

Lessons and Legacies of the War in Ukraine: Conference Report

Edited by Jeffrey Mankoff



Institute for National Strategic Studies

National Defense University

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Cover: Civilian buildings destroyed by Russian occupiers, in Borodianka, Kyiv Oblast, Ukraine, March 2022 (RoStyle/Shutterstock)

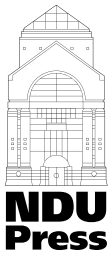
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Executive Summary

The international conference titled “Lessons and Legacies of the War in Ukraine” took place on November 17, 2023, at the National Defense University in Washington, DC. Hosted by the University’s Institute for National Strategic Studies, the conference brought together perspectives from practitioners in the U.S. Government and uniformed military, along with experts from academia and the think tank community in the United States, United Kingdom, Ukraine, and Taiwan, to discuss the lessons that the United States and its allies should take from the first year and a half of the effort to repel Russia’s invasion of Ukraine. Across two plenary sessions and three smaller breakout groups, the conference facilitated discussion on lessons at the strategic, operational, and tactical levels of war. All discussions took place under the Chatham House Rule.

Following introductory remarks, the first plenary session, titled “Russia and Ukraine on the Eve of War,” focused on lessons from the run-up to the February 2022 Russian invasion. The three panelists addressed what we were witnessing before Russia invaded Ukraine; how we interpreted what we were seeing; and what lessons we can draw from the experience of attempting to foresee and prepare for the Russian invasion. The panelists agreed that deterring Russian President Vladimir Putin from his choice to carry out a large-scale invasion of Ukraine would have been exceedingly difficult and posed high risks to the North Atlantic Treaty Organization and its member states. Panelists shared a view that concepts of deterrence, when applied to Putin’s Russia, need to be reconsidered given Putin’s expectations that Russia could weather Western post-invasion economic and political sanctions. Panelists disagreed, however, about Russia’s propensity for escalation to use of nuclear weapons.

Further discussion focused on the difficulties of interpreting and communicating indicators of Russia’s impending invasion to skeptical publics (especially in Europe) and the need for the U.S. military to engage in advance preparation for confronting a hostile Russia rather than the series of improvisations adopted in the aftermath of the 2014 annexation of Crimea and intervention in Donbas.

The second plenary was titled “Innovation and Adaptation on the Battlefield.” The three session panelists—all experts on military innovation and strategy across multiple domains—focused on identifying:

- surprising or impactful innovations and developments
- reasons for surprise or under-preparation

- different actors' capacities for innovation and learning
- the effect of these innovation and adaptations on the course of the war in Ukraine
- the implications for the future of conflict more broadly.

Attempting to look at the war in Ukraine from the perspective of Beijing, the first panelist suggested that while lessons from the Ukraine conflict are specific to the region, many others are fungible to contexts beyond Europe—including those related to the use of joint fires, suppression of air defense, naval/coastal defense, and land operations. The other speakers provided more granular analyses of the lessons that other actors could draw not only from the struggle to establish air superiority in Ukraine but also the struggle to dominate the cyber domain, where the contours of a conflict with China would be different in many ways from those observed in the Ukraine war.

The conference reconvened in the afternoon for simultaneous breakout sessions devoted, respectively, to:

- Russia After the War
- Seeing Kyiv, Thinking Taipei
- Training and Equipping Allies and Partners.

The first breakout session addressed the effect of the Ukraine war on Russia's society and political system, with an emphasis on being prepared for dealing with a much different Russia that emerges out of the war. Speakers discussed the likelihood of different postwar scenarios for Russia, the vulnerabilities that the war has exposed in Russia's social and political fabric, the lessons that Putin and his circle are likely to take from the war, and the implications for postwar engagement with Russia—whether or not it remains under Putin's rule.

Speakers expressed a range of views on potential Russian vulnerabilities—both in relation to the regime's international influence and domestic stability. Given the Putin regime's long endurance and grip on power, however, speakers found it most likely that Russia would remain authoritarian with Putin at the helm, that neither elites nor the state would fracture, and that bottom-up regime overthrow would not occur. While less likely, speakers did allow

for possibilities involving a change in the tenor or nature of the regime and public attitudes, particularly in the case of a catastrophic defeat in the war. On the other hand, something short of a Russian defeat, such as an armistice or ceasefire, which could be spun by the regime as a victory, might do more to solidify its hold on power and encourage continued expansionist thinking into the next generation.

