# Russia-Ukraine Conflict: Military Lessons for India

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"If you wage war, do it energetically and with severity. This is the only way to make it shorter and consequently less inhuman".

- Napoleon

#### Abstract

The Russia-Ukraine conflict has emerged as a pivotal geopolitical event with far-reaching implications for global security. As the international community closely monitors the unfolding dynamics in Eastern Europe, this essay seeks to analyse the military lessons that India can draw from the ongoing crisis. The multifaceted nature of the conflict, encompassing conventional warfare, hybrid tactics, and strategic considerations, provides a unique opportunity for India to glean valuable insights for enhancing its own defence capabilities and strategic preparedness. This essay attempts to comprehensively examine key aspects, including the evolving nature of modern warfare, the role of technology, and the importance of strategic alliances. By dissecting the strategies employed by both Russia and Ukraine, the study aims to identify lessons for effective military doctrines, orchestration of operational art, and diplomatic strategy that could be pertinent to India's defence posture. The essay employs a multidisciplinary approach, combining

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military strategy, geopolitical analysis, international interjections, and technology assessment to provide a holistic understanding of the Russia-Ukraine conflict. The findings aim to equip Indian policymakers, military leaders, and strategic thinkers with actionable insights to fortify the nation's defence capabilities and navigate the evolving challenges in an increasingly complex geopolitical environment. Lastly, this research endeavours to contribute to the discourse on national security by distilling relevant lessons from a contemporary conflict with profound implications for the global order.

#### Background

The Russia-Ukraine conflict, which began in 2014, has been one of the most significant geopolitical crises of the 21<sup>st</sup> Century, profoundly impacting Ukraine and global politics. The Russia-Ukraine conflict has its origins in Ukraine's historical links to Russia. Ukraine was part of the Soviet Union until its dissolution in 1991, when it gained independence. The relationship between Ukraine and Russia has remained complex, with Ukraine oscillating between seeking closer ties with Europe and maintaining its historical, cultural, and economic links with Russia. Ukraine emerged as a contested region between the European Union (EU) and Russia, dividing the country into two factions: Western Ukraine, aligned with European interests, and Eastern Ukraine, aligned with Russian interests. This conflict started with the 2004 Orange Revolution. The Ukrainian political crisis increased the fighting in late 2013. Ukrainians protesting for EU integration overthrew pro-Russian President Viktor Yanukovych in 2014. This threatened Russia's dominance in Ukraine, thus, it annexed Crimea in Feb 2014. The annexation drew international condemnation and led to sanctions on Russia.

In Eastern Ukraine, notably in the Donetsk and Luhansk regions, pro-Russian separatist movements emerged following the annexation of Crimea. The declaration of independence by these regions led to violent confrontations between Ukrainian forces and separatists. Russia was accused of supplying separatists with military support, thus, aggravating the conflict. Multiple attempts at resolving the conflict through diplomacy were made, with the Minsk agreements being the most notable. These agreements, brokered by the Organisation for Security and Cooperation in Europe, aimed to establish a ceasefire and a roadmap for a peaceful settlement. However, ceasefires were frequently violated, and a lasting peace remained elusive.

#### **Geopolitical Implications**

The Russia-Ukraine conflict has had significant geopolitical ramifications. The conflict has strained Russia's relations with the West, leading to sanctions and increased tensions. It has contributed to a broader deterioration of Russia's relations with the North Atlantic Treaty Organization (NATO) and the EU. Eastern European countries, particularly those bordering Russia, have become increasingly wary of Russia's actions, leading to greater alignment with NATO and requests for NATO assistance. Ukraine's desire for closer ties with the West has grown stronger, resulting in a shift away from Russia and efforts to join Western institutions. The conflict highlighted the limits of international institutions in resolving disputes and underscored the importance of great power politics in shaping global events. The conflict has had highlighted severe humanitarian consequences, with thousands of deaths and significant displacement of civilians. Infrastructure in affected areas has been heavily damaged. Economically, Ukraine and Russia have suffered due to sanctions, reduced trade, and the costs of the conflict.

The Russia-Ukraine conflict represents a complex and ongoing geopolitical crisis with far-reaching implications. It has strained international relations, challenged regional security, and tested the effectiveness of diplomatic efforts to resolve conflicts. As the situation continues to evolve, the world watches closely, hoping for a peaceful resolution that respects the sovereignty and aspirations of Ukraine while addressing Russia's concerns.

