), pp. 154-168.

companies have conducted dual use trade with the DPRK from 2013 and 2016 ...”¹² This trade has been attributed to companies such as Dandong Dongyuan Industrial Co. Ltd, mentioned previously as well. It is now known that “... US\$ 28.5 million worth of material to North Korea was exported during these years ... including a shipment of radio navigational aid apparatus ...”¹³

Additionally, the Chinese support to six Transporter-Erector-Launcher (TEL) trucks, which are designed to move and fire ballistic missiles, in the recent times cannot be ignored. It is to be noted that these trucks were made by China’s Hubei Sanjiang Space Wanshan Special Vehicle Company, which is a subsidiary of China Aerospace Science and Industry Corp, a state-owned company that makes the Shenzhou rockets as well as missiles.¹⁴ One can also not ignore the frequency of the DPRK’s ballistic missile tests in the recent years. Indeed, the Chinese assistance to put the programme on fast track cannot be discounted. While on the nuclear front, the “... Chinese contribution may seem less than straightforward ...”¹⁵ it cannot be ignored and any future resolution of the nuclear issue will have to address these inadequacies.

CHINA’S INDIRECT INFLUENCE

The Pursuit of Active Detachment

This influence can also be termed as ‘behind the scenes’ activities of China that influence the nuclear issue in such a way that either reduces or aggravates the intensity of the whole nuclear conundrum, without entirely solving it. In this manner, the Chinese influence can be termed as truly ‘catalytic’. Furthermore, one can classify this influence as China practising a policy of ‘active detachment’ of the issue.

By not calling out North Korea on its non-compliance substantively, and by conditioning the resolution of any crisis to the

12 Manpreet Sethi, “Proliferation and the Korean Peninsula: The Making of North Korea’s ‘Mature’ Nuclear Enterprise” in Titli Basu, ed., *Major Power and the Korean Peninsula: Politics, Policies and Perspectives* (New Delhi: KW Publishers, 2019), pp. 43-64.

13 Ibid.

14. Prabha Rao, “How North Korea was Armed. *IDSA Issue Brief World*, https://idsa.in/issuebrief/how-north-korea-was-armed_prao_301017. Accessed on October 22, 2019.

15. Sethi, n. 12.

role of the US and relevant parties, China has continued to maintain its active detachment from the issue. It is to be recognised here that 'active detachment' does not imply a complete absence from the issue: the expression simply means to participate without actively being invested in the 'larger end goal of a possible denuclearisation'. While China seems much aware of its own potential toward influencing North Korea's nuclear behaviour, one can argue that China views the 'possibility of an economic collapse of the regime' with more urgency than 'nuclear collapse'. This further sets the priority for China in adopting the kind of response it usually does whenever a nuclear crisis in the Korean peninsula occurs. The Chinese intervention, with economic support, in the face of punishment through the pressure of sanctions, can be explained in this context.

China's Attitude on the Nuclear Conundrum

While China views the DPRK's nuclear weapons programme sceptically, it also maintains the view that the country's security interests remain legitimate vis-à-vis the United States. It has maintained that it does not have the wherewithal to force either of the countries to take up their responsibilities. It believes that it cannot convince North Korea to stop its nuclear programme. In fact, it views the American incapability in reaching a successful solution to the nuclear issue as a driving factor for North Korea's nuclear weapons advancement because this further provides Pyongyang the time and rationale to advance its nuclear capability.¹⁶

In the year 2003, the failure of the Agreed Framework and subsequent withdrawal of the DPRK from the Non-Proliferation Treaty (NPT), resulted in a nuclear crisis. North Korea's withdrawal from the NPT had resulted in a nuclear crisis that compelled China's role as a mediator. Evidently, this was a big crisis as it was the first time any NPT country had withdrawn from the treaty. The implications were huge; in other words, 'a collapse of the nuclear order'.

