THE GEOPOLITICAL IMPACTS OF CHINESE ANTI-ACCESS/AREA DENIAL SYSTEMS

GAURAV SEN

The most important relationship in the contemporary world, according to a widespread perception, is between the United States and China. China is the United States' most capable adversary since the collapse of the Soviet Union. As a result, the unipolar era has come to an end, and China's growth is hastening the creation of a bipolar world.¹ China, in all likelihood, appears unwilling to reach a settlement with the United States about the disagreements that have escalated the rivalry into a great power struggle. In the coming years, the impasse is probably going to get worse. Beijing's relentless display of military might after the arrival of US House Speaker Nancy Pelosi to Taiwan is a clear indication that it has made up its mind to create a "sphere of influence" around its already chaotic territory.² That too at a time when the disparity in power between the two nations has narrowed down considerably.³ Notably, the United States has maintained

Mr Gaurav Sen is Research Associate at the Centre for Air Power Studies, New Delhi.

- 1. Christopher Layne, "This Time It's Real: The End of Unipolarity and the 'Pax Americana,'" *International Studies Quarterly*, vol. 56, no. 1, 2012, pp. 203-213, *JSTOR*, at http://www.jstor.org/stable/41409832. Accessed on July 19, 2022.
- Gaurav Sen, "Could Pelosi's Visit Spark the Next Taiwan Strait Crisis?," The National Interest, July 29, 2022, at https://nationalinterest.org/blog/buzz/could-pelosi%E2%80%99s-visit-spark-next-taiwan-strait-crisis-203908. Accessed on August 7, 2022.
- 3. Steve Chan, "Balance of Power, Power Balance, and Balancing" in *Looking for Balance: China, the United States, and Power Balancing in East Asia,* 1st ed. (Stanford University Press, 2012), pp. 18-57.

The countries of the Indo-Pacific are facing consistent threats from China's outright militarisation of the global commons. China has acquired the air, naval, and missile capabilities that might undermine American dominance in the western Pacific.

a deliberate silence in reaction to China's actions during the recent Taiwan issue. It is interesting to note that the US leaders handled the previous Taiwan issue (1995-96) with a deft demonstration of their diplomatic and military skills.⁴ The expanded capabilities of the People's Liberation Army (PLA) may be the underlying cause of this inactivity. In 2003, a force that paraded around with disorganised combat capabilities, antiquated weapons, unorganised leadership, and poorly formalised doctrine had evolved into one of the most advanced war-fighting

forces, with the largest navy in the world by 2020.⁵ Consequently, the US aircraft face the risk of being sunk by the PLA's new 'carrier killer', its submarines could face the danger of annihilation by the People's Liberation Army Navy's (PLAN's) newly developed anti-submarine capabilities. The operational entry of US Navy forces near China's waters, now detectable by China's modernised space navigation and radar systems, would be repelled by the possibility of becoming targets of the highly accurate cruise and ballistic missiles of the People's Liberation Army Rocket Force (PLARF).

In reality, the situation no longer appears to be one-sided. The countries of the Indo-Pacific are facing consistent threats from China's outright militarisation of the global commons. China has acquired the air, naval, and missile capabilities that might undermine American dominance in the western Pacific.⁶ The US appears to be depleted as a result of the long-

^{4.} Robert S. Ross, "The 1995-96 Taiwan Strait Confrontation: Coercion, Credibility, and the Use of Force," *International Security*, vol. 25, no. 2, 2000, pp. 87-123, *JSTOR*, at http://www.jstor.org/stable/2626754. Accessed on August 19, 2022.

Congressional Research Service, China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress, DOD, March 8, 2022, pp. 1-10.

^{6.} Evan Braden Montgomery, "Contested Primacy in the Western Pacific: China's Rise and the Future of U.S. Power Projection," *International Security*, vol. 38, no. 4, 2014, pp. 115-49, *JSTOR*, at http://www.jstor.org/stable/24481102. Accessed on August 19, 2022.

running conflicts in Afghanistan and Iraq.⁷ For now, it is reasonable to infer that the distribution of power in the system is shifting.

In international politics, the world system undergoes tectonic shifts depending on the relative increase or decrease in the capabilities of a state.⁸ The same can be seen with the relative rise of China and the decline of the US.⁹ The preeminence that the United States enjoyed for nearly two decades after the Soviet collapse is slowly eroding.¹⁰ China's economic rise, which

China is using not only its military power in areas where it can exploit the rules-based order but is also engaging in a profound reordering of the world, according to its own philosophy.

has fulfilled its defence ambitions, has resulted in such a structural change. We can see the emergence of a bipolar world, in which a growing standoff in terms of issues between the two powers is evident. In world politics, the rising power is always seen with suspicion as it tries to leave its imprint by challenging the dominance of the default power. The evidence of China as a rising power, which is revisionist in its orientation, is quite visible in international politics. China is using not only its military power in areas where it can exploit the rules-based order but is also engaging in a profound reordering of the world, according to its own philosophy. In all theatres, be it territorial or maritime, and in every domain—space, economic, social, political—China seems to be at odds with the world. It has ratified the

^{7.} Ibid.

^{8.} Kenneth N Waltz, "Structural Realism after the Cold War," Quarterly Journal: International Security, vol. 25, no. 1, Summer 2000, pp. 5-41.

^{9.} John J. Mearsheimer, "The Gathering Storm: China's Challenge to US Power in Asia," *The Chinese Journal of International Politics*, vol. 3, issue 4, Winter 2010, pp. 381-396, at https://doi.org/10.1093/cjip/poq016. Accessed on January 22, 2020.

^{10.} R. Joshua, Itzkowitz Shifrinson and Michael Beckley, "Debating China's Rise and U.S. Decline". *International Security*, 37(3) 2013, pp. 172-181.

^{11.} Øystein Tunsjø, The Return of Bipolarity in World Politics: China, the United States, and Geostructural Realism (New York: Columbia University Press, 2018), p. 262.