#### The Special Military Operation

On 21 Feb 2022, Russian President Vladimir Putin expressed his primary apprehensions and anxieties regarding the progressive advancement of NATO towards the east, resulting in the gradual encroachment of its military infrastructure upon the Russian border. He said that "Over the past 30 years, Russia has been patiently trying to come to an agreement with the leading NATO countries regarding the principles of equal and indivisible security in Europe".<sup>1</sup> However, in return, Russians have constantly encountered either cynical lies and deception, or attempts at coercion and extortion. At the same time, despite Russian objections and worries, the NATO alliance has continued to grow. He added, "Its military machine is moving and, as I said, is approaching our very border".<sup>2</sup>

Three days later, on 24 Feb 2022, Putin made it clear in a televised address that the People's Republic of Donbas had asked Russia for help. Under the circumstances, Russia had no other option and was compelled to take bold and immediate action. He announced that:

"In this context, under Article 51 (Chapter VII) of the UN Charter, with permission of Russia's Federation Council, and in execution of the treaties of friendship and mutual assistance with the Donetsk People's Republic and the Luhansk People's Republic, ratified by the Federal Assembly on 22 Feb, I made a decision to carry out a special military operation".<sup>3</sup>

He added, "The purpose of this operation is to protect people who, for eight years now, have been facing humiliation and genocide perpetrated by the Kyiv regime".<sup>4</sup>

"To this end, we will seek to demilitarise and denazify Ukraine and bring to trial those who perpetrated numerous bloody crimes against civilians, including against citizens of the Russian Federation. It is not our plan to occupy Ukrainian territory. We do not intend to impose anything on anyone by force".<sup>5</sup>

#### Phases of Military Campaign

Firstly, going by the intricacies of warfighting terms, the special military operations have transcended into the 'Military Campaign' that is now entering its nineteenth month. During this period, it has seen a complete cycle of weather changes, but both sides are undeterred by the prolonged operations, and the conflict is still ongoing. Besides conventional warfare, the Russia-Ukraine conflict is notable for its use of hybrid warfare tactics. Hybrid warfare combines conventional military tactics with unconventional methods, such as cyberwarfare, disinformation campaigns, and support for insurgent groups. Russia has been accused of arming and

supporting separatist forces while also engaging in cyberattacks and disinformation campaigns to sow discord and confusion.

A geographical orientation on the map and a summary of conflict with a self-explanatory time-sliced pictorial depiction of Russia's control of Ukraine's territory since Feb 2022 is considered essential for understanding the chronology of the campaign's progress, thus far.



Figure 1: Map Explainer: Key Facts About Ukraine Source: Visual Capitalist<sup>6</sup>

• On 24 Feb 2022, Russia invaded Ukraine by land, sea, and air, targeting military assets and cities. The United States' (US) President Joe Biden called the attack 'Unprovoked and Unjustified' and imposed harsh sanctions on top Kremlin officials<sup>7</sup>, including Putin, four of Russia's largest banks<sup>8</sup> and the oil and gas industry.

• On 26 Feb 2022, Russia launched an all-out offensive on Ukraine, targeting almost the entire country with a lesser concentration on the far western side. An audacious air operation was undertaken to capture Hostomel airfield near Kyiv. However, it could not execute the follow-up air operations and logistical support, leading to the disastrous outcome of the missions. Russia had to take a tactical pause at the end of the first week of the invasion.<sup>9</sup>

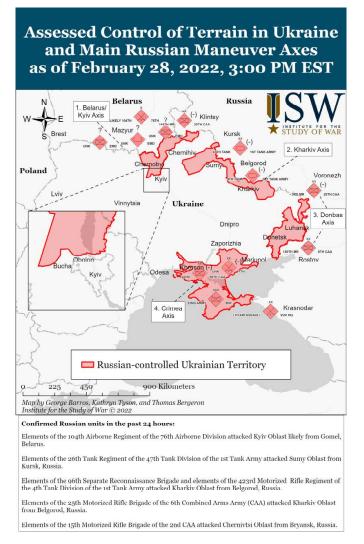


Figure 2: Russian captured Area in Ukraine as of 28 Feb 2022 Source: Institute for the Study of War

