

The Spectre of Nuclear Weapons Use in Ukraine: The Nuances of Nuclear War Risk

Ukrayna'da Nükleer Silah Kullanımı Hayaleti: Nükleer Savaş Riskinin Nüansları

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Abstract

The essence of Russian security policy is composed of the combined use of conventional and unconventional threats in both war and peacetime. Russia aims to dominate the process of escalation especially by frequently threatening nuclear war in Ukraine. It attempts to maintain the strategic initiative superiority, forcing its enemies to act under its control. Put differently, through the means of manipulating the fear of nuclear war in Ukraine, it tries to avert other states from directly intervening in the battlefield and to prevent military aid delivered to its enemies from becoming strategic. Methodologically, this article examines Russia's effort to gain dominance in escalating tensions through nuclear risk as a case study. The nuclear risk hinges on the uncertainty of nuclear deterrence. The nuances of this often-ignored uncertainty are explained in this article. Since such a uncertainty poses credible risk of nuclear war, absolute victory is not possible. No party will get everything it wants; therefore, the only solution is diplomatic compromise through negotiation. The importance and implications of this article lie in the fact that the problems and warnings examined here are likely not only in Ukraine but also in a possible future crisis over Taiwan or future conflicts involving nuclear powers.

Keywords: Nuclear Deterrence, Nuclear Weapons, Escalation Dominance, Russia, Ukraine

Öz

Rusya güvenlik politikasının özünü, hem savaşta hem barış zamanlarında, konvansiyonel ve konvansiyonel olmayan tehditlerin ve silah sistemlerinin bir arada kullanılması oluşturmaktadır. Özellikle nükleer savaş tehdidini sıklıkla savurarak, çatışmanın tirmandırılması sürecinde baskın olmaya çalışmaktadır. Barış zamanında bu şekilde elde ettiği stratejik girişim üstünlüğünü, çatışma ve krizlerin tüm aşamalarında korumaya çalışarak, düşmanlarını kendi kontrolü altında hareket etmeye zorlamaktadır. Diğer bir deyişle nükleer savaş korkusunu manipüle ederek, diğer devletlerin savaş alanına doğrudan müdahalesini engellemeye ve askeri yardımın stratejik hale gelmesini sınırlamaya çalışmaktadır. Rus askeri zihniyetinin kilit noktası budur. Etkisi psikolojiktir ve Ukrayna'da bugüne kadar kısmen başarılı olmuştur. Makalenin önemi ve yansımaları, irdelenen husus ve uyarıların sadece Ukrayna'da değil, olası Tayvan'a dair bir krizdeki gibi nükleer güçlerin dahil olacağı ilerideki çatışmalarda da muhtemel olmasında yatmaktadır. Metodolojik olarak, Rusya'nın Ukrayna'daki nükleer stratejisi bir örnek olay/vaka incelemesi olarak ele alınmıştır. Rusya'nın nükleer risk yoluyla gerilimi tirmandırma hakimiyeti kazanma çabası irdelenmiştir. Bu çaba, nükleer caydırıcılığın belirsizliğine dayanmaktadır. Nükleer saldırı riskine yol açan ve sıklıkla görmezden gelinen bu belirsizliğin nüansları açıklanmıştır. Bu belirsizliğin, nükleer savaş riski oluşturması nedeniyle, hem Ukrayna'daki hem de nükleer silahların gölgesinde oluşacak ilerideki çatışma ve krizlerin mutlak zaferle sonuçlanması mümkün değildir. Hiçbir taraf tüm isteklerini elde edemeyecektir. Bu şartlarda tek çözüm müzakerelerle gelecek diplomatik uzlaşdır.

Anahtar Kelimeler: Nükleer Caydırıcılık, Nükleer Silahlar, Tirmandırma Hakimiyeti, Rusya, Ukrayna

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Introduction: Purpose, Methodology, and the Outline

Russia makes use of conventional and unconventional threats in both in peacetime and war. The continuous use of conventional and nuclear threats helps Russia attain control over escalation processes. The upper hand of strategic initiative thus achieved in peacetime is maintained throughout all phases of crises. This is the gist of Russian endeavour to gain escalation dominance in Ukraine. Russia aims to coerce the enemy to act within a framework that Russia controls. Its effect is psychological, and it partially succeeds in Ukraine up until today. This is realized mainly through credible risk of nuclear war. Methodologically, this article conducts a case study on Russian nuclear strategy in Ukraine and analytically discusses the Russian endeavour to gain escalation dominance via nuclear risk. It also unearths the uncertainty and nuances of nuclear deterrence that give way to risk of nuclear strikes. The manipulation of the uncertainty on the possible use of nuclear weapons is a part of the Russian strategy in current conflicts. The purpose of this article is to help illuminate the latter by taking the conflict in Ukraine as a departure point. Manipulating the fear of nuclear war is the heart of the Russian military mentality at work in Ukraine that halts other states' direct involvement in the battlefield. Russia prevents military aid to Ukraine from getting strategic. Since a similar stratagem may be imitated in future military confrontations, most notably over Taiwan, the discussion on the subject not only clarifies the military affairs in Ukraine but the warnings of this article may also be likely to prove prescient for other possible inter-state conflicts.

In accordance with that purpose of the article, the case study employed herein follows the “interpretive case study methodology.” Interpretive case studies are selected because of an interest in the case rather than in the formulation of a general theory.¹ They have a link to theory; however, they do not contribute to theory development. Rather, they rely on previously established generalizations that are found applicable to the context of interest, helping to shed light on the case at hand. Eckstein calls this a “discipline-configurative” type of study.² The case is explained by subsuming it under well-established propositions: the outcome observed is inferred by deduction from the extant theory and a set of specified antecedent conditions. According to Eckstein, the explanation of the case (in his words, the interpretation) is successful if it is logically compelled by the theory: one should be able to demonstrate that given the regularity and the characteristics of the case, the outcome must have occurred or had a high probability of doing so.