^{12.} W. Feng, B. Gu, and Y. Cai, "The End of China's One-Child Policy", *Studies in Family Planning*, 2016, vol. 47, pp. 83-86, https://doi.org/10.1111/j.1728-4465.2016.00052.x. Accessed on January 22, 2020.

^{13.} Woosang Kim, "Alliance Transitions and Great Power War," American Journal of Political Science, 35, no. 4, 1991, pp. 33-50. Accessed on January 23, 2021.

United Nations Convention on the Law of the Sea (UNCLOS) provisions but rarely adheres to them by claiming to own most of the South China Sea through its 9-dash line claims. According to the UNCLOS principles, the line is invalid, and China's non-compliance showcases its reluctance to follow the global rules. This has resulted in regular skirmishes between China and the other claimants, including Vietnam and the Philippines. Moreover, in the East China Sea, China's provocation led to the Japanese forming an Air Defence Identification Zone (ADIZ) to keep an eye on Chinese incursions.¹⁴ China claims that it also owns the Senkaku/Diaoyu are a significant source of contention for the Japanese. In recent times, China's standoff with India in the Galwan Valley, and its adventurism in the Indian Ocean Region (IOR) have triggered concerns for Indian strategists. Thus, Beijing's attempt to regain its lost glory is visible as it hustles to challenge the states and tries to play games to tweak the international order to enhance its strategic interests.

This paper discusses some on-going developments in East Asia. It is no secret that Chinese capabilities have grown to a level that has activated security dilemmas in the region's residents; China has been proactively asserting its preeminence, and many reports suggest that it has achieved some sort of absolute control in the first island chain which means that China has challenged the United States' long-held preponderance in the region. Moreover, China is working on mastering the strategy of Anti-Access/ Area Denial (A2/AD) in the western Pacific. The strategy works on the two pillars¹⁵ of A2/AD—both are rapidly supposed to activate in the wake of any offensive by the US forces against China in the East Asian waters. 16 Area

^{14.} Joshua R. Itzkowitz Shifrinson, "Neo-Primacy and the Pitfalls of US Strategy toward China", The Washington Quarterly, 43: 4, 79-104, 2020, DOI: 10.1080/0163660X.2020.1849993. Accessed on January 4, 2022.

^{15.} Alexander Lanoszka and Michael A Hunzeker, "Confronting the Anti-Access/Area Denial and Precision Strike Challenge in the Baltic Region", The RUSI Journal, 2016, 161:5, pp. 12-18, DOI: 10.1080/03071847.2016.1253367. Accessed on August 5, 2021.

^{16.} Andrew Krepinevich, Barry Watts and Robert Work, Meeting the Anti-Access and Area-Denial Challenge (Washington, D.C.: Centre for Strategic and Budgetary Assessments 2003), pp. 34-67.

denial works to freeze the US force's assets stationed in the region, and antiaccess stands to thwart the reinforcement of troops by the United States. The A2/AD is a combination of military equipment that is already in use and technologies, jointly known as Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR).¹⁷

WHAT IS A2/AD? WHERE DOES IT STAND IN CHINA'S CALCULATION?

The new strategies of war-fighting are a direct result of the changing perceptions of national security. As the previous military strategies become irrelevant to the newly generated national security demands, new ideas of war-fighting prevail upon the previous ones. But the core element of the security strategies remains static:¹⁸ offensive and defensive. Offensive strategies are meant to secure operational access and victory through them. Defensive strategies are designed to preserve the nation's sovereignty and defend its homeland and areas around it from these impending offensive forces. Despite advancements in technology and shifts in the security landscape, the objectives of any military plan remain either offensive or defensive.¹⁹ In addition to encouraging the development of new war-fighting domains like space and cyber, force modernisation has also made it possible to project power by sharpening the military doctrines.

As a result, A2/AD typically belongs to the category of defensive military tactics that aim to thwart an enemy invasion in a specific region. The A2/AD obstacles to the approaching forces are not new, despite the language appearing to be contemporary.²⁰ In the past, militaries that contended with distant rivals were observed taking action to bar an enemy from entering their area or moving freely along their perimeter. These include the United

^{17.} C4ISR stands for Command, Control, Communications, Computers (C4) Intelligence, Surveillance, and Reconnaissance (ISR).

Patrick Porter, "Shadow Wars: Asymmetric Warfare in the Past and Future," Security Dialogue, vol. 37, no. 4, 2006, pp. 551–61. JSTOR, at http://www.jstor.org/stable/26299453. Accessed on January 13, 2022.

^{19.} Ibid.

^{20.} Krepinvich, et al., n. 16.

In the year 1999, China officially dropped its commitment to ground force-centric combined arms operations in favour of more technologically driven joint operations in the aerospace, maritime, and electromagnetic battlespace dimensions.

States' emphasis on coastal defence during the 19th century to deter external invasion, Germany's use of torpedoes and sea vessels to evade a British naval blockade before World War I, and the Soviet Union's threat to American forward bases and its reinforcements headed for Europe during the Cold War.²¹ The main goals of such asymmetric defensive techniques, known as A2/AD systems, are to prevent intervention by stronger projecting forces.²²

In the year 1999, China officially dropped its commitment to ground force-centric *combined arms operations* in favour of more technologically driven *joint operations* in the aerospace, maritime, and electromagnetic battlespace dimensions.²³ The shift categorically changed the focus from operational planning to undertaking protracted wars on the mainland to short-duration high-intensity joint campaigns in China's littoral.²⁴ The Chinese defence strategy was improved from static defence to mobile defence as a result of the enormous strategic development gained by planning to allow the PLA to destroy the enemy's most important asset. Even though these particular revisions to the national military policy were considered the most significant steps towards modernisation and reform, the PLA was still considered to be a sizeable but outdated military in the early 21st century. The People's Republic of China (PRC) has marshalled its resources, technology, and political determination over the past 20 years to strengthen and modernise the PLA in almost every way, despite its former

^{21.} Montgomery, n. 6.