• On 02 Mar 2022, 141 of the 193 United Nations (UN) member states voted in an emergency session of the UN General Assembly to condemn Russia's invasion of Ukraine and demanded its urgent withdrawal from Ukraine.<sup>10</sup>

• By 06 Apr 2022, Russia had withdrawn all troops from Ukraine's capital (Kyiv) region.<sup>11</sup>

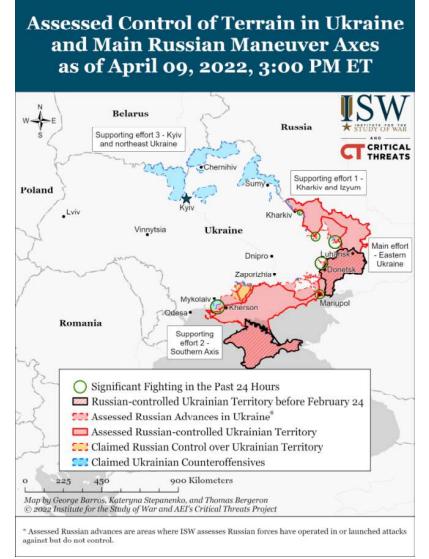


Figure 3: Ukraine's Counter Offensive and Russian Captured Area as of 09 Apr 2022

Source: Institute for the Study of War

• On 14 Apr 2022, Russia faced a major setback with the sinking of the Russian missile cruiser *Moskva*, the flagship of the Black Sea Fleet.

• On 18 Apr 2022, Russia conducted a strong offensive in eastern Ukraine after failing to conquer the capital.<sup>12</sup>

• By May 2022, Russian forces seized Mariupol, a crucial port city in the southeast.<sup>13</sup>

• Since Jun 2022, fighting has mainly occurred in Ukraine's east and south<sup>14</sup>, with Russian weapons targeting the Black Sea and Sea of Azov port cities.<sup>15</sup> Ukrainian food exports were blocked, causing supply chain chaos.

• By mid-Aug 2022, the war's frontline shifting southward generated concerns about a nuclear fallout at the Russian-captured Zaporizhzhia atomic reactor on the Dnipro River.<sup>16</sup>

• Sep 2022 saw Ukrainian forces march northeast and revive the southern counteroffensive. Ukrainian forces shocked Russian soldiers and cut off crucial supply routes by retaking significant Kharkiv land. Ukrainian forces recaptured Kherson and all-terrain west of it, forcing Moscow to retire across the Dnipro River.<sup>17</sup>

• By the end of 2022, Ukraine had taken back half of the land that Russia had taken over. However, Russia still controlled 14.0 per cent of the country.<sup>18</sup>

• Putin also hinted at the chance of a nuclear escalation, citing the US precedent of dropping atomic bombs on Hiroshima and Nagasaki during World War II.

• In Aug 2023, Yevgeny Prigozhin, leader of the Russian private military company Wagner Group, was killed in an air crash.<sup>19</sup> Two months earlier, Prigozhin had led a failed uprising against the Russian government.

## Assessed Control of Terrain in Ukraine and Main Russian Maneuver Axes as of September 12, 2023, 3:00 PM ET



\* Assessed Russian advances are areas where ISW assesses Russian forces have operated in or faunched attacks against but do not control.

Figure 4: Russian captured Area in Ukraine as of 12 Sep 2023 Source: Institute for the Study of War

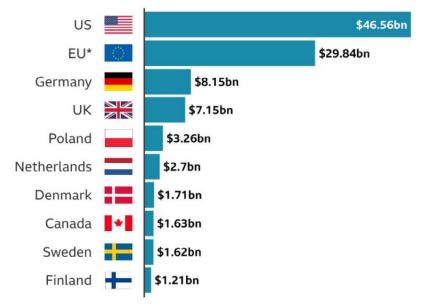
#### International Interjections

A report on the Ukraine war<sup>20</sup> states that the US has provided nearly USD 40.0  $bn^{21}$  in security assistance to Ukraine since 24 Feb 2022, including USD 19.0  $bn^{22}$  in military aid and USD 16 bn

in humanitarian aid. In early 2023, the Biden administration approved the Patriot Air Defence system for Ukraine and significantly increased its troop presence to over 1,00,000 in Europe.<sup>23</sup> US President Biden said in a joint press conference with British Prime Minister Rishi Sunak on 08 Jun 2023, that the US has the funds to "Support Ukraine as long as it takes". A day later, USD 2.1 bn in military aid was announced.<sup>24</sup> NATO has sent more weapons and ammunition to Ukraine to defend against Russia's invasion. The EU, Germany, and the United Kingdom (UK) have given the most military aid after the US. Military aid<sup>25</sup> to Ukraine is shown in Figure 5. Meanwhile, Russia has turned to North Korea and Iran for military equipment and intelligence collection. It continues to sell subsidised gas and oil to other countries.