The second breakout session was devoted to the lessons that the war in Ukraine holds for a potential conflict with China over Taiwan. Speakers addressed the question of whether the Ukraine war makes a conflict over Taiwan more or less likely, the presumptive lessons that the Chinese People's Liberation Army (PLA) has taken from the Ukraine war, and the lessons that Taiwan *should* take from it. The speakers generally agreed that the Russia-Ukraine conflict had made an imminent clash between China and Taiwan less likely, whether because of the difficulties Russia's invasion has encountered or because the war in Ukraine has been a wake-up call for Taiwan, which is working to make itself a harder target for the PLA. Beijing has likely concluded that a war over Taiwan would be more protracted than previously assumed and would require a much larger effort on the part of the Chinese state and society. Nevertheless, Beijing is likely to conclude that Moscow's threats of nuclear escalation have been effective at limiting outside involvement. For Taiwan, the war in Ukraine has made clear that the possibility of conflict with China is a real possibility and that preparations must be made now—especially because such a war is likely to be protracted and will require the participation of the whole of society.

The final breakout session attempted to draw lessons from the U.S.-led campaign to train and equip Ukraine's military. Panelists representing the perspective of providers, recipients, and observers of foreign efforts to train, equip, and reform the Armed Forces of Ukraine addressed the effect of foreign training, equipment, and advice on Ukraine's defense posture, strategy, doctrine, and combat performance from 2014 to 2022; what the foreign providers of this assistance could have done differently; and the factors that allowed the United States, its allies, and partners to quickly ramp up material assistance to Ukraine in 2022—including the challenges they had to overcome in the process.

Panelists acknowledged the progress the Ukrainian military and defense institutions had made since 2014 but underscored both provider and recipient limitations that inhibited the effectiveness of foreign initiatives to train, equip, and reform the military and defense ministry prior to Russia's full-scale invasion. While the U.S. security cooperation enterprise was able to rapidly respond to the materiel and tactical training requirements by invoking in extremis authorities in the aftermath of the Russian invasion, doing so required ad hoc adaptations and the adoption of processes and procedures that will be sustainable. The Ukraine conflict has also

exposed shortcomings in U.S. stockpiles and the consequences of poor “pre-crisis” coordination with allies and partners on readiness gaps. Although platform-specific training has been adequately quick and responsive to Ukrainian needs, more advanced and collective training has at times been divorced from the frontline realities of Ukrainian forces.

While several speakers cautioned that it is not possible to draw definitive lessons from a conflict that is still ongoing, the first 2 years of war in Ukraine have already provided much new information about the future of warfare—and about the future contours of U.S. relationships with Russia, China, and other revisionist powers. While still preliminary, this information can help the United States be better prepared for the current era of strategic competition. The challenge now lies in ensuring that it is absorbed across the national security enterprise and properly integrated into future diplomatic and military planning.

Plenary One: Russia and Ukraine on the Eve of the Invasion

The first plenary session focused on:

- better understanding what we were seeing before Russia invaded Ukraine
- how we interpreted what we were seeing
- what these observations tell us about how to proceed.

The plenary's moderator asked the three panelists to address five overarching questions in their remarks:

- Why the Russian invasion of Ukraine and its initial failure took so much of the world by surprise?
- How did deterrence fail in this case?
- What indicators should we have been paying attention to to deter the Russian invasion?
- Were there options to deter Russia that we missed?
- What lessons should we draw from the war's inception about deterrence in the future?

Panelists made their presentations and answered specific audience questions. The presentation sequence progressed in a manner that the moderator described as “start[ing] from about 60,000 feet and gradually com[ing] down to about 10,000 feet.” One panelist spoke from historical expertise and a grand strategic perspective about Russia's motivations and Putin's deeply held prejudices about and expectations in Ukraine. Another panelist evaluated the onset of the Russia-Ukraine war with an operational lens—informed by close observation of how Russian deception activities and Putin's prewar bluster and expectations led to the North Atlantic Treaty Organization (NATO)'s “self-deterrence” of the kinds of assertive, pre-invasion moves that might have prevented Putin's choice to invade. The third panelist shared an operational-tactical perspective, with prepared remarks and answers to questions demonstrating close, personal experience in the pre-invasion military and politico-military discussions across NATO prior to the Russian invasion.