In tandem, the theoretical mainlines are sought through Raymond Aron's, Patrick Morgan's and Robert Powell's work on deterrence theory, thereby relying on previously established generalizations on the point at issue. That is how extrapolations for a possible conflict in Taiwan can be deduced. The first two sections –the first section on examining escalation and the second section on escalation thresholds as social conventions- present the necessary backdrop for the third and fourth sections, which are titled “Use of Nuclear Risk within Russian Military Strategy” and “Nuances of Nuclear Risk in Ukraine”. These last sections elaborate on how Russia is successful at manipulating the risk of a possible nuclear war.

1 Arend Lijphart, “Comparative Politics and the Comparative Method”, *The American Political Science Review*, 65:3, 1971, pp. 682-693.

2 Harry Eckstein, “Case Study and Theory in Political Science”, Roger Gomm, Martyn Hammersley & Peter Foster (eds.), *Case Study Method: Key Issues, Key Texts*, Sage, London, 2000 [1975], pp. 119-164.

1. Escalation Dominance

Escalation dominance refers to a situation where one party of the conflict has the upper hand in terms of their ability to escalate the conflict in a way that is detrimental to their opponent, while the said opponent is unable to respond similarly. This can be due to factors such as superior resources, military capabilities or strategic advantages. In simpler terms, escalation dominance means having the power to intensify the conflict or expand its scope in ways that the other party cannot match. This can include targeting new or previously untouched objectives, opening new areas of conflict or utilizing previously unused weapons. It is an important concept in understanding the dynamics of power and strategy within conflicts. It can occur in three ways: following deliberate objectives, following unintended consequences, and following accidental consequences. However, the increase in violence is not necessarily escalatory on its own. Not every increase or expansion of violence is escalatory: Escalation occurs only when at least one of the parties involved believes that there has been a significant qualitative change in the conflict as a result of the new development.³

Typically, escalation is seen as an interactive process between two or more combatants, with each aggravating their threats or using force in response to the other's actions. In addition, one combatant may escalate unilaterally to increase pressure on the other regardless of what the enemy does. As an illustration, during Operation Desert Storm, Iraq repeatedly tried to escalate the conflict in response to the unchanging nature of sustained air attacks of the coalition forces led by the United States. One of the Iraqi attempts involved launching ballistic missiles against Israel, aiming to improve the Iraqi position. However, this strategy was unsuccessful as the coalition refused to engage in an early ground battle and Israel chose not to get involved. In a different example, Germany's objective in initiating unrestricted submarine warfare during World War I was to gain a significant military advantage without triggering an escalating response. Unfortunately for Germany, this plan backfired as Britain continued to fight and the United States joined the Allies much earlier than anticipated by Germany.⁴

2. Escalation Thresholds as Social Conventions

Escalation thresholds may come in different guises and their diversity is the reason why escalation is not easy to manage. Some escalation patterns may be symmetric in that one of the combatants may cross a threshold which is considered as a breach by both combatants. These can come in the form of being the first to initiate hostilities in a crisis, crossing recognized international territorial boundaries or employing nuclear weapons in a war. However, the use of nuclear weapons in specific ways such as destroying satellites in orbit or employing electromagnetic pulses to inflict damage without causing significant loss of life may or may not be seen as a clear violation of the widely accepted nuclear threshold. Essentially, these thresholds are not inherent in reality, but rather social constructs shaped by the perceptions of those involved in the conflict. They are subjective and mutually constructed by the parties involved. It is possible for one party to be highly conscious of a particular threshold while the other remains oblivious to it. Moreover, if one party recognizes the importance of a specific threshold to the other party, as exemplified by China's utmost concern regarding Taiwan's declaration of independence, that threshold will likely hold tremendous significance for all the parties involved.

3 Forrest E. Morgan et al. *Dangerous Thresholds: Managing Escalation in the 21st Century*, 1st ed., Rand Corporation, 2008, p. 11.

4 Ibid.

3. Use of Nuclear Risk within Russian Military Strategy

The Russian concept of “*Strategicheskoye Sderzhivanie*” (Strategic Deterrence) bears only a weak connection to the Western conceptualization of deterrence. It assumes a constant condition of warfare, if not an actual war at all times. The constant condition of warfare is the assumed operational context for Russians to force the enemy to act within a framework that Russia controls.⁵ As such, it contains an informational warfare dimension to it. This Russian concept suggests a multi-domain mix of coercion and deterrence, in which a coordinated system of military and non-military (political, diplomatic, legal, economic, ideological, and cyber) measures are to be applied consecutively or simultaneously to defer military action.⁶ Within that mix, unconventional military capabilities are effective by their mere existence and the threat of their usage. Accordingly, Russian control over escalation on the battleground is also achieved through the effective threat of nuclear war risk.

Russian tactics can be broken down into the stages of demonstrative moves which follow the principles of deterrence by fear-inducement and progressive infliction of damage, which is deterrence through limited use of force. Fear-inducing deterrence works utilizing demonstrative actions which, in times of peace or perceived military danger, convey to the adversary that Russian forces are prepared to harm their most essential possessions. These may include chemical and petroleum sector facilities, nuclear and hydroelectric power plants, having the potential to cause grave financial losses, human casualties, or disruptions to the way of life in the country. On the other hand, the strategy of deterrence by restricted use of force involves selecting targets that do not pose a threat to civilian lives or unintentional escalation and instead focus on destroying or disabling strategically significant items which are relevant to the military or the economy of the country. Before an actual escalation, these tactics entail indicating one’s skill and willingness to use force. Russian military strategists anticipate successive levels of damage commencing with single and grouped strikes by using conventional weapons and issuing nuclear threats, either as a preventive action when there is an imminent threat of attack or at the beginning of the combat. This is a case of a demonstrative use of force, which could additionally include the use of nuclear weapons.⁷

To be sure, for Russia, the adversaries do not end with Ukraine. American support for Ukraine is a key issue. The American aversion to casualties as a possible asymmetry is not a factor in this conflict because the United States (US) did not put any boots on the ground in Ukraine other than its military advisers. Yet, the fact that the American public is getting war-weary due to the prolongation of the war and prohibitive costs of aid to Ukraine constitutes the asymmetry in which Russia enjoys an advantage in this conflict. The probability of Russian use of nuclear weapons has been haunting the conflict in Ukraine right from the start. The longer the conflict, the more haunting the nuclear risk becomes. The reason for this is the fact that victory tends to become more and more imperative for the combatants as the wartime losses pile up. This makes it increasingly attractive to consider costly, risky, or even desperate measures, many of them escalatory, which seem to offer the possibility of success if the current trajectory of events does not appear to be leading toward a satisfactory outcome.⁸

5 Stephen Blank, “Nuclear Weapons In Russia’s War Against Ukraine”, *Naval War College Review*, 75:4, Autumn 2022, p. 54.