^{22.} Ibid

^{23.} For a detailed look at the PLA's new operational level doctrine, see David M. Finkelstein, "Thinking About the PLA's 'Revolution in Doctrinal Affairs'," in David M. Finkelstein and James Mulvenon, eds., China's Revolution in Doctrinal Affairs: Emerging Trends in the Operational Art of the Chinese People's Liberation Army (Washington, DC: December 2005), pp. 1-27.

^{24.} Ibid.

incapacity with its long-term objectives.²⁵ As China's strategy aims to achieve 'national rejuvenation' by 2049, the PLA has the target to be a 'world-class' military by 2049.²⁶ Surely, the PRC does not want the PLA to be a mere showcase of its modernisation but to actively participate in its foreign policy and to become an active wheel of its regional and global aspirations.²⁷ China's military policy, which

As China's strategy aims to achieve 'national rejuvenation' by 2049, the PLA has the target to be a 'world-class' military by 2049.

centres on the idea of "active defense," 28 aims to protect its interests in sovereignty, security, and prosperity.

According to its 2019 White Paper on defence, the Chinese military has primarily remained oriented on longstanding regional threats.²⁹ Therefore, A2/AD is best suited to shrug off regional threats, even though the PLA's evolving concepts and capabilities are preparing it to counter an intervention by an adversary in the Indo-Pacific region and project power globally. It has been developing capabilities to dissuade, deter or if necessary, defeat the interventionist force during a large-scale contingency such as Taiwan.³⁰ This is more evident in its behaviour and its sensitivities towards the Taiwan issue. Seemingly, according to the Department of Defence, the "PLA's A2/AD capabilities are most robust in the first island chain which it intends to extend beyond".³¹

HOW WILL A2/AD WORK FOR CHINA?

It is only after comprehending the ongoing relevance and significance of the Indo-Pacific area, and East Asia in particular, for the United States,

^{25.} Congressional Research Service, n. 5.

A Report to Congress, Military and Security Developments Involving the People's Republic of China, Department of Defence, United States of America, pp. 1-6.

²⁷ Ibid

^{28.} The Department of Defence defines active defence as: "The employment of limited offensive action and counterattacks to deny a contested area or position to the enemy."

^{29.} n. 26.

³⁰ Ibid.

^{31.} Ibid.

that one can decipher China's long-term preparation for such a concept. There is ample literature that examines the United States' collapse in global politics and China's ascent, but there is also enough research that attests to the United States' continuous dominance in the system even after China achieves economic supremacy.³² This belief is mostly supported by the fact that the United States consistently outperforms the PRC in terms of accumulated wealth, technology, and innovation.³³ The US' military force is the only force in the world that can project power in every corner of the world. By virtue of its unparallel firepower, it has command of all the global commons, which makes it the only superpower in the system.³⁴

China, on the other hand, is competing with the United States' hegemonic design and ability to intervene in East Asian waterways, if not the Indo-Pacific, at the moment. The confidence China has in its ability to match the power of the United States is a result of its economic expansion. This misconception, however, has been disproved by the fact that China's military industry is less productive because of a weak innovation foundation.³⁵ Many academics contend that China is undergoing a rare combination of strength and weakness at the same time, which has prompted the leadership to feel uneasy.³⁶ Beijing finds it exceedingly challenging to exclude Washington from its neighbourhood. East Asia hosts most of the allies of the United States that did not only prove to be a bulwark against Communism during the Cold War but are also prosperous nations whose economic prosperity is based on a highly skilled and technologically superior manufacturing base.³⁷ These

^{32.} Michael Beckley, Why America? Unrivaled: Why America Will Remain the World's Sole Superpower, (Cornell University Press, 2018), pp. 1-9.

^{33.} Ibid., pp. 135-54.

^{34.} Barry R. Posen, "Command of the Commons: The Military Foundation of U.S. Hegemony." International Security, vol. 28, no. 1, 2003, pp. 5-46. JSTOR, at http://www.jstor.org/ stable/4137574. Accessed on August 19, 2022.

^{35.} Beckley, n. 32, pp. 62-97.

^{36.} Hal Brands and Michael Beckley, "The Coming War Over Taiwan", Wall Street Journal, August 4, 2022, at https://www.wsj.com/articles/the-coming-war-over-taiwan-11659614417. Accessed on August 9, 2022.

^{37.} Victor D. Cha "Powerplay: Origins of the U.S. Alliance System in Asia," International Security, 34, no. 3, 2009, pp. 158-96, at http://www.istor.org/stable/40389236. Accessed on June 2, 2022.

allies of America are Japan, South Korea, and Taiwan with which China has a history of territorial disputes. Following World War II, these economies were largely in ruins and under attack from Communist China and the USSR. The United States successfully kept them from joining the Communist camp and sustained stability in the region, which was ensured by the deployment of US forces there.³⁸ The United States has put in place several security agreements that provide South Korea and Japan with protection from both conventional and nuclear threats.³⁹ In other words, the United States had evolved into the region's guardian and promoter of growth, which it plans to keep doing but which has recently come under danger from the PRC.

It is interesting to note that China has some disagreements with the US allies, including South Korea, Japan, and Taiwan. China, however, is the only country that fully comprehends how difficult it will be to defeat US forces in a one-on-one conflict, even in the western Pacific. Because of its ability to project power and its permanent bases in East Asia, the United States has always had more firepower than China. The "Forward Presence" and "Power Projection" capabilities of the United States withstood the fierce wrath of the Soviet Union during the Cold War.⁴⁰ Nonetheless, the American foothold in East Asia has been carefully crafted, based on a clear understanding of the source of the principal security threat. The bases that are established on allies' soil are reasonably secure and will be the primary source of reinforcement if a crisis arises in the theatre.⁴¹

The posture of deterrence and forward defence, however, significantly declined following the end of the Cold War; China's economic growth and its belligerent attitude created a new frontier of problems in its backyard in the Pacific. It is interesting to note that East Asia, which had previously served as the main theatre for defending against the Soviet menace during the Cold War, is now increasingly displaying the traits of being the arena for a

^{38.} Ibid.

^{39.} Ibid.

^{40.} Krepinvich, et al., n. 16.