The panelists agreed that deterring Putin from his choice of a large-scale invasion of Ukraine would have been difficult and posed high risks to NATO and its member states. One panelist stated Putin could not have been dissuaded by the West short of an unacceptable accession to his demands that the United States and Europe sign a political agreement signaling abandonment of Ukraine and sell-out the other post-Soviet, now-NATO states adjoining Russia. This action would have made other European border states with Russia vulnerable to future Russian coercion, gray-zone encroachments, and other interventions. Another panelist intimated that deterrence might have been possible, but only if NATO resolved to put troops into Ukraine prior to the war. The third stated the Alliance was not fully postured for Putin's choice to invade despite 4 months of intense focus in the immediate run-up; however, years of U.S. and Western investment in a professional Ukrainian army was badly misunderstood in Moscow and led to the bloody failure of Moscow's initial invasion.

Panelists shared a view that concepts of deterrence, when applied to Putin's Russia, need be reconsidered. All agreed that deterrence by cost imposition had no chance of working on Putin given his expectations that Russia could weather Western post-invasion economic and political sanctions like it had done in the past. One panelist stated that even a Western effort at deterrence by denial was unlikely to succeed given Putin's resolve. The other two panelists stated that there might have been additional prewar Western actions to deter Russia by denial. One of the panelists believed that a more serious post-2014 investment in U.S. and NATO warfighting headquarters infrastructure and resources might have shown Putin something new and riskier. Another stated that Putin's invasion could have been deterred by the introduction of NATO or non-Alliance troops into Ukraine before the war. This panelist argued that Western political leaders were dissuaded from doing so by an effective, decade-long manipulative Russian disinformation campaign insinuating that a war with Russia could not be won and must not be fought.

Panelists also agreed that prewar public sharing of declassified information about Russian intentions and capabilities was a positive and important new development. The sharing had significant impact, but not with all necessary audiences—some of whom remained skeptical that Russia planned a major attack until it was too late.

Panelists disagreed about Russia's propensity for escalation to nuclear weapons. All agreed that there was a prewar lesson about taking Putin at his word and not mirror-imaging what the West would do—especially given Putin's prewar writings and statements that Ukraine was not a legitimate sovereign state and rightfully Russian property. But panelist agreement ended when debating whether repeated Russian threats by Putin spokesmen and surrogates should be taken

seriously when the United States and NATO determined how far to go in supporting Ukraine's understandable desires to confront Russia militarily. One panelist cautioned against taking Putin's comments about nuclear weapons too categorically, arguing that Russia has hyped the nuclear weapons bogeyman in the heads of Western political leaders over the past decade to a level that overstates Russian physical capabilities to use them.

Another panelist stated that as the process of U.S./NATO material and training support to Ukraine grew over the past 2 years of war, a number of points where leaders feared Putin might unleash nuclear weapons have passed without Russia's actually using them. However, another panelist was more cautious. That panelist agreed that there may be some hype of Russia's propensity to use nuclear weapons but cautioned that Putin has stated clearly that he views the war in Ukraine as an existential one for him and his vision of Russia. This clear resolve must be taken seriously and understood to mean that Putin would consider every possible military option if the war took a serious turn for the worse. The United States is wise to proceed with caution regarding the potential for Russian nuclear weapons use.

Panelist One

The panelist stated that the Russian invasion of Ukraine took much of the world by surprise for several reasons. Before 2022, Putin was widely perceived as cunning, calculating, and prudent in his choices for interstate armed conflict, with Georgia in 2008 and Crimea/Donbas in 2014 as prime examples. World leaders believed that Putin consistently pursued limited aims, accepted "frozen conflicts," and tolerated partial successes to secure Russia geopolitical leverage rather than seek absolute victory. Most of the world, therefore, perceived Putin again had limited aims in Ukraine. As an example, the United States believed that even China was surprised by the full-scale Russian invasion of Ukraine. The United States and its Western partners got used to dealing with a Putin bounded by prudence, limits, and constraints.