6 *Military-Encyclopedic Dictionary of the Russian Ministry of Defense*, available at encyclopedia.mil.ru/ Research Briefing, 28 June, 2023, <https://commonslibrary.parliament.uk/research-briefings/cbp-9825/>, accessed 12.10.2023.

7 Michael Kofman and Anya Loukianova Fink, “Escalation Management and Nuclear Employment in Russian Military Strategy,” *War on the Rocks*, June 23, 2020, <https://warontherocks.com/2020/06/escalation-management-and-nuclear-employment-in-russian-military-strategy/>, accessed 26.09.2023.

8 Richard K. Betts, *Nuclear Blackmail and Nuclear Balance*, Washington, D.C.: Brookings Institution Press, 1987;

Simultaneous with his order of Russian invasion of Ukraine in February 2022, the President of the Russian Federation Vladimir Putin declared that any country which considered the possibility of interfering in Ukraine would confront results that were never seen in history.⁹ On February 27, Putin ordered the Russian nuclear forces to be put on “special combat readiness” and this order led some experts and news outlets to interpret it as high alert nuclear status. The second important occasion was Putin’s speech on September 21, which was given in response to perceived nuclear threats from NATO.¹⁰ In this speech, Putin announced the partial mobilization of up to 300,000 reservists, which was interpreted as an indication that Russia was losing ground in Ukraine. Moreover, in his October 3 address, Putin said that the United States was the only country which used nuclear weapons in a war and thus it had already set the precedent for the use of nuclear weapons at the end of World War II.¹¹

Putin also stated that the goal of Russian defence policy is to “provide guaranteed strategic deterrence, and, in the case of a potential external threat, its effective neutralization” in his speech in Sochi in 2017.¹² According to the Russian President, strategic deterrence (*Strategicheskoye Sderzhivanie*) is a comprehensive idea which aims to influence the enemy’s decision-making by combining military and non-military means. According to Russia’s 2015 National Security Strategy, a range of inter-connected political, military, military-technical, diplomatic, economic, and informational measures are collectively referred to as strategic deterrence all of which are used to prevent the use of force against Russia, defend its sovereignty, and maintain its territorial integrity. The Russian nuclear doctrine does not advocate the first use of nuclear weapons, however, it does not preclude such a course of action in the event of a conventional attack that would threaten the state’s existence. President Putin has increasingly employed the threat of the Russian nuclear arsenal to challenge the Western military and diplomatic support of Ukraine after the Russian invasion of the country in February 2022.

As part of its campaign of nuclear deterrence, Russia has placed its nuclear weapons on high alert, tested and deployed new weapons, raised the spectre of resuming nuclear testing, and suspended its participation in the critical nuclear arms control agreement with the United States in March 2023.¹³ Russia declared in June 2023 that it would place tactical nuclear weapons on the border with Belarus, the first such deployment outside of the country since the dissolution of the Soviet Union in 1991. While the decision does not directly violate the Nuclear Non-Proliferation Treaty (NPT), British parliamentarians have suggested that being similar to NATO’s agreements on nuclear sharing, the decision violates the substance

Alexander L. George and William E. Simons, eds., *The Limits of Coercive Diplomacy*, 2nd ed., Boulder, Colo.: Westview Press, 1994.

9 Putin warns that the West shouldn’t ‘push’ Russia out of the global economy *PBS News Hour* Feb 24, 2022 <https://www.pbs.org/newshour/world/putin-warns-that-the-west-shouldnt-push-russia-out-of-the-global-economy>, accessed 12.11.2023.

10 Exclusive: NATO chief calls Putin’s nuclear threat a ‘dangerous’ escalation *Reuters*, September 21, 2022 <https://www.reuters.com/world/europe/exclusive-nato-chief-says-putins-ukraine-escalation-dangerous-reckless-2022-09-21/> accessed 24.11.2023.

11 *Ibid*.

12 Putin Praises Russia’s New Armaments Program, *Russian News Agency TASS*, <https://tass.com/defense/976533>, 20 November 2017, accessed 09.12.2023.

13 Filipp Lebedev and Mark Trevelyan, “Russia Passes Law Pulling Ratification of Nuclear Test Ban Treaty”, *Reuters*, October 26, 2023

<https://www.reuters.com/world/europe/russian-upper-house-approves-de-ratification-nuclear-test-ban-treaty-2023-10-25/>, accessed 20.12.2023.

of the NPT.¹⁴ In reaction to Putin's actions, the Western governments have begun to believe that Moscow may have considered deploying non-strategic nuclear forces, namely tactical nuclear weapons, as its forces began to retreat in autumn 2022. Russia denies these claims, but Western intelligence reports suggest that top Russian leaders did indeed discuss the possibility.¹⁵

Some analysts have dismissed the possibility of Russian nuclear weapons use, arguing that Russia knows that employment of nuclear weapons would be self-defeating.¹⁶ They point to the lack of high-value military targets (for example, concentrated Ukrainian forces) that could be effectively destroyed with such weapons and to the risk that these weapons might harm the Russian troops deployed in Ukraine. Arguing that it would ignite NATO's entry into the war, would erode Russia's remaining international support or would cause possible domestic chaos in Russia, these analysts contend that Russia would be deterred from using nuclear weapons. However, these arguments have not changed the prudent reluctance of Washington to follow suit and rather prioritise the prevention of Russian use of nuclear weapons.