^{41.} Ibid.

By fielding its A2/ AD forces China is acknowledging its current incapability to counter the US forces, thus, resorting to an asymmetric defence strategy.

prospective Cold War rivalry between China and the United States. The preeminence of the United States forces in the western Pacific has had a consequential effect on the regional stability.42 Though tested many times by China (Taiwan Strait crisis) and North Korea, it had not been able to alter the practical status quo in the region. That is because of America's strong military presence and its

extensive security commitment to its partners. China, despite achieving a considerable modernisation of its military, still lacks the competence of the United States forces in most of the indications of military power. The best way for China to avoid the United States' intervention on the battlefield, most likely during a Taiwan adventure, is to exploit the asymmetrical advantage that it has near its coastal region. Curiously, by fielding its A2/AD forces China is acknowledging its current incapability to counter the US forces, thus, resorting to an asymmetric defence strategy.

Conceptually, the term A2/AD is a military strategy. The term can be separated into two different strategies that have worked to thwart the USA's freedom of access and manoeuvre on the battlefield of the western Pacific. These military strategies have been carefully crafted after understanding the requirements of China's ambitious projects in East Asia. The A2/AD system is asymmetric warfare that exploits the advantages which China enjoys, knowing that the technologies to deny entry are easier to develop than operational access.⁴³ The United States' military preponderance in the western Pacific is now in supposed danger due to the maturation of Chinese A2/AD capabilities.⁴⁴ The exaggeration of the fears demonstrates

^{42.} Major Christopher J. McCarthy, "Anti-Access/Area Denial: The Evolution of Modern Warfare," Missile Defense Advocacy Alliance, at https://www.usnwc.edu/Lucent/OpenPdf. aspx?id=95. Accessed on October 16, 2021.

^{43.} Dr. Peter G. Laky, Land Force Roles in the Western Pacific: Anti-Access/Area Denial (Philadelphia: US Army War College, 2014).

^{44.} Stephen Biddle and Ivan Oelrich, "Future Warfare in the Western Pacific," International Security, vol. 41, no. 1, pp. 7-48, at doi:10.1162/ISEC_a_00249, Accessed on March 16, 2021.

the possibility of successive A2/AD campaigns that can exclude the USA as far as the second island chain in the Pacific.

The traditional way of projecting the power of the USA is the primary target of anti-access⁴⁵ operations—'A2' in short—taking the help of the long-range sensors, ballistic and cruise missiles, and anti-ship capabilities. The A2 system primarily works to deter US forces from entering the crisis theatre so it cannot assist its allies against China. On the other hand, anti-denial systems—in short 'AD'—are plans to deter the freedom of action and manoeuvre of the US forces, which operate from the bases stationed within the area of conflict. The proliferation of sensors and satellite reconnaissance allows China to target the fixed assets and monitor US deployments to the forward bases, placing these

The A2 system primarily works to deter US forces from entering the crisis theatre so it cannot assist its allies against China. On the other hand, anti-denial systems—in short 'AD'—are plans to deter the freedom of action and manoeuvre of the US forces, which operate from the bases stationed within the area of conflict.

bases at high risk even with the deployment of moderate numbers of ballistic and cruise missiles. He duties of the anti-denial campaign warrant the 'cross-domain synergy', preventing adversaries' activities from the sea, land, and air spheres altogether. Thus, achieving air superiority is a prerequisite for any such operation with reliable integrated defence systems at home. The land denial systems are accompanied by demonstrating the capacity to thwart the effort of manoeuvring, using short and medium-range artillery; and missile strikes against US manoeuvre forces at either their littoral penetration or airlanding points. Similarly, maritime denial takes up the task with wide-area mines, contamination of waters, and even long and short-range ballistic or cruise missiles, and anti-ship/submarine capabilities against the US forces.

^{45.} Laky, n. 43.

^{46.} Ibid.

However, at the same time, experts suspect the utility of these military strategies, stating that these platforms, that are to be used in A2/AD, were always an essential part of the military artillery. There is nothing new that the concept adds to military knowledge; the technical terms only contribute to mystifying the concept that invite complexities regarding the performance of these strategies. The denial and anti-access techniques have been always indispensable to warfare tactics; thus, China's A2/AD campaign is overestimated. The effectiveness of the A2/AD strategies is also a matter of dispute. The speculation about the 'zone of exclusion' of anything near the second island chain is overly optimistic, and China is still unable to field substantial assets within the range of anywhere near the second island chain. Military techniques that are to be used in the A2/AD campaign demonstrate inherent asymmetries in the operating environments of the land, air, and surface, and the effectiveness of the systems tends to reduce with the increased range. Although, with some exceptions such as the Chinese mainland and sometimes near Taiwan's air space, the US still maintains air and maritime superiority⁴⁷ in the western Pacific. The prerequisites for a successful A2/AD campaign are extra expensive, and the doctrine itself requires massive modernisation of the Chinese forces. However, the fact that the USA still outspends China by a considerable margin entails that the speed of modernisation of the US forces could be faster than that of the Chinese forces.

Nonetheless, the shortcomings of the A2/AD systems pertain to the lack of technical progression required for effective A2/AD war; thus, Stephen Biddle's and Ivan Oelrich's statement⁴⁸ that "the A2/AD debate is mostly about the future, not the present" sounds realistic. For example, the effectiveness of the Intelligence, Surveillance, Reconnaissance (ISR) system, crucial for the defence potential targeting, varies widely with the background provided and that cannot be solved without technical progression.⁴⁹ China's defence

^{47.} Biddle and Oelrich, n. 45, pp. 7-48.

^{48.} Ibid.

^{49.} Prepared for Members of Congress, CRS report, Intelligence, Surveillance, and Reconnaissance Design for Great Power Competition, Congressional Research Service, June 2020, at https:// crsreports.congress.gov R46389. Accessed on January 22, 2021.

industry is still in a phase wherein it cannot outpace that of the USA; though China has been outspending the USA in Research and Development (R&D), the real work will take time to materialise on the ground. The elaborate discussion over the Chinese A2/AD and its efficacy could be feasible only by examining the level of modernisation of the PLA and whether these modernising trends are in line with this assessment of the 'zone of exclusion'.