Putin's past patterns numbed many to the fact that he had talked about the legitimacy of Russian "spheres of influence" in Eurasia before 2022. Many looked at Putin's 2021 article where he stated that Ukraine had no legitimate history independent of Russia and had no basis to be considered an independent state as a bargaining chip or bluster as opposed to a preview of the rationale for why he must attack to eliminate Kyiv's sovereignty. These factors suggest that a major lesson should be to take Putin at his word when he states clearly that Russia is committed to eradicate the sovereignty of a neighboring state with a history of past subordination in the Russian empire.

The panelist then noted that Russia's subpar military performance in Ukraine caught many around the world off guard. The massive 2022 failure of the Russian invasion exposed meager troops, training, and equipment. The failure of Putin's attempted blitzkrieg demonstrated the effect of poor military organization and rampant corruption in the Russian military. These problems were well known and frequently reported by outside analysts. The spectacular failure of Russian troops clearly demonstrated the consequences of these longstanding military deficiencies.

The panelist then addressed the question of how deterrence failed in this case. The panelist suggested that there were at least three aspects of this question. The panelist first stated that the West could not deter Putin's invasion despite repetitive diplomatic missions to Moscow and the pre-invasion sharing of declassified intelligence with allies. These steps did not deter Putin because he was firmly set on the course of invasion. The panelist also noted that Putin did deter the United States and NATO from launching an all-in military support program for Ukraine with every Western weapon and technology it had in its arsenal. Moscow frequently hinted at nuclear weapons use in the event of a serious U.S./NATO direct intervention or armament of Ukraine with weapons able to reach into the heart of Russia.

Finally, the panelist observed that Western partners have—so far—successfully deterred any full attack by Russia on a formal NATO Ally. NATO members are overtly arming, training, and supporting Ukraine's self-defense and contributing to the deaths of tens of thousands of Russians without Putin's attacking these nearby states. This suggests that the frequent invocation of the NATO Treaty's Article V provision by President Joseph Biden and other Alliance leaders has Putin's attention and at least some role in deterring wider European war involving NATO states.

The panelist stated that despite the failure of deterrence against the full-scale Russian invasion of Ukraine, there were several good pre-invasion politico-diplomatic moves taken by the United States and NATO Allies. The United States released rapidly declassified intelligence to demonstrate that Putin had the will and the intent for a major attack. The United States also sent many senior officials—including Central Intelligence Agency director and former U.S. Ambassador to Russia William J. Burns—to Moscow, warning Putin that a military attack on Ukraine could not ultimately succeed and would trigger massive economic sanctions with lasting consequences. The Allies had also sent a series of diplomatic missions to Russia in 2021 to find a reasonable political compromise, despite Putin's aggressive maneuvering. These and other U.S./Western initiatives established that there was nothing more the United States could do to deter Putin's Ukraine invasion. This was not a case like World War I, where the major actors stumbled

into war. It was more akin to World War II, where one major party had both the will and the capability to invade its neighbor—and nothing but the most outrageous and unacceptable diplomatic concessions had a prayer to stop it.

The panelist stated that perhaps Putin's long COVID-19 isolation fueled his hubris regarding certain success in conquering Ukraine. Perhaps his fawning advisors fueled his delusion and grievance against both Ukraine and NATO, stating that Putin must push back against NATO. Perhaps he was determined to completely defeat Ukraine, despite all odds.

The panelist repeated earlier observations about the relevance of past U.S./Western responses to Putin aggressions in Georgia and Crimea/Donbas. The panelist stated that the United States could have done more in both cases to firmly signal to Moscow that its military aggression against neighbors would meet a more vigorous and painful response. The panelist noted that in these and other cases, the United States let Russia get away with creating frozen conflicts that Putin could later leverage.

The panelist also observed that Putin most certainly perceived that the West was in disarray in late 2021 and early 2022 and thus unlikely to mount a credible, coordinated response. For example, Putin saw American weakness after the chaotic August 2021 withdrawal from Afghanistan. He furthermore saw a weak Europe divided on many economic and political issues and without much military investment. Putin also believed that European energy dependence on Russia would deter effective collective action in defense of Ukraine. Finally, he saw Germany's political transition and internal frictions as an opportunity to act while Berlin was weak.

The panelist concluded by noting that the United States did attempt to deter but failed to understand Putin's core motives for a military invasion. This should prompt a rethink about deterrence concepts. The United States and NATO should understand that Putin views the continuation of war in Ukraine as a proxy clash between Russia and the United States. Given these realities, Western leaders must ask, what does it really mean to "deter" Russia?