Such American prudence seems to result from several principal factors in the Ukraine case. First, the United States and NATO cannot assume that Russian reasoning about nuclear deterrence and escalation will follow a logic similar to that of their Western counterparts. Second, escalation need not be the outcome of deliberate action: Inadvertent escalation could lead to a crossing of the nuclear threshold under circumstances that were not planned for. Third, and utmost importantly, there is evidence that the Kremlin perceives this war to be almost existential. As for the evidence of this perception, Ukraine has long been in a category of its own in Russian foreign policy priorities. Russia was prepared to commit substantial resources and make great sacrifices before the 2022 conflict to advance its goals in Ukraine. For instance, Moscow paid a heavy price for its invasion of eastern Ukraine and annexation of Crimea in 2014. Russia's GDP declined by 2% on average between mid-2014 and mid-2015 as a result of Western sanctions and this effect grew worse as the sanctions persisted in the following years.¹⁷ Putin has demonstrated his willingness to go to even greater extremes to achieve his goals in Ukraine, as evidenced by his decision to launch a full-scale invasion in February 2022, despite unambiguous warnings from the US and its allies that he would pay a considerably heavier price than in 2014. The choice to send 300,000 Russians into combat in September also demonstrated Russian adamancy as well. It is also tenable to argue that President Putin's willingness is stark given how persistent the Russian

14 "Russia's Use of Nuclear Threats During the Ukraine Conflict", *UK parliament House of Commons Library, Research Briefing*, 28 June 2023, <https://commonslibrary.parliament.uk/research-briefings/cbp-9825/>, accessed 17.12.2023.

15 Helene Cooper, Julian E. Barnes, and Eric Schmitt, "Russian Military Leaders Discussed Use of Nuclear Weapons, U.S. Officials Say," *New York Times*, November 2, 2022, <https://www.nytimes.com/2022/11/02/us/politics/russia-ukraine-nuclear-weapons.html#:~:text=WASHINGTON%20%E2%80%94%20Senior%20Russian%20military%20leaders,to%20multiple%20senior%20American%20officials>, accessed 11.12.2023.

16 Raphael S. Cohen and Gian Gentile, "The Case for Cautious Optimism in Ukraine", *Foreign Policy*, August 9, 2022, <https://www.rand.org/pubs/commentary/2022/08/the-case-for-cautious-optimism-in-ukraine.html>, accessed 10.11.2023.

17 International Monetary Fund, "IMF Survey: Cheaper Oil and Sanctions Weigh on Russia's Growth Outlook," August 13, 2015, <https://www.imf.org/en/News/Articles/2015/09/28/04/53/socar080315b>, accessed 10.09.2023; Samuel Charap and Miranda Priebe, *Avoiding A Long War—U.S. Policy and The Trajectory of The Russia-Ukraine Conflict*, *Rand Corporation*, January 2023, <https://www.rand.org/pubs/perspectives/PEA2510-1.html>, accessed 13.12.2023.; Konstantin A. Kholodilin and Aleksei Netšunajev, "Crimea and Punishment: The Impact of Sanctions on Russian and European Economies," 2016, *German Institute for Economic Research, DIW Discussion Papers*, No. 1569, <https://econpapers.repec.org/paper/diwdiwwpp/dp1569.htm>, accessed 19.10.2023.

policy in Ukraine had been, despite the Western economic sanctions after the 2022 invasion. President Putin said in February 2023 that Russia's economy had overcome the worst effects of sanctions and was expected to show modest growth in 2023.¹⁸

Since the Kremlin perceives this war to be almost existential, Russia can go all the way down to nuclear use when it deems it inevitable. Alarming, it seems to be the case that the situation on the ground is not very far away from that indeed: since Russia's conventional capabilities have been partially destroyed in Ukraine, Moscow's non-nuclear escalatory options are limited. If Russia experiences further large-scale battlefield losses, desperation could set in among senior Kremlin decision-makers. Once other conventional escalatory options have been exhausted, Moscow may resort to nuclear weapons specifically tactical nuclear weapons, to prevent a catastrophic defeat. Thus, these factors ironically combine to give Russia the upper hand to control the escalatory dynamics in the Ukrainian conflict. Ironically, Russia has this escalation upper hand, despite its current conventional weakness: Russian asymmetry in conventional strength in comparison to Western conventional superiority makes it obligatory for Russia to come closer to nuclear use, while its threat assessment in Ukraine as existential gives it a survival motive. The fact that the Kremlin's view of the Ukraine war as existential is not reciprocated in Washington gives the psychological escalatory advantage to Russia in becoming relatively better at controlling the fear of nuclear war. This is why President Putin seems to be probing responses to his various escalation moves. He has taken several escalatory steps in the conflict, ranging from halting gas exports to Europe to efforts to block the much-needed Ukrainian grain shipments to developing countries, and from an expanded and humanitarian bombing campaign to human rights violations against civilian targets in Ukraine.

It is reasonable to assert that Russia's nuclear arsenal has enabled the current war in Ukraine not least because of the implicit credibility of Putin's nuclear threats. This is because Russian nuclear threats abet its conventional threats and aggression by deterring its adversaries from counteracting the aggression. Yet again, it is worth reiterating for the emphasis that if Russia suffers heavy losses on the battlefield, despair may set in among the Kremlin's key decision-makers. After other conventional de-escalation options have been exhausted, Moscow can resort to nuclear weapons, particularly tactical nuclear weapons to prevent a possible catastrophic defeat. Furthermore, Russian strategists have long emphasized the usefulness of the tactical nuclear weapons in achieving operational and tactical goals in a conventional war which Moscow is losing.¹⁹ Russia possess the ability to implement those concepts: its tactical nuclear weapons delivery systems include artillery, short-range ballistic missiles, and cruise missiles, all of which could be used in Ukraine. Russian strategists also foresee the pre-emptive use of non-strategic/tactical nuclear weapons against civilian targets –cities, military industrial centres, and government facilities– as well as military targets, at least in the context of a war with NATO. Moscow could also use tactical nuclear weapons to conduct demonstration strikes either in the atmosphere or in population centres.²⁰

The military effectiveness of non-strategic nuclear weapons employment in Ukraine is debatable but it is a plausible scenario, given what is known about the Russian planning

18 "Putin Says Russian Economy Will Grow in 2023 Despite Sanctions", *Reuters*, February 9, 2023, <https://www.reuters.com/world/europe/putin-says-russian-economy-will-grow-2023-despite-sanctions-2023-02-09/>, accessed 04.03.2023.

19 Clint Reach, Edward Geist, Abby Doll, Joe Cheravitch, "Competing with Russia Militarily: Implications of Conventional and Nuclear Conflicts", *RAND Corporation*, PE-330-A, June 2021.