### Largest donors of military aid to Ukraine

Commitments made by donors for arms and equipment, 24 Jan 2022 to 31 May 2023



\*Commitments by EU institutions include the Commission, Council, EPF and EIB Figures do not include commitments related to other military purposes

Source: Kiel Institute for the World Economy

BBC

Figure 5: Ukraine's Military Aid until May 2023 Source: BBC, Kiel Institute for the World Economy The US announced a USD 500 mn military aid package for Ukraine<sup>26</sup> until May 2023. The US has also confirmed the provision of cluster munitions, which has alarmed NATO allies. Ukraine will also receive French missiles like those recently delivered, Storm Shadow missiles by the United Kingdom. By Jun 2023, the UN Human Rights Office had registered almost 9,000 civilian deaths and over 15,000 civilian injuries.<sup>27</sup> The bloodshed has forced over six million people to flee to neighbouring countries, notably Poland and Moldova, where the US and other partners assist refugees.

#### Lessons for India

The ongoing conflict, now spanning over 32 months (as of this writing) has led defence analysts worldwide to revisit the lessons learnt many times. The assessment of evolving phases of military operations in these months can be maturely analysed for well-informed lessons that would be relevant for any other country with further extrapolation in their local context. Following are a few of the lessons drawn in the Indian context.

Steep Asymmetry Gradient. Russia is a superpower with no comparison to the military prowess of Ukraine. Russia has very high technological and numerical superiority against Ukraine and maintains a steep gradient in the military assets, capacity and capability build-up. This holds true both in the conventional and sub-conventional domains. Russia also enjoys a significant asymmetry in the form of nuclear deterrence. However, despite such overall superiority, it has not been able to achieve its objective to date. The prolonged duration of the battle, without any imminent resolution, can be attributed to a confluence of factors, namely the military incompetence exhibited by the Russian military command and the mobilisation of public support orchestrated by President Zelenskyy.<sup>28</sup> This argument leads to the following observations and lessons for a country waging war against the adversary. Along with military lessons, a few interconnected lessons regarding the intent of war are also deliberated.

**Political Objectives and End State**. The country must clearly spell out the political objectives to its armed forces, if not the country. Unfortunately, an unambiguous political intent has not been observed in any of the addresses given so far by President Putin. No specific official statements in this regard have been made until now. Russian political leaders would find it unacceptable

if the country relinquished the advantages it has acquired in combat. Likewise, the minimum permissible solution for Ukraine would be a return to the status quo.<sup>29</sup> How these conflicting viewpoints can be resolved is yet to be determined. It is most likely heading akin to the Line of Control and Line of Actual Control (LAC) references in the Indian context. The end state throughout this conflict has been blurred and indecisive, leading to the failure of military operations by the Russians.

Conflict Termination Criteria (CTC). It is essential to have the CTC well-defined before waging war. It helps maintain the focus throughout the conflict, and the military forces make their operational manoeuvres accordingly to meet those objectives and force the adversary to end the conflict on its terms. The initial objectives of the Russian government were to swiftly effect a regime change in Ukraine and establish a governing body that would be amenable to Russian interests while also ensuring Ukraine's commitment to refrain from joining NATO. It is an option that a predefined CTC may be revisited for meaningful direction and the execution of military operations. Depending on the conflict's progress, attrition, and percentage of success in achieving objectives, the best alternate CTC must be made the original one is not achievable. During this prolonged conflict, there have been numerous occasions for the Russians to revisit the CTC, but unfortunately, this has not been seen on the ground, and the conflict does not seem to be ending. Therefore, having a CTC is essential.