From April 2003 to October 2007, China was able to host six rounds of Six-Party Talks (US, China, North Korea, Russia, Japan, and South Korea). These talks were able to deliver three defining

16. Fu Ying, "The Korean Nuclear Issue: Past, Present and Future: A Chinese Perspective", John L. Thornton China Centre, Brookings Institution, Strategy Paper, May 3, 2017.

documents as joint statements – one in 2005, two in 2007 – that came to be regarded as the basis for resolving the nuclear issue. However, the Six-Party Talks came crashing down due to the opposite positions of the US and DPRK. While the DPRK remained attached to its proposed plan with simultaneous actions from the US, the US, on the other hand, remained focussed on denuclearisation being a pre-condition if the DPRK was to receive any security and economic guarantees.¹⁷

Since 2003, China has opposed the DPRK's development of Weapon of Mass Destruction (WMDs), including its missile programme and launch of satellites. In fact, one of the most pronounced reactions by China on the nuclear issue was delivered in the year 2009 by supporting the United Nations Security Council (UNSC) Resolution 1874 against the nuclear tests.¹⁸ The PRC, in its official explanation of its vote in the UNSC against North Korea, strongly urged, "... DPRK to honor its commitment to denuclearization and also asked it to return to the Six-Party Talks ..."¹⁹ It is to be noted that post the 2009 test, a Foreign Affairs Leading Small Group (FALSG) was reportedly formed in order to look into the North Korean nuclear issue. As per the leaked reports, there remained some disagreement among the 10 members, which also included FALSG Vice-Chair Xi Jinping in terms of what kind of policy China should adopt towards the DPRK. On the other hand, pro-DPRK leaders expressed concern about the stability of the regime in the absence of Chinese support. FALSG also argued that the "DPRK remained a critical strategic asset against presumptive US-Japan-ROK collusion aimed at encircling China".²⁰ Finally, the three-day FALSG meeting was concluded on one key note: China would deal with the DPRK nuclear issue separately from other Sino-

17. Ibid.

18. "UN Security Council Condemns North Korean Rocket Launch", *The Guardian*, April 13, 2009, <https://www.theguardian.com/world/2009/apr/13/un-north-korea-rocket-launch>. Accessed on February 18, 2019.

19. "Explanation of Vote on Security Council Resolution 1874 on DPRK Nuclear Test, by "H.E. Ambassador Zhang Yesui, Permanent Representative of the People's Republic of China to the United Nations", <http://www.china-un.org/eng/gdxw/t567537.htm>. Accessed on February 20, 2019.

20. Ohn Daewon and Mason Richey, "China's Evolving Policy towards the Democratic People's Republic of Korea under Xi Jinping", *Asian Studies Review*, vol. 39, no. 3, 2015, pp. 483–502.

DPRK relations. With regard to the nuclear use, the three principles of (i) no war; (ii) no instability; (iii) no nuclear weapons would be followed.²¹

Furthermore, specifically in 2013, when the DPRK conducted its third nuclear test, defying the UN resolutions, it not only drew condemnation from China, but the North Korean ambassador was summoned by China in order to convey the protest.²²

The subsequent February 2013 test, which was an Intercontinental Ballistic Missile (ICBM) test, invited an unprecedented response from Beijing not only in the form of condemnation but also in terms of coercive measures such as support to UNSC Resolutions 2087 and 2094, and even suspension of some economic joint projects. It is especially important to note that China had co-sponsored UNSC Resolution 2094, suspended border trade for a short while, and also published a 236-page list of dual-use technology items (usable in WMD and missile programmes) that were banned from export to the DPRK

Support to Economic Engagement

One can see that since 2009, China has maintained a dual approach in its relations with the DPRK. While, on the one hand, it supported UNSC Resolutions 1718 and 1814 – as a balanced and appropriate approach – on the other hand, it also supported North Korea economically to prevent it from collapsing. This is evident from the Chinese support to the DPRK in times of food crises and political unrest. Within the larger goal of supporting the stability of the North Korean regime, one can see that China has also expanded its economic cooperation with the DPRK. The Chinese investment in North Korea's special economic zones, its intention to utilise the port of Rasun in order to support its own development of the inland provinces of Jilin and Heilongjiang are some examples. It is noteworthy that North Korea comprehensively changed the "Rason Economic Zone Trade Act" that