20 Michael Kofman, "Escalation Management", 2022.

and capabilities.²¹ While the use of Russian nuclear power in this war is plausible, we cannot accurately determine how likely such use is. Nevertheless, the Biden administration takes the Russian nuclear threat seriously and, together with NATO, it has to strike a delicate balance to prevent the use of nuclear weapons in Ukraine. Both the American government and NATO have refrained from putting out the threat of a clear military response to a possible Russian use of nuclear weapons. Instead, the Biden administration made it clear that Putin's threats are not to be taken lightly and that the threat of nuclear use is a serious matter. Biden stated on October 3 that "He [Putin] is not kidding when he talks about the possible use of tactical nuclear weapons or biological or chemical weapons because his military can be pointed out to be significantly weaker."²²

A possible Russian use of nuclear weapons in Ukraine would have exceedingly high consequences for the United States. Should Russia make concessions or gain a military advantage from using nuclear weapons, the NPT regime gets more weakened and other countries may be more likely to use such weapons in future conflicts. In addition, a possible use of Russian nuclear weapons in Ukraine would have serious and unpredictable consequences for the West, which could lead to the breakdown of transatlantic and NATO unity. Thus, the Biden Administration has its reasons to curtail Russia's use of nuclear weapons. Russia clearly attaches far more strategic value to Crimea than it does to other occupied Ukrainian territories, likely due to the historical role of the naval base of Sevastopol as the home of the Russian Black Sea Fleet. Were Ukrainian forces able to reclaim Crimea, Russian President Vladimir Putin may find himself under domestic pressure to take drastic action. In short, the ambiguity on the issue of determining whether Russia now considers Crimea *casus belli* with the US and NATO could lead to miscalculation which would produce a nuclear escalation.

4. Nuances of Nuclear Risk in Ukraine

Western countries' involvement in the Ukraine conflict is largely affected by the shadow of nuclear war, which raises several questions. According to the nuclear deterrence theory, the existence of nuclear capabilities in Russia and the West should not have much of an effect on the progress of the conflict since the incentives of mutually assured destruction are strong enough to avoid a nuclear war. However, a late political scientist at the University of California Berkeley, Robert Powell, challenged this theory in a paper titled "Nuclear Brinkmanship, Limited War, and Military Power".²³ According to Powell, conflicts can lead to nuclear war even under mutually assured destruction, but the threat of nuclear war changes the dynamics of any conflict from the start. Ukraine's current situation is illuminated by this argument.

Powell argues that the balance of military power does not matter much for deterrence in the theory of nuclear brinkmanship. Indeed, it plays virtually no role in the logic of brinkmanship. However, the irrelevance of the balance of military power' in standard accounts of brinkmanship is more a matter of assumption than deduction. It is hard to reconcile this aspect of the theory with key features of actual crises. For example, states amid a nuclear crisis frequently appear to face a fundamental trade-off between bringing more military power to bear and raising the risk of escalation to a nuclear war. When deciding whether to

21 Ibid.

22 Michael Hernandez, "Biden Says World at Risk of Nuclear 'Armageddon'", *Anadolu Agency*, October 10, 2022, <https://www.aa.com.tr/en/americas/biden-says-world-at-risk-of-nuclear-armageddon-/2704945>, accessed 03.09.2023.

23 Robert Powell, "Nuclear Brinkmanship, Limited War, and Military Power", *International Organization*, 69:3, Summer 2015, pp. 589-626.

escalate, a state can often take steps which exploit its military capabilities and its potential more. This increases the chances of prevailing if any subsequent fighting remains limited and the conflict does not escalate to a catastrophic nuclear exchange. But these steps also make it more likely that the crisis would ultimately end in this way. That is how the challenger party exploits the uncertainty inherent in the situation.

What then comprises the model? Two countries are included in the model: One is referred to as a defender and the other as a challenger. Additionally, the challenger initiates action first and chooses how much conventional power to use in the fight. When the challenger makes that decision, the defender must determine whether to increase the likelihood of a nuclear exchange or not. The concept here is that the defence can increase this to a greater extent if the challenger brings more power into the confrontation. Although it seems odd to refer to it as exogenous, there is a somewhat exogenous probability that a nuclear war will break out, for instance via chance or accident. Powell, however, believes that the defender still has a decision to make. It now has more possibilities, but it still has to choose whether to escalate the nuclear rhetoric or not. The challenger then must choose whether to give up or keep fighting with the force brought in. If the challenger does not give up and fight on, the defender then has to decide whether to continue fighting or whether to give up. If one of the parties gives up, the war is over, and the probability of nuclear confrontation goes away. But if both of the parties decide to fight on, then they fight until the conflict is resolved and there is a probability that something bad will happen. Actually, both countries will suffer the very negative payoff of nuclear confrontation. This possibility of nuclear confrontation prevents the West from intervening further in the case of Ukraine.

Powell's model integrates the balance of power into nuclear deterrence theory by developing a simple game-theoretic model of the trade-off between bringing more power to bear and running a higher risk of uncontrolled escalation. At the outset of the game, the challenger decides how much military power, if any, to use to achieve its goals. The more power it brings to bear, the higher the probability of prevailing is, given that the events remain under control and the conflict does not escalate to a catastrophic nuclear exchange. However, bringing more power to bear makes the conflict less stable in a way that increases the potential risk for the events to go out of control. The defender then chooses how much of this escalatory potential to exploit to compel the challenger to back down. That is, the defender determines the actual risk in which events will go out of control if neither state backs down. If the events remain under control, the states engage in a contest of strength and the probability that the challenger prevails depends on how much power it brought to bear. Thus, Ukraine must gauge the extent of escalatory potential that it can exploit in its effort to compel Russia to back down without driving it to use nuclear weapons.

The first result presented by this analysis is about the balance of resolve. The balance of resolve favours a state when its resolve is higher than its adversary's. When the balance of resolve is known, both states know which one of them is willing to run a higher risk and hence which state would prevail in a contest of resolve. It is important to note that this escalatory potential is gauged not just by Ukraine but more by the US, owing to its military support for Ukraine and also because it is the US that has nuclear weapons which can counterbalance Russia. Ukraine does not have such nuclear weapons.