**Operational Art.** The Russo-Ukrainian conflict is a classic example of how war should not be orchestrated. The Russian side has experienced the sacking of military leadership at least six times until Aug 2023, which does bring out the ineffective orchestration of the tactical and operational art of warfare. A critical lesson learned from this conflict is maintaining synergy between all the players on the battlefield. Two major embarrassments the failed attempt to capture Hostomel Airfield and the sinking of the Moskva in the initial phase of the conflict, are glaring examples of a lack of operational planning and synergy within and with other services in the battlespace. The surrender of Snake Island, the withdrawal from Kyiv, being unable to capture Odesa thus far, and losing almost the entire North Ukraine are direct reflections of the mistuned operations by the Russian forces. The Indian Armed Forces will have to pay adequate attention to this aspect in the light of the proposed realisation of theaterisation.

**Intelligent Preparation of the Battlefield (IPB)**. The IPB is one of the early and primary stages of the preparatory phase of war. This conflict has shown that the IPB of Russia did not meet the desired professional standards. Right from the first week of the conflict, the tactical failures in the execution of suppression of enemy air defence missions, special heliborne operations, special operations, delays in follow-up operations, and logistics are a few of the examples that remind us of the necessity of a well-planned IPB. Russian actions have, at times, succumbed to the complacency factor of being a much superior force. In the Indian context, this aspect needs to be well-planned and rehearsed. One should also be cautious of the widely and easily accessible misinformation through Open-Source Intelligence (OSINT) as part of propaganda warfare. Both China and Pakistan have found themselves effectively managing their tactical social propaganda.

Revisiting Centre of Gravity (CoG). The John Warden Model of the CoG is still relevant to the core. However, this concept is shadowed under the garb of an ambiguous end state, CTC by the central leadership, and ineffective Op Art by the military commanders on the battlefield. In the first three days of the conflict, Russian forces showed an intent to strike the CoG and capture Kyiv, forcing President Zelenskyy to come down to the negotiation table. However, the orchestration of military tactical operations was severely jeopardised due to the lack of follow-up on the ground or in the air. Since then, the mighty Russian forces have been unable to hit the CsoG, such as Kyiv, Odesa etc., which is alarming. It is time to revive the basics of neutralising the CsoG and mop up the infructuous, prolonged special military operations with a well-planned final blow on the CoG, enabling the painful operations to end. Russia has taken most of the Donbas region. The Ukrainians recaptured the control of Zaporizhzhiya and Kherson oblasts from the Russians, and the land battle still continues there. To assert full dominion over the entire northern shoreline of the Black Sea, which shares a border with Ukraine, the city of Odesa holds significant strategic value as a CoG that the Russian forces may choose for targeting and call a truce. Odesa links Crimea to the Russian mainland by land route, passing through Donbas for secured Russian access to the Atlantic via the Mediterranean

Sea. This reminds us to revisit CoG and critical vulnerabilities, especially with the infrastructure development by both Pakistan and China nearing border areas.

**War of Resources**. This conflict has undoubtedly highlighted the need for adequate resources to wage a war for prolonged durations. The detailed analysis of the phases of operations indicates that even Russia had to take several tactical pauses right after the first week and in between to gather and consolidate its resources for the next moves. Prolonged wars indeed lead to the 'Battle of attrition and fatigue'. In the Indian context, self-reliance is an essential drive that needs to be boosted expeditiously to meet military hardware requirements. In the interim, India must keep its diplomatic channels open with the military hardware supplier countries during war or conflict. Also, integrated training in the theaterisation concept requires to be strengthened.

War of Egos. Though rarely discussed, this conflict has also emerged as a War of Egos between the leaders by virtue of being the superpowers. The ongoing conflict is not simply between Russia and Ukraine; it involves bigger powers such as the US, the entire West, and NATO against Russia. Various statements and postures by leaders of all these countries, even to the extent of nuclear threats in this prolonged period, show that in this age and era of peace, countries are still betrothed to conventional war. The chances of India getting into such a scenario with Pakistan may not exist due to the huge disparity in most cases, except nuclear deterrence. However, with China, it cannot be ruled out due to India's growing stature in all sectors. However, as a responsible and diplomatically mature nation, India would not engage in such an immature act.