Panelist Two

The panelist stated that writings and records from fall 2021 showed that a slow-motion invasion of Ukraine was inevitable. Open sources and declassified U.S. intelligence demonstrated clearly that Russia would undertake an illogical major land invasion. But Western intelligence mostly saw and reported Russian-sourced expectations of a walkover—expectations that also relied on a Russian misjudgment of Ukrainian military capabilities. Western estimates also were insufficiently assertive to bring along an array of civil society nodes across Europe that were points of potential deterrence. The panelist argued that many in Western militaries knew more

and were making more preparations to support Ukraine in the event of a Russian invasion than the public or nongovernmental analysts ever knew.

The panelist stated that knowledgeable watchers did know what was coming, but much of the world was taken by surprise due to the historical problem of failing to think like Russia does and “mirror-imaging” in trying to understand Russian decisionmaking. Moscow’s disinformation campaigns also contributed to misunderstanding Russia’s true resolve and wartime aims. Finally, Western self-deterrence made all European capitals west of Warsaw “try to wish the problem away” in the hopes that all would remain normal. Even today there is still a desire by many to reach an accommodation with Russia, even though Moscow has shown its true colors as a threat. Moreover, a rush to accommodate Russia would be “catastrophic.”

Differing from the first panelist, the second panelist declared that there were opportunities that were missed—actually, disregarded—that the West that might have taken to deter the Russian invasion. The panelist lamented that the West did not come together more comprehensively to send a message of unity and resolve to Putin before the war began. The panelist cited the procession of Western diplomats to Moscow as insufficiently coordinated and never forceful enough to deter Putin’s chosen course. The economic consequences threatened and the reputational damage to Russia forewarned were not consequential enough to deter Putin either. The panelist then alluded to the possibility that a late 2021 visit to Putin by William J. Burns might have included a promise by Burns that Putin could have his way in Ukraine for a promise by Russia not to invade any other NATO nation.¹ The panelist then intimated that this supposed deal could explain some of what seemed inconsistent in U.S. policy behavior after the Burns visit. Among the inconsistencies the panelist cited was a failure by the United States to take any concrete, highly visible strategic steps to rattle Putin based on the declassified information made public. In this sense, public knowledge of Russia’s grand invasion plans made little difference to Putin since he saw no meaningful change in U.S./NATO strategic posture aimed to stop him.

The panelist asserted that a physical presence of foreign troops in Ukraine was the only hope of deterring Putin. These troops might have been NATO or non-NATO, and they might have gone directly on the ground and/or conducted a no-fly zone. This might have changed Putin’s calculus and made him think twice. The panelist stated that the United Kingdom did consider options for putting some of its troops into Ukraine, but without U.S. support such an effort had little chance. The panelist strongly asserted that if Putin saw no Western troops move forward into Ukraine, Putin believed the West was giving Moscow a green light for invasion.

The panelist also scrutinized the American presumption that any direct U.S.-Russian clash could lead to the use of nuclear weapons. The panelist argued that this presumption gave Russia

a “get-out-of-jail-free card.” Less impressed by the Russian nuclear weapons threat, the United Kingdom did what it could to send arms, munitions, and equipment to Ukraine before the start of hostilities, along with more robust capabilities after the Russian attack. Today, the United Kingdom has just about exhausted its supply of munitions and is among those Western partners working with Ukraine that are now reaching a point where their low supply stocks risk the decline of meaningful and sustained support to Kyiv into the future.

The panelist ended with several lessons to learn from the runup to the Russia-Ukraine war. The panelist acknowledged that none was new or novel but did bear reciting. First, do not misunderstand the adversary’s aims. Second, do not self-deter. Accept that deterrence requires risks. De-escalation taken to its logical conclusion is surrender. Third, recognize that delay raises costs. Deterrence by denial is always cheaper and easier and politically more acceptable in the long run than deterrence by cost imposition (or punishment). Finally, be honest about the facts on the ground because self-delusion about the facts in Ukraine has proved tragic and, in the future, might prove fatal.

Panelist Three

The panelist began with a caution that lessons learned from the Russia-Ukraine war would be iterative and evolutionary. The panelist also commended