21. Ibid.

22. David Chance and Jack Kim, "North Korean Nuclear Test Draws Anger, Including From China", Reuters, <https://www.reuters.com/article/us-korea-north/north-korean-nuclear-test-draws-anger-including-from-china-idUSBRE91B04820130212>. Accessed on February 20, 2019.

had already been overhauled in January 2010 and December 2011 in order to guarantee free business activities by foreign companies. For North Korea, these are important initiatives for revenue generation, especially when its economy is overshadowed by sanctions. In 2009, both countries signed cooperation agreements in the areas of economic assistance, technology cooperation, education, software industry, tourism, etc. Furthermore, trade between both countries reportedly increased by 29.3 per cent in 2010 and 62.4 per cent in the year 2011.²³ The year 2009 also marked the 60th anniversary of their bilateral relations, with the celebration of the “China-North Korea Friendship Year”.²⁴

Since 2010, both countries have exchanged several visits by the heads of states. In fact, Chinese President Hu Jintao proposed the following five approaches towards strengthening bilateral relations. He suggested: (a) a regular exchange of visits between the leaderships of the two countries; (b) exchange of views in a timely manner on domestic and diplomatic issues; (c) strengthening of economic cooperation; (d) strengthening of coordination in international and regional cooperation.²⁵

In the recent times too, one can see that the continuation of China’s dual policy towards North Korea helps China reclaim its nuclear influence. In 2017, North Korea conducted its biggest nuclear test – the country claimed it to be a hydrogen test. China did condemn the test and welcomed the efforts of ‘relevant parties’ – mainly the US-DPRK – but subsequently continued its economic engagement with the DPRK. During the US-DPRK negotiation, “the Chinese imports from North Korea plummeted by 88 percent, while exports dropped by 33 percent.”²⁶ The two leaders have since met four times, in May

23. Jong-Seok Lee, “China–North Korea Relations in the Post-Cold War Era and New Changes In 2009”, *The Chinese Historical Review*, vol. 21, no 2, 2009, pp. 143-161; and Heungkyu Kim, “From a Buffer Zone To A Strategic Burden: Evolving Sino-North Korea Relations During The Hu Jintao Era”, *The Korean Journal of Defense Analysis*, vol. 22, no. 1, March 2010, pp. 57-74.

24. PRC Ministry of Foreign Affairs, “Wen Jiabao Attends the Opening Ceremony of “China-North Korea Friendship Year”, March 19, 2009, https://www.fmprc.gov.cn/mfa_eng/wjb_663304/zjzg_663340/yzs_663350/xwlb_663352/t553089.shtml. Accessed on February 7, 2019.

25. Lee and Kim, n. 23, pp. 57-74.

26. China-North Korea Relations, CFR, <https://www.cfr.org/backgrounder/china-north-korea-relationship>. Accessed on December 12, 2019.

2018, June 2018, January 2019, and June 2019. During their most recent meeting, Xi was welcomed to Pyongyang, marking the first time a Chinese leader visited North Korea since 2005. Finally, in the two years of the Trump-Kim diplomacy, one can find China enhancing its economic cooperation with the DPRK.

CONCLUSION

Thus, it is clear that while China has condemned North Korea on its nuclear capability regularly, simultaneously it has also established their strategic relations with greater elements of an alliance. While the PRC may have its own rationale – such as the fear of a spillover in case the North Korean regime collapses while stringent sanctions are underway – it is to be noted that this indirectly renders the pressure tactics ineffective and may work favourably to resolve North Korea's nuclear conundrum. All this makes space for greater engagement of China in North Korea's nuclear issue towards finding a long-term, sustainable solution to its (North Korea's) nuclear imbroglio.