WHAT REAL DANGER DOES A2/AD POSE?

The merits and demerits A2/AD go hand-in-hand. Still, a powerful lobby has warned the American leadership of the probability of Chinese capabilities pushing the USA out of the Pacific. As mentioned earlier, the denial strategy has always been an indispensable part of military doctrines but the striking fact of the Chinese A2/AD systems is that there is no other power that has come close to being profoundly successful in executing it. China, by and large, is the only country, after a long time, that is not only showing the intention to carry out A2/AD operations but also possesses the capabilities to do so. On the other hand, we cannot underestimate China by simply stating that it currently does not have the capacity and technological depth to compete with the USA. Even though it does not possess the capability at present, security experts think that it is the trajectory of acquisitions and strategic evolution that matters, ⁵⁰ and the maturation could take time.

There is no doubt that the USA possesses more power than China, according to every military indicator. On the other hand, scholars are arguing about China's potential decline. Scholars argue that the Chinese economy is in a troubled phase, debt is bourgeoning, domestic demands seems to be reducing and COVID has inflicted severe damage to the financial health of the country.⁵¹ However, military balance is a completely different issue. Despite China's decline, it has gathered much military and technological power to challenge the United States in an asymmetrical

^{50.} Biddle and Oelrich n. 45, pp. 7-48.

^{51.} Beckley, n. 33, pp. 33-61.

The power projection capabilities of the US have always been at the forefront to dissuade and prevent enemy forces from damaging US interests in any corner of the world.

battle. Military balance between the two nations also includes the distance and terrain as well as operational planning and force design which most of the time decides how much actual power each side could bring to the theatre. These elements of military balance pose a different picture of the East Asian complex security.

CREATING A 'CONTESTED ZONE' IN THE WESTERN PACIFIC

China is increasingly involved in the profound restructuring of the military posture in the 'first island chain'⁵² and has already been able to shift the cross-strait balance in its favour. This change in military balance has already increased the cost of intervention by the United States.⁵³ The power projection capabilities of the US have always been at the forefront to dissuade and prevent enemy forces from damaging US interests in any corner of the world. Along with its land-based aircraft force, the United States relies heavily upon its carrier strike force during a crisis occurring away from home. It has been instrumental in signalling resolve and conducting military operations.⁵⁴ These carriers have been powerful and impressive vehicles to showcase the US strength and power projection capabilities to the world. Projection capabilities, along with the heavy deployment of aircraft carrier strike groups also include nuclear-powered submarines, combat ships, and C4ISR systems that underpin US power projection in a crisis theatre.

^{52.} The first island chain refers to the first chain of major Pacific archipelagos out from the East Asian continental mainland coast. It is principally composed of the Kuril Islands, the Japanese archipelago, the Ryukyu Islands, Taiwan (Formosa), the northern Philippines, and Borneo, hence, extending all the way from the Kamchatka peninsula in the northeast to the Malay peninsula in the southwest.

^{53.} David A. Shlapak, et al., A Question of Balance: Political Context and Military Aspects of the China Taiwan Dispute (Santa Monica, Calif.: RAND, 2009), pp. 3-5.

⁵⁴ The U.S. Navy currently has eleven nuclear-powered carriers, including one permanently forward deployed in Japan, along with ten carrier air wings, each composed of approximately 60 fighter-attack, electronic warfare, airborne early warning, and multi-mission aircraft.

These carriers have been virtually invulnerable to the enemy forces due to their inherent mobility as well as the weaknesses of earlier US adversaries. Thus, during crises, they have been able to penetrate the adversary's waters by stationing themselves close to the shore, allowing the US forces to launch their air missions inside the enemy's territory. Despite all this, the PLA's expanding arsenal of precision

The PLA's expanding arsenal of precision strike weapons could endanger the ships travelling close to the first island chain and force them to station themselves offshore.

strike weapons could endanger the ships travelling close to the first island chain and force them to station themselves offshore. Therefore, restricting the range of the air wings, reduces both their symbolic significance and their operational utility.⁵⁵

The problems regarding power projection emerged because of the changing operational realities, which occurred due to the understanding of the US' military practices. This helped the adversaries in challenging Washington in a whole new way, making them sustainable against the US forces. 56 The anecdote of 1991 is monumental in the context of the evolving Chinese military doctrine that learnt lessons from 'Operation Desert Storm' and recrafted itself by adopting foreign technology to recreate a formidable joint military force with expeditionary ambitions.⁵⁷ The proliferation of military technologies has also neutralised the defining edge of American troops. The rapid progression in military technology has made the other militaries capable of sustaining the USA's force projection to an extent.⁵⁸ For example, the evolution of long-range precision strike weapons as a deciding factor on the battlefield has given the American military the

^{55.} The F-35C, for example, which will eventually become the main strike aircraft on carrier flight decks, has an unrefuelled range of slightly more than 600 nm. See Lockheed Martin, "F-35C Carrier Variant," at http://www.lockheedmartin.com/us/products/f35/f-35c-carriervariant.html.

^{56.} Michael Dahm, "China's Desert Storm Education," U.S. Naval Institute, Proceedings, 2021, vol. 147/3/1,417.

^{57.} Wang Pufeng, "Meeting the Challenge of Information Warfare," China Military Science, 41, no. 1, 1995, p. 15.

^{58.} Lanoszka and Hunzeker, n. 15, pp. 12-18.

leverage to destroy the enemy forces and even the military installations without entering the battlefield by crippling the adversaries' counter-force capabilities. Still, the change in the calculations occurred after the reported surrender of the precision strike weapons was completed by Russia, China, and Iran.⁵⁹ On the other hand, US forces, in the absence of a capable enemy, have grown accustomed to fighting weak opponents, who did not possess the capability to threaten US bases, air, and naval forces. In contrast, China seems an irregular enemy which not only harbours the largest navy on earth but also some of the most dangerous weapons that could sink the US naval force's ships.