Secondly, it can be inferred that greater instability makes a conflict at higher levels of violence less likely and that at lower levels more likely. Thirdly, the analysis explains the incentives which different states have to adopt different nuclear doctrines and force postures.

States which are weaker but more resolute than their adversaries have an incentive to adopt doctrines and deploy forces which in turn make the use of force riskier and thus easier to transform a contest of military strength into a test of resolve. The latter result that came out of Powell's model tells that once a conflict is started, the states introduce some randomness in whether they would engage in nuclear war or not. This randomness is not completely exogenous, in the sense that it would depend not only on whether a conflict is started but also on what kind of conflict is started.

When we bring this model to the conflict between Russia and Ukraine, we can witness the following: if the US engages in support of Ukraine even to a small extent just by sending some sort of weapons which are not extremely deadly, the probability of nuclear confrontation between the US and Russia goes up but only to a small degree. But if the US sends for example planes or arterial means, which can fight planes, this American action gives Russia a possibility to escalate the conflict to the point where the probability of a nuclear confrontation will be higher. So overall, two issues are in play here. First, there's the issue of how strong the countries are, vis-a-vis their military, which means the balance of power. Secondly, there is the issue of how resolute the countries are, where resolute really means the degree of willingness to blow up the world to defend oneself.

When the mainlines of Patrick M. Morgan's ideas on deterrence are taken into consideration, however, it is possible to infer that NATO members' practice of deterrence by delivery of arms has become more prominent as the war in Ukraine has continued.²⁴ This policy of NATO members accomplishes many purposes. It reaffirms the determination to support Ukraine, avoids overt direct involvement in the war, and threatens with deterrence. NATO leaders face increasing pressure to help Ukraine but are also concerned that a direct intervention in the war could lead to a harsh response from Russia. The arms supply and continued supply commitments to Ukraine have been aimed at strengthening Ukraine's security, as well as its combat and defence capabilities. But there has been also a clear and chilling basis for this commitment. Western countries' commitment to support Ukraine has served as a message of deterrence through denial. This signalled to Russia that with continued Western military support to Ukraine, Russia would not be able to achieve its goals and therefore Russian escalation would be futile. This logic was implemented through a large-scale and gradual arms supply.²⁵ This can be called deterrence by arms supply which can be considered as an extension of the concept of deterrence by denial.

However, fearing Russian retaliation, NATO members refrained from threatening direct deterrence in favour of actively intervening and deploying troops to protect Ukrainian territory.²⁶ Western officials such as German Chancellor Scholz have made it clear that NATO should avoid direct military conflict with Russia and that such deterrence threats will not be made.²⁷ NATO member states refrain from overt attempts to prevent Russia from using its nuclear weapons against Ukraine and they instead employ deterrence to prevent a situation where such an attack would affect NATO countries, or more generally, where Russia invades NATO territory.²⁸

24 Patrick M. Morgan, *Deterrence Now*, Cambridge University Press, Cambridge, 2003.

25 A. Lupovici, "Deterrence by Delivery of Arms: NATO and the War in Ukraine", *Contemporary Security Policy*, 44:4, 2023, 624-641.

26 V. Putin, Attempts to Interfere in Situation in Ukraine to be Met with Instant Response, *TASS*, April 27, 2022, <https://tass.com/politics/1444327>, accessed 02.04.2023.

27 A. C. Arndt, & L. Horowitz, *Nuclear Rhetoric and Escalation Management in Russia's War Against Ukraine: A Chronology*. Working Paper no. 3. German Institute for International and Security Affairs, 2022.

28 Remarks of President Joe Biden – State of the Union Address, March 1, 2022, <https://www.whitehouse.gov/>

The nuclear revolution is a big break from the military history that preceded 1945. The significance of nuclear war is the possibility of a nuclear state to destroy its enemy rather than defeat it. This has annulled the initiation of a nuclear war between Soviet Russia and the US which could end in mutual destruction since the beginning of the Cold War. Nuclear weapons have forced the states which have them to avoid war-making, and this has been the way how the Cold War was kept cold. Therefore, with the advent of nuclear weapons, the enemy has become the nuclear war itself. Since nuclear parameters did not change in the wake of the Cold War, Russia and the US are still in the know of mutual annihilation risk through the use of nuclear weapons –whether they are tactical or strategic. It is the credible control of this risk by Russia that greatly supplements its conventional means. Importantly, this risk prevents other major powers from intervening directly in the Ukraine war. Another implication is the limitation of military support given to Ukraine by the West in order not to escalate into a nuclear war with Russia.

Today, politicians, academics, experts, and pundits must remember this crucial aspect of the war in Ukraine, namely the fact that the real enemy is nuclear war itself. Any analysis that argues for using Western nuclear weapons in response to Russian escalatory politics risks spiralling into the destruction of societies and states in their entirety. Indeed, the US defence establishment encourages the argument that a nuclear war can be won in a report called *Guide to Nuclear Deterrence in the Age of Great Power Competition*.²⁹ This guide is published by the Louisiana Tech Research Institute, which provides support for the US Air Force Global Strike Command. Similarly, a recent Chatham House report, titled *How to end Russia's war on Ukraine*, ignores the dangers of nuclear catastrophe.³⁰ Nor does another seemingly relevant Chatham House report under the title of *Russian nuclear intimidation* do any good to the nuclear realities involved in Ukraine.³¹ These reports repeatedly emphasize the need for a sober analysis; however, they do not go beyond lip service to it owing to their ideological undertones bent on total victory. Yet, the decision-makers in Washington have not yet fallen into these argumentational traps and they still avoid the use of nuclear weapons. Lest a nuclear war to occur, Washington also tries to prevent the Russian use of nuclear weapons even when it surrenders the escalatory upper hand to Russia.

Another crucial point which still goes unaddressed is that the issue is not solely about advocating the Western or Russian cause. Strategic assessment is beyond who is right or wrong especially when a possible use of nuclear weapons is in question. Russian aggression cannot be offset by reckless policies which fuel escalation and avoid caution. The conundrum must be about avoiding nuclear war, measuring political determination, enriching the information environment about deterrence, and minimizing the probability of inadvertent nuclear weapons use; not about exercising escalation as recently seen.³² Independent of how the feelings against Russia and aspirations for total victory drive the policy, attacking either

briefing-room/speeches-remarks/2022/03/01/remarks-of-president-joe-biden-state-of-the-union-address-as-delivered/, accessed 10.02.2023.