#### Reequipping the Forces.

• The protracted struggle has underscored the necessity for a diverse range of military weaponry to effectively address the emerging threats from the adversary. The conflict has witnessed the utilisation of a wide array of weaponry and systems, including tanks, combat vehicles, air defences, longrange artillery, howitzers, anti-tank weapons, drones, fighter jets, para drops, helicopters, electronic warfare, space-based surveillance, communication, intelligence, surveillance and reconnaissance, loitering munitions, among others. It has reminded us that while newer technology shows greater reliability and efficacy, no older weapon or system is obsolete. Every weapon will be used in the war at some point.

A similar assessment can be drawn from the ongoing and prolonged deployment of Indian troops in Eastern Ladakh post-Galwan skirmish. It has necessitated the need for the Indian armed forces to reequip themselves with the military hardware that may be required for specific terrain and purposes. For example, India needs more robust detection capabilities in its mountainous terrain. Radars have the fundamental limitations of the line of sight. Thus, dependence on passive detection systems is one way out. The People's Liberation Army Air Force is mitigating the disadvantages of having their airbases at higher altitudes, which penalise weapon-carrying capability with the constant infrastructure development for their rocket and missile forces throughout the International Border and LAC. As a result, India needs to defend its airbases and airstrips, which are vulnerable to missile attacks with almost no early warning available. Thus, India needs consider Iron Dome-type systems in such terrain for specific sectors and areas.

#### Space-based Warfare.

• This conflict has further validated the need to graduate from the conventional domain of warfare to the space domain. During the initial phase of operations, it was observed through many reports that the enhanced accessibility of satellite data and signals impacted the effectiveness and durability of Ukraine's communication and military intelligence systems. It also facilitated new OSINT applications for space-based data reporting.<sup>30</sup>

 According to reports, SpaceX has deployed thousands of Starlink terminals in Ukraine to ensure continuity of broadband connectivity. The funding for this initiative is said to have been provided by commercial and certain governmental entities.<sup>31</sup> The Ukrainian military's use of satellite broadband connectivity is extensive, encompassing tactical communications. In addition, commercial radio frequency spectrum monitoring, implemented on satellites weighing 15 kg by the American enterprise HawkEye 360, has played a significant role in identifying military personnel movements and endeavours to disrupt global positioning sytem signals.32 The utilisation of commercial high-resolution radar images plays a significant role in the process of mapping military activities and chronicling ground changes, providing near realtime information. According to the US National Geospatial-Intelligence Agency, extensive utilisation of commercial geospatial intelligence has been achieved by integrating data obtained from over 200 commercial satellites and more than 100 distinct companies. This utilisation has been described as 'Unprecedented' in scale and scope.33 Taking a clue from this conflict, the Indian Air Force (IAF) has rightly projected itself as an aerospace force through its latest doctrine of the IAF (IAP 2000-22). India must become a potent user of space with its robust and safe military application through space at the earliest.

Short, Swift and Sectoral War. Since the beginning of the conflict, analysts have begun inferring that the age of long wars has returned, and the notion of a short and swift war is no longer valid. Similarly, the inferences that tanks have become obsolete, drones are the future of aerial warfare, etc. These early inferences have caused significant damage and confusion in strategic and academic circles, in addition to the thought processes of men in uniform. It is important to appreciate that this conflict is not a classical war, and it has the merit of becoming a relevant case study in various war colleges of how wars should not be fought. In the Indian context, no country has the complete wherewithal to engage in such prolonged wars. In all likelihood, this region will experience only short and sectoral war similar to Op Vijay in 1999.

#### Conclusion

The Russo-Ukrainian war in the highly technological era has plenty to offer regarding how war is not to be fought by the superior nation and how the end state of the superior force can still be kept at bay by an inferior nation, although at a higher cost. It also reveals that every country will have to depend on itself during such crisis due to global and regional geopolitical and geoeconomic complexities. Though not much similarity exists in the Indian context, many of the above lessons can be learned from this crisis between a superior nuclear state and an inferior non-nuclear state. These lessons can be addressed at strategic, operational, and tactical levels for the defence forces. At the same time, the conflict has also brought various lessons for the national and political leadership, the general populace, industry, etc. While many scholars and practitioners of warfare have outrightly changed their stance due to the outcome of the war, such as the notion that short and swift wars have transitioned into long-drawn conflicts, or that all-out physical warfare has returned; these may not be the appropriate lessons in the Indian context. India and its adversaries have their peculiarities ranging from political, economic, ethnical and natural hindrances where the conduct of war, if any, will be quite different to the ongoing Russia-Ukraine conflict.

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