The PLA Navy (PLAN) has fielded thousands of anti-ship missiles, including the DF-21D, Medium Range Ballistic Missiles (MRBMs), and the DF-26B Intermediate-Range Ballistic Missiles (IRBMs), both of which are popularly known as 'carrier killers.60 These missiles are capable of hitting moving ships as well as carriers. As mentioned above, the utility of aircraft carriers in an A2/AD environment has been questioned, due to the proliferation of precision strike weapons. In addition, the YJ-18 anti-ship cruise missiles are also a threat that could be launched from land, sea, and sub-surface base. These cruise missiles pose a danger to the USA's carriers when launched by the submarines and surface ships. While the PLA has been in a constant chase to develop technologically superior submarines that can match Western submarines' design, it has been partly successful in inducting the nuclear-powered attack submarine (SSN) and nuclear-powered ballistic missile submarine (SSBN) named as the Shang class Type 093 and Jin class type 094.61 Perhaps the most worrisome development in the submarines field is the supposed deployment of the JL-2 Submarine-Launched Ballistic Missile (SLBM), whose expected range is 7,200 km, fitted on the Jin class SSBN. These missiles are capable of hitting US territories by remaining close to China's

Thomas G Mahnken, "Weapons: The Growth and Spread of the Precision-Strike Regime" Daedalus, 140, 2011 no. 3, pp. 45-57.

^{60.} Zachary Keck, "Cruise Missiles: China's Real 'Carrier Killer'", The Diplomate June 5, 2014.

Department of Defence, "China Naval Modernization: Implications for U.S. Navy Capabilities— Background and Issues for Congress," Updated on March 8, 2022, pp. 15-18. Accessed on June 13, 2022.

littorals. However, the PLAN submarine fleet is heavily dependent on the diesel attack submarine (SS) currently numbered at 56 but the Department of Defence report states that "China is rapidly growing the number of SSN and SSBN and projected to include new SSN and SSBN but the number of SSs is likely to remain unchanged".62 Given the speed, range, and endurance of the SSN, the PLAN is looking forward to doing away with the antiquated SS that are relatively noisy and particularly vulnerable to US Anti-Submarine Warfare (ASW).63 The new Shang class SSN which is a lot quieter and endurable for long-range operation, along with the new Yuan class Type 039A which is fitted with an indigenous 'Air Independent Propulsion (AIP)' system would enhance the PLAN's stealth qualities for ASW.64 Adding to that, to improve the lethality of its anti-access warfare, China is developing ground-based over-the-horizon radars, reconnaissance satellites unmanned aerial vehicles "to locate targets at great distances from the PRC, thereby supporting long-range precision strikes, including employment of ASBMs (Anti-Ship Ballistic Missiles)."65

As America has enjoyed command over the global commons for so long, as Berry Posen puts it, these small arms, aircraft capabilities, and anti-surface warfare systems can be used to create a 'contested zone' where the defending forces channel their comprehensive power to contest the American supremacy.⁶⁶

ANNIHILATING THE US BASES FROM THE WESTERN PACIFIC

A2/AD warfare comes with the potential to deter the USA from entering a crisis area, but scholars believe that it still won't be easy for China to win a regional conflict against the US as it has substantial forces already stationed in the region. The forward bases include both air and naval facilities and

^{62.} Ibid.

^{63.} Ibid.

^{65.} Office of the Secretary of Defence, "Military and Security Developments Involving the People's Republic of China 2011" (Washington, D.C.: Department of Defence, 2011).

^{66.} Posen, n. 35, pp. 5-46.

Preemptive missile strikes are consistent with China's overall strategy of 'active defence', as Beijing could consider a preemptive strike to be a defensive 'counter-attack' against adversaries threatening China's sovereignty.

are guarded by a layered air and ballistic defence system.⁶⁷ Thus, the United States' strong position is still very difficult for China to challenge.

Ideally, if a crisis emerges in East Asia such as over Taiwan and other disputes, the US' primary instrument of power projection would be its land-based tactical aircraft. However, things have changed dramatically in the western Pacific with the proliferation of precision strike weapons that have enabled China to strike the fixed bases of the USA in

its proximity.⁶⁸ Scholars argue that if China's core strategic interest appears to be threatened by the US forces, it might resort to a preemptive missile strike against the US' forward deployment.⁶⁹ However, a security expert argues that China would hesitate to strike the US' forward bases on US allies' soil as it will escalate things to a direct conflict with the USA. Notwithstanding this argument, we find that preemptive missile strikes are consistent with China's overall strategy of 'active defence', as Beijing could consider a preemptive strike to be a defensive 'counter-attack' against adversaries threatening China's sovereignty. As per known Chinese missile force doctrine, the assumed overall goals of such a missile campaign would be paralysing the enemy's strength and checking the powerful enemy's military intervention activities. The United States Department of Defence has stated that China currently fields about 1,200 conventional armed Short-Range Ballistic Missiles (SRBMs, 300-1,000 km range), 200 to 300 conventional Medium-Range Ballistic Missiles (MRBMs, 1,000 to 3,000 km range), an indeterminate

^{67.} Thomas Shugart and Javier Gonzalez, "FIRST STRIKE—China's Missile Threat to U.S. Bases in Asia," June 2017, CNAS.

^{68.} Toshi Yoshihara, "Chinese Missile Strategy and the U.S. Naval Presence in Japan the Operational View from Beijing," *Naval War College Review*, vol. 63, no. 3, Summer 2010, pp. 39-62, at https://www.usnwc.edu/getattachment/69198ee2-edc2-4b82-8f85-568f80466483/Chinese-Missile-Strategy and-the-U-S--Naval-Presen. Accessed on June 13, 2022.

^{69.} Shugart and Gonzalez, n. 68.

number of conventional Intermediate-Range Ballistic Missiles (IRBMs, 3,000-5,500 km range) and 200-300 Ground-Launched Cruise Missiles (GLCMs, 1,500 + km).