BOOK REVIEW

**India's Pursuit of Energy Security:
Domestic Measures, Foreign Policy and
Geopolitics**

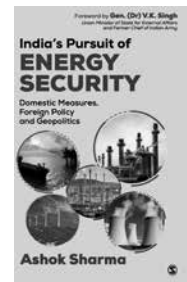
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PREM ANAND MISHRA

India is at the crossroads of many significant changes. In a few decades from now, India will comprise the largest component of the human race. Its growth story will shape the world, considering its demography, burgeoning urbanisation and fastest-growing middle-class. The challenges are multifold, from the domestic to the external, and its growth potential is overwhelmingly dependent on energy needs. Ashok Sharma's book, *India's Pursuit of Energy Security: Domestic Measures, Foreign Policy and Geopolitics*, primarily debates India's growth story and its future through the lens of energy security. India's growth story has multiple challenges due to its significant dependence on energy needs: one-fourth of India's 1.2 billion people

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still have insufficient access to electricity. This book is not just about heaps of data on India's economy and its energy requirements but an acute understanding of many dimensions of India's current growth story and its future stakes. The central argument of the book that runs through over three hundred pages provides us with insight into India's multi-pronged strategy to secure its energy needs, not restricted to its Gross Domestic Product (GDP) growth but including the dynamics of its strategic interests, from foreign policy and other security concerns, the challenges and roadblocks.

This book is about India's pursuit of energy security from three vantage points: domestic measures, foreign policy and geopolitics, particularly India's growing competition with China and the aftermath of the Fukushima Daiichi incident in 2011. The author critically inquires into the comprehensive meaning of India's energy security, its visions and roadmaps which have taken shape since the arrival of Prime Minister Modi. The book places itself as a rich source of investigating India's tryst with energy security, mixed with suggestions and identified areas of concerns. Divided into six chapters as six dimensions, the book offers astute and exhaustive details of India's pursuit of energy security: (a) domestic and international settings; (b) addressing demand in a carbon-controlled environment; (c) domestic factors in exploration, production, privatisation and energy efficiency; (d) energy security as a foreign policy component and the explorations abroad; (e) quest for nuclear energy, diplomacy and agreements; and lastly (f) growing rivalry/competitiveness with China under the new geo-political order featuring as a great game. The author problematises the concept of energy security using the framework of the 4 As – Availability, Affordability, Accessibility and Acceptability. For the author, these 4 As comprise a methodological tool to understand the political, social, economic, and environmental issues.

The backdrop of the book debates India's dilemma over carbon-controlled growth as coal remains the most important energy source, critical to India's current and future growth. However, it is unlikely that coal will provide half of India's energy in the future. The book focusses on the concept of energy security from various aspects and its evolutionary nature. The book argues that there is still lack of

precision in understanding the concept of energy security which is acceptable to all sectors and sections. Energy security is about national security and continuous availability of natural resources, and energy consumption for human civilisation at an affordable price.

For China and India, energy security lies in their ability to rapidly adjust to their new dependence on the global markets: a commitment to self-sufficiency. For the author, India's pursuit of energy security starts with the Vajpayee regime (1998-2004). The 1998 nuclear test was aimed at showing the great power ambition, domestic political context, and Bharatiya Janata Party's (BJP's) revivalist agenda; and to challenge the nuclear apartheid that India had been facing since 1978 after the first nuclear test in 1974. The Vajpayee era was India's first major push towards diversification of new energy sources. The major focus of the book is about Modi's policies on energy security and its linkages with economic development. According to the author, Modi's foreign policy has taken energy security as a geopolitical dimension. The book is based on heaps of data, tracing all sources of energy. There are many challenges that the author has marked off: First, India's growth trajectory from the primary to the tertiary sector has limited the scope of developing its manufacturing sector. Second, its defence industry needs a real push as India lacks a defence sector of its own. Third, the impact of the China-Pakistan factor on India's huge military expenditure. Fourth, why India must envision a policy of self-reliance. Fifth, modern amenities and rural electrification, as 70 per cent Indians live in the rural areas. And sixth, inadequate access to energy sources.