29 Alan Kaptanoglu and Stewart Prager, "US Defense To Its Workforce: Nuclear War Can Be Won", *Bulletin of the Atomic Scientists*, February 2, 2022, <https://thebulletin.org/2022/02/us-defense-to-its-workforce-nuclear-war-can-be-won/#post-heading>, accessed on September 2, 2023, accessed 01.03.2023.

30 Timothy Ash et al. *How to end Russia's War on Ukraine Safeguarding Europe's Future, and the Dangers of A False Peace* Russia and Eurasia Programme Report, June 2023, <https://www.chathamhouse.org/2023/06/how-end-russias-war-ukraine>, accessed 09.12.2023.

31 Keir Giles, *Russian nuclear intimidation How Russia uses nuclear threats to shape Western responses to aggression*, Research Paper Russia and Eurasia Programme, March 2023, <https://www.chathamhouse.org/2023/03/russian-nuclear-intimidation>, accessed 7/11/ 2023.

32 Glenn Diesen, "NATO Escalates: The War enters a new phase - Colonel Douglas Macgregor and Glenn Diesen", <https://www.youtube.com/watch?v=3KIqR3ORYLE>, accessed 15.09.2023.

Crimea³³ or the Russian mainland³⁴ is a serious escalation. From NATO-aligned Atlantic Council to the Estonian Defence Minister or Biden's own Secretary of State Antony Blinken, many decision-makers have previously acknowledged that threatening Crimea could trigger a nuclear war. The longer the conflict continues, the more reckless moves come to centre stage.

The Biden Administration and its NATO partners run the risk of abandoning prudence by giving weaponry previously rejected as too escalatory, ranging from Patriot air defence systems to Abrams tanks or from cluster bombs to F-16s.³⁵ The recent reversal, which takes the US closer to crossing another red line for Ukraine, involves the planned deployment of Army Tactical Missile Systems capable of flying up to 190 kilometres, allowing Ukrainian forces to assault far beyond Russia's defence lines within Crimea and deep into Russian soil.³⁶ The Biden Administration used to argue that the Army Tactical Missile System was off the table, owing to its capacity to pose an unacceptable risk of escalating the conflict and aggravating Russia. This prudent caution has vanished today because the American official declarations do not seem to distinguish between the desirability of total victory and its feasibility.³⁷ If a nuclear war is to be taken seriously, assessments must be beyond aspirations for total victory and beyond who is right or wrong. Fighting Russian aggression is just and righteous but avoiding nuclear war is not any less just and righteous.

Since most analyses on Ukraine ignore the reminders of nuances of nuclear deterrence, the current American desire for total victory-driven escalatory armament of Ukraine entails urgent warnings.³⁸ First of all, the West must not reduce the strategic balance to a simple calculation of the number of warheads or missiles at the disposal of the nuclear-armed states. The second-strike capability is more than weapons-systems technicalities as Raymond Aron and Bernard Brodie pointed out at the beginning of the nuclear era. This means that the nature of the weapons, the capacity to survive an enemy's first strike and to penetrate the defences of the enemy are more important than numerical equality. Second, it means that since deterrence is "a relation between two wills, the balance of deterrence is a psycho-technical equilibrium".³⁹ Will or determination matters more than technological credibility. However, the question is among whom? This leads to the third warning regarding the nuances of nuclear risk and deterrence.

33 "As Kim Meets Putin, Ukraine Strikes A Russian Military Shipyard and Moscow Once Again Attacks Odesa", *CBS*, September 13, 2023, <https://www.cbsnews.com/news/ukraine-russia-war-kim-jong-un-putin-missile-strike-shipyard-sevastopol-odesa/?intcid=CNI-00-10aaa3a>, accessed 14.11.2023.

34 Helene Cooper et al. "Biden Administration Shrugs Off Ukraine's Attacks in Russia", *The New York Times*, June 5, 2023, <https://www.nytimes.com/2023/06/05/us/politics/ukraine-attacks-inside-russia.html>, accessed 18.10.2023.

35 Max Abrahms, "You're Not Supporting Ukraine Enough Until the Nuclear Blast Hits Your Face-Opinion", *Newsweek*, September 14, 2023, <https://www.newsweek.com/you-are-not-supporting-ukraine-enough-until-nuclear-blast-hits-your-face-opinion-1827128>, accessed 11.09.2023.

36 Mark Episkopos, "US Closer to Crossing Another Red Line for Ukraine: ATACM Missiles", *Responsible Statecraft*, September 10, 2023, <https://responsiblestatecraft.org/atacms-ukraine-russia/>, accessed 20.10.2023.

37 Antony J. Blinken, *Secretary Antony J. Blinken and Ukrainian Foreign Minister Dmytro Kuleba at a Joint Press Availability*, Kyiv, Ukraine, September 6, 2023, <https://www.state.gov/secretary-antony-j-blinken-and-ukrainian-foreign-minister-dmytro-kuleba-at-a-joint-press-availability-4/>, accessed 12.11.2023.

38 Brian Clark, "If America Pushes For A 'Total' Ukraine Victory It Could Mean Nuclear War", *19FortyFive*, December 9, 2022, <https://www.19fortyfive.com/2022/12/if-america-pushes-for-a-total-ukraine-victory-it-could-mean-nuclear-war/>, accessed 03.02.2023.

39 Christian Malis, "Raymond Aron, War and Nuclear Weapons" Oliver Schmidt (ed.), *Raymond Aron and International Relations*, Routledge, New York, 2018, p. 96.