Though the United States has many air bases across the western Pacific, only two bases, Marine Corps Air Station Futenma, and Kadena air base on the southern Japanese island of Okinawa, are in the near vicinity of the Taiwan Strait, which will be suitable for operations in an A2/AD environment. Kadena air base would be the centre of US operations because it hosts the largest combat air wing in the US Air Force.⁷⁰ Kadena air base, situated 450 nautical miles (nm) from the centre of the Taiwan Strait and 350 nm from the nearest point on the Chinese

Though the United
States has many
air bases across the
western Pacific, only
two bases, Marine
Corps Air Station
Futenma, and Kadena
air base on the
southern Japanese
island of Okinawa,
are in the near vicinity
of the Taiwan Strait,
which will be suitable
for operations in an
A2/AD environment.

mainland, makes it a perfect choice for US forces to operate in. The nearer the location from the target, the more combat sorties can be delivered. But this calculation could have a negative implication altogether. The virtue of being closer to the mainland makes it more vulnerable to Chinese missile attacks. The US Naval War College's authoritative PLA publications have indicated that China's missile forces might attempt a preemptive strike to knock out the US Navy in Asia by specifically targeting vulnerable carriers and warships.⁷¹ This assumption has been forwarded by Toshi Yoshihara who believes that no other place captures the Chinese eyes as much as the Yokosuka facility, which is counted as the most valuable forward deployment of the US Navy.⁷² The Yokosuka naval facility is home to the US Navy's sole

^{70.} Joe Pappalardo, "Behind the Scenes at a Rehearsal for Armageddon," *Popular Mechanics*, July 28, 2014, at http://www.popularmechanics.com/military/a9936/behindthe-scenes-at-a-rehearsal-for-armageddon-16355867/. Accessed on June 13, 2022.

^{71.} Yoshihara, n. 69.

^{72.} Ibid.

permanently forward-deployment aircraft carrier, the USS Ronald Reagan (CVN-76) as well as other facilities.

The proliferation has enabled these adversarial forces to target the American fixed bases in the range of their precision strike weapons, which has throttled the belief of the secure forward presence of the US military. The western Pacific has presented another set of challenges with its dynamic geostrategic and political situation. The region, recently, has emerged as the critical space for the ongoing rivalry between the USA and China, subsequently replacing the Euro-centric trans-Atlantic view of world politics of the Indo-Pacific. The ever-increasing military challenge brewing in the Indo-Pacific owing to the dramatic economic rise of China has become more intense in the aftermath of the 2008 financial crisis, leaving the structure upon which the USA relies to assist in the wake of the crisis, in danger.

GLOBALISING CHINA'S A2/AD THREAT

No one can mitigate the vices of international politics. Military warfare strategies have always helped generate the fear of security dilemmas.⁷³ The dilemma unravels the unabated quest for power maximisation on both sides of the rivalry. Some scholars of international politics suggest that the US-China conflict is inevitable; while some believe that it is highly unlikely as both nations clearly understand the mutual destruction that would ensue if they face each other on a battlefield. However, structural realism defies the second image impacts on international politics:⁷⁴ the classical realism tends to count as a simulator of international disputes and a prime mover of peace and war on the international stage.⁷⁵ Domestic politics, where nationalism resonates loudly, hampers reasonable decision-making and favours national

^{73.} Charles L. Glaser, "The Security Dilemma Revisited." World Politics, vol. 50, no. 1, 1997, pp. 171-201. JSTOR, at http://www.jstor.org/stable/25054031. Accessed on August 20, 2022.

^{74.} Kenneth N. Waltz, "Structural Realism after the Cold War," Quarterly Journal: International Security, vol. 25, no. 1. Summer 2000, pp. 5-41.

^{75.} R. B. J. Walker, "Realism, Change, and International Political Theory", International Studies Quarterly, vol. 31, no. 1, 1987, pp. 65-86. JSTOR, at https://doi.org/10.2307/2600660. Accessed on September 9, 2022.

glory instead. 6 One region of the world where these drumbeats seem to be at a high level is East Asia. The region's volatile climate, in which each country seeks to further its own interests, is the driving force behind this. China has reached a stage where there is no going back. The Indo-Pacific region is experiencing a tussle between a rising power with substantial capabilities and an intention to reshuffle the international order with the leader of the liberal world—the United States. On the other hand, the United States is under tremendous pressure to resolve the crisis that will inevitably develop in the Indo-Pacific area. China's claims are so prevalent that the Indo-Pacific region cannot ignore them. Beijing's claims demand an absurd amount of the western Pacific under its belly from the East China Sea to the South China Sea. East Asia has been seen by China for many centuries as a natural sphere of influence that was forcibly taken away by foreign countries during the 'Century of Humiliation'. Beijing is prepared to commemorate the nation's rejuvenation in 2049, which more or less points to a return to its previous status as the region's undisputed leader as it was before the 'Century of Humiliation'.

It is interesting to note that China has vowed to establish a 'community of common destiny' whose fate would be chosen only by Beijing. 77 The location of the community is none other than the East Asian nations of the Korean peninsula and Japan, while Taiwan, which it claims, rightfully is China's sovereign territory.⁷⁸ The revival of the Chinese nation, however, is no less sacrosanct than its lavishly imagined Chinese world order. These concepts have the covert goal of temporarily establishing a globe or territory that adheres to Chinese goals and values. Unfortunately for China, these goals collide with the countries that Beijing hopes will first join it, namely Japan, South Korea, and Taiwan, whose widespread belief in a liberal international system is seen as an irritant by China. Thus, a confrontation in the East China

^{76.} Bill Hayton, The South China Sea: The Struggle for Power in Asia (New Haven, London: Yale University Press, 2014), pp. 1-298.

^{77.} Stephen N. Smith, "Community of Common Destiny: China's 'New Assertiveness' and the Changing Asian Order," International Journal, vol. 73, no. 3, 2018, pp. 449-63. JSTOR, at https:// www.jstor.org/stable/26499706. Accessed on June 20, 2022.

^{78.} Ibid.