The author argues that India is facing the challenge of finding a precise fuel-mix for its energy security to maintain carbon monitored economic development with a growth rate of 8 per cent. The nuclear deal is a significant move in that direction as it would reduce India's dependence on hydrocarbon energy sources and help in moving towards cleaner energy. Furthermore, in addressing the demand in a carbon-controlled environment, how will India secure its needs when energy constitutes a significant portion of its GDP and coal continues (at 55 per cent) to burden its energy quest? Thus, India needs to augment its renewable sources, particularly solar and wind as a leading portion of its energy basket in pursuit of energy security. The author

discusses the Integrated Energy Policy, the structural constraints due to the coal and manufacturing sectors and outlines certain issues on inefficiency (sectoral), productivity stagnation, obsolete technology and environmental issues (excessive pollutant/ash handling) amidst the Paris Climate Summit concerns. In the long run, however, the strategy, as mentioned, is to focus on renewables. India supports a gas-based economy and has formulated a policy on 'Natural Gas Hydrocarbon Vision 2025'. Some of the developments have been discussed in this book, particularly the India-Russia gas pipeline; the agreement with Gazprom; India, Japan, Qatar and Australia forging an alliance on 'gas swap' to reduce logistics and transport costs; the Russia-India-Japan-West Asia partnership (planned), besides the old Turkmenistan, Afghanistan, Pakistan, India (TAPI) pipeline. Similarly, on the question of wind energy, the issue of high tariffs is a real concern. Currently, India has 22 operational reactors and envisions adding 17 GW of nuclear energy by 2024, augmenting the share of nuclear energy to 25 per cent by 2050 from the current 3 per cent. Since Modi came to power, India has become a leading country on solar energy.¹ The government started a flagship programme, the International Solar Alliance, with a group of 62 countries targeting to produce 1 TW of power by 2030. The author also discusses India's dilemma of oil and gas exploration. The author discusses at length about the new licensing programme from the New Exploration Licensing Policy (NELP) to the Hydrocarbon Exploration and Licensing Policy (HELP).

According to the author, a significant challenge for India is the growing competitiveness with China, which he calls 'Energy Geopolitics' and 'Greater Game'. In the Indo-Pacific region, the author rightly observes that India and China are stuck in a legacy of mistrust and suspicion, of which, the Pakistan factor is an important aspect of the mistrust; China's 'string of pearls' expanding into the Indian Ocean to encircle India, besides One Belt One Road (OBOR), which India sees as a strategic threat, and to which India is responding through Modi's Act East Policy which has cultural-historical, economic,

1. Sumant Sinha, "Why India is the New Hotspot for Renewable Energy Investors", World Economic Forum, January 14, 2020, <https://www.weforum.org/agenda/2020/01/india-new-hotspot-renewable-energy-investors/> and <https://www.ft.com/content/a42e23be-8900-11e8-affd-da9960227309>, accessed on January 25, 2020.

institutional and structural dimensions. The author concludes with certain recommendations, particularly at the domestic level. He finds that India must (a) overcome organisational, financial and social challenges in the energy issue; (b) increase the share of its nuclear and renewable energy; (c) make a balance between fossil and non-fossil sources; (d) invest in energy infrastructure; (e) develop a strategy for facilitating environmental concerns; and lastly (f) provide energy for all at an affordable price. There is a need for a comprehensive study of the energy security of India.

This book is a significant contribution to academics and policy issues. The receding US hegemony and the militarily aggressive posture of China is unfolding a great power game in the Indo-Pacific region and in this backdrop, this book locates India's positions, its ambitions and its dilemma. It is conceptually rich and provides an all-inclusive understanding of India's pursuit for energy security in the backdrop of India's domestic challenges and geo-political ambitions.

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