The third warning is that “resorting to allies to restore a fractured equilibrium is a thing of the past”.⁴⁰ Whether the victim has a network of allies does not matter that much. If Ukraine is hit by a Russian tactical/non-strategic nuclear weapon, it is not guaranteed that the US can come to Ukraine’s help, lest initiating a mutual annihilation. If Russia fires non-strategic nuclear strikes in substantial salvos against Ukraine, can the US respond? Can the US risk nuclear war with Russia? If the answer is not an unhesitating “yes”, current escalatory recklessness is too risky. The question runs both ways. Can Russia respond to an American tactical nuclear first strike without risking mutual annihilation? Again, the answer is not an unhesitating “yes”. Thus, the US and Russia must not carry one another to the nuclear edge. When nuclear missiles are fired, they do not come back. This is true for both sides. It is highly likely, for this reason, that the US and all other Western powers, which have the best militaries in the world, did not send troops to Ukraine to join the warfighting on the ground. Yet again, a casualty-averse West could have sent in many drones which can remarkably alter the situation in Ukraine’s favour. But the Western states simply did not do it either. Very early on in the conflict, as soon as it was clear that Russia was invading, the West could have sent in numerous drones with no risk of losing any American or Western lives, but they did not do that. The only compelling reason why they did not do that is the fact that there’s at least some tiny risk of nuclear war which would emerge from these actions. They preferred to not be engaged in any kind of conflict with Russia if they could avoid it.

This is all the more so because of the fourth warning: “the credibility of deterrence presupposes a reference to the whole situation and can never be reduced to a simple military calculation.”⁴¹ What matters is to know “who can deter whom from what, through what kinds of threats and in what kind of circumstances”. However, this has historically proved to be an arduous task to accomplish for unconventional deterrence. Today, nuclear-armed missiles are on high alert in both the US and Russia. This stance raises the likelihood of an inadvertent or unauthorized launch. There have not been any such launches till now and, therefore, safety precautions appear to be effective enough to prevent an inadvertent launch. Yet, there were close calls in history. The more these close calls occur, the more likely that an accident will result in a calamity.⁴² Indeed, deterrence is not credible under dangerously increasing strategic uncertainty in the Ukrainian case. Thus, minimizing the probability of inadvertent use of nuclear weapons by de-escalation is the key. Powell also touches upon it:

Even if a state cannot credibly threaten to deliberately launch an all-out nuclear attack, it can credibly make “threats that leave something to a chance”. That is, a state may be able to credibly threaten and actually engage in a process — a crisis or a limited war— that raises the risk that events will go out of control and end in a catastrophic nuclear exchange. How much risk a state could credibly threaten to run would depend on what was at stake in the political conflict. The higher the stakes, the more risk a state would be willing to run.⁴³

40 Stanley Hoffmann, “Raymond Aron and the Theory of International Relations” *International Studies Quarterly*, 29:1, 1985, pp. 15-17.

41 Ibid.

42 Dan Drollete, “Introduction: Near-misses, Close Calls, and Early Warnings”, *Bulletin of the Atomic Scientists*, <https://thebulletin.org/premium/2023-05/introduction-near-misses-close-calls-and-early-warnings/>, accessed 17.08.2023.

43 Robert Powell, “Nuclear Brinkmanship, Limited War, and Military Power”, *International Organization*, 69:3, Summer 2015, p. 594.

Conclusion

The utmost important implication of the above-mentioned warnings that are discussed here is the need for a political compromise. Indeed, US President Biden has said that this war would end at the negotiating table.⁴⁴ To portray it otherwise is to act unrealistically as if nuclear weapons did not ever exist. Although diplomatic talks and negotiations are the only solution under the shadow of nuclear weapons, the Western countries have not yet made any moves to push the parties toward talks. Thus, the questions to consider for future research are as follows: Will the West be able to start discussing whether total victory is possible in Ukraine? The West must focus on the question of whether Ukraine's theories of victory are plausible.⁴⁵ Will the US lay the groundwork for future peace negotiations and end this war via negotiations, or will it continue to work for Ukraine's total victory and continue to risk a nuclear war? Seeking a diplomatic end to the war in Ukraine is the sole responsible move to roll back the Doomsday Clock hand to a safer level.

To understand the dynamics of the conflict and prevent it from getting nuclear, several points must be emphasized: First, the Western states should not reduce the strategic balance to a simple calculation of the number of warheads or missiles held by nuclear-armed states. The second-strike capability is more than just the technical features of weapon systems. The second important point is that deterrence is a "relationship between two wills, making it a psycho-technical balance". Will or resolve is more important than technological reliability. The third important point is that "relying on allies to restore the disrupted balance is a thing of the past". Having an ally network is not that significant in nuclear war scenarios. If Ukraine were to be hit by Russia's non-strategic nuclear weapon, there is no guarantee that the US would come to Ukraine's aid. It is not easy to answer whether the US could respond if Russia launches large salvos of non-strategic nuclear attacks against Ukraine. Can the US take the risk of a nuclear war with Russia? If the answer is not a resounding "yes", the current escalating recklessness is very risky. Can Russia respond to an American tactical nuclear first strike without the risk of mutual destruction? The answer is again not a resounding "yes". Therefore, the US and Russia should not push each other to the nuclear brink. Once nuclear missiles are launched, there is no turning back. This applies to both sides.

Another crucial point which still goes unaddressed is that the issue is not solely about advocating the Western or Russian cause. Strategic assessment is beyond who is right or wrong, especially when a possible use of nuclear weapons is in question. Russian aggression cannot be offset by reckless policies that fuel escalation and avoid caution. The conundrum must be about avoiding nuclear war, measuring political determination, enriching the information environment about deterrence, and minimizing the probability of inadvertent nuclear weapons use. This is significant for nuclear weapons since their effects concern the probable destruction of many societies that are not even involved in a nuclear-armed conflict. Seeking a diplomatic resolution to the war in Ukraine is the only responsible step to move the Doomsday Clock to a safer level. The same consideration should be given to all future crises involving nuclear weapons. Conducting a threat assessment which includes these issues by NATO countries would contribute to minimizing the risk of a nuclear war.

44 Joseph R. Biden Jr., "President Biden: What America Will and Will Not Do in Ukraine", *The New York Times*, May 31, 2022, <https://www.nytimes.com/2022/05/31/opinion/biden-ukraine-strategy.html>, accessed 13.12.2022.

45 Barry R. Posen, "Ukraine's Implausible Theories of Victory-The Fantasy of Russian Defeat and the Case for Diplomacy", *Foreign Affairs*, July 8, 2022, <https://www.foreignaffairs.com/articles/ukraine/2022-07-08/ukraines-implausible-theories-victory>, accessed 15.09.2023.

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