Taiwan is not only a piece of land but has a powerful and skilled force of 22 million people who are ahead of the PRC in per capita income. In addition, it is the global hub of cutting-edge semiconductors.

Sea is very likely, given that the countries do not bandwagon with China but whose chances remain meagre until the USA becomes an established hegemon in the western Pacific. There are strong indications that Taiwan will fall victim to China's significant military modernisation and expanding capabilities as a result of internal pressure. Similar to this, the concurrent pressure China applies to Taiwan will undoubtedly have a significant impact on the Indo-Pacific area as a whole. Along with

upending the regional balance of power, the PRC's armed takeover of Taiwan will give China a newfound capacity for power projection.

Taiwan is not only a piece of land but has a powerful and skilled force of 22 million people who are ahead of the PRC in per capita income. In addition, it is the global hub of cutting-edge semi-conductors. The reunification of Taiwan with China means that China will control the Taiwan Strait and the waters east of the Taiwanese east coast. The control of such large swathes through which important Sea Lines of Communication (SLOCs) go, will boost China's capacity to pressure South Korea and Japan. The pundits of East Asian security predict that Chinese Taiwan will not only be an "unsinkable aircraft carrier" to project power but will also provide China the capability to strangulate the economies of South Korea and Japan.

Taiwan, as mentioned, is the largest producer of cutting-edge semiconductor chips which are often regarded as the backbone of the fourth industrial revolution—without semi-conductors, most of the economies

^{79.} Gaurav Sen, "The Significance of Taiwan to the World," CAPS: Infocus, New Delhi, August 19, 2022, at https://capsindia.org/the-significance-of-taiwan-to-the-world/. Accessed on September 12, 2022.

^{80. &}quot;Losing Taiwan Means Losing Japan", *The Scholars Stage*, February 26, 2020, at https://scholars-stage.org/losing-taiwan-means-losing-japan/. Accessed on August 4, 2022.

^{81.} Liam Gibson, "US Once Again Thinks Taiwan is 'Unsinkable Aircraft Carrier'", Taiwan News, December 30, 2021, at https://www.taiwannews.com.tw/en/news/4393143. Accessed on August 10, 2022.

of the world would grind to a halt.82 Hence, India and Australia, and other participants of the global economy will be the most affected by it. Though both India and Australia, stand at a distance from the island, globalisation has connected them all, and supply chain disruption is an event both developing and developed economies wish to avoid. Therefore, the problem of Taiwan's reunification is considerably more important than is believed. Similar to this, the threat posed by the A2/ AD programme, whose only stated goal is to prepare for a Taiwanese emergency, also carries painful repercussions for the regional order. The problem with China is that it is not only claiming Taiwan but large swaths of the

China has already disregarded the decision of the International Court of Justice regarding the South China Sea, which shows its brazen disregard for the rule-based international order. Scholars have argued that China wants to convert the South China Sea into 'China's lake'

South China Sea (SCS) which meets the shores of almost all Association of Southeast Asian Nations (ASEAN) countries. Schina's blatant militarisation and forceful annexation of the SCS islands have been deplored by the entire Indo-Pacific community unanimously. China has already disregarded the decision of the International Court of Justice regarding the South China Sea, which shows its brazen disregard for the rule-based international order. Scholars have argued that China wants to convert the South China Sea into 'China's lake' where it would have the privilege to decide the navigation rights of other nations. If China were to gain control of the South China Sea, the global economy would face turbulence, and China would exploit the

^{82.} William Langley and Chan Ho-him, "How Rising Tensions Across the Taiwan Strait could Threaten Global Trade", *Financial Times*, August 5, 2022, at https://www.ft.com/content/68871ec9-6741-4e0a-8542-940152df4e36. Accessed on August 10, 2022.

^{83.} Pooja Bhatt, Nine Dash Line: Deciphering the South China Sea Conundrum (New Delhi: KW Publishers Pvt Ltd, 2020).

^{84.} Stein Tønnesson, Gordon Houlden, et al., eds, *Security, Strategy, and Military Dynamics in South China Sea: Cross-National Perspectives*, 1st ed. (Bristol University Press, 2021).

region to exact revenge on its enemies. For instance, the South China Sea is used for 55 per cent of India's trade.⁸⁵

As mentioned above, Taiwan's incorporation with mainland China would enhance its power projection capabilities, and Taiwan's industrial economy would be beneficial for the extension of the mainland's technological base. The enhanced power with the incorporation of Taiwan would enable China to occupy its claims in the SCS. Once it gets its way with the United States during the Taiwan contingency, it will boost Beijing's confidence as well as reduce the US' credibility among its allies. The idea of reputation and credibility has influenced the US foreign policy to a great extent. The loss of credibility will hamper the United States' long-held relations with regional allies such as Japan, South Korea, and Taiwan. The United States' delay in intervening during a Taiwan contingency would lead to the end of the United States' primacy in East Asia. In the absence of its credibility, American allies will balance the USA and China, and eventually, the growing pressure will lead them to bandwagon with China.86 Therefore, the presence of the US Army in the western Pacific and similarly its various security commitments to China's adversaries maintain the feasible balance of power in East Asia and curb China's intimidating moves against the regional states. However, a hypothetical scenario of a successful A2/AD adventure by the PLA would lead to a dramatic shift in the balance of power in the Indo-Pacific. The globalisation of A2/AD forces is one such concept that should make the world realise that China's preparation for A2/AD systems is not only for a regional war such as for Taiwan and the Japanese islands but will lead to greater cascading effects which will include the whole Indo-Pacific region.

^{85. &}quot;Question No. #4832 Indian Trade Through South China Sea", The Minister of State in the Ministry of External Affairs, GoI, answered on April 1, 2022, at https://www.mea.gov.in/lok-sabha.htm?dtl/35118/question+no+4832+indian+trade+through+south+china+sea#:~:text=(a)%20to%20(e),China%20Sea%20and%20Malacca%20Straits. Accessed on August 1, 2022.

^{86.} Amitav Acharya, "Will Asia's Past Be Its Future?", *International Security*, vol. 28, no. 3, 2003, pp. 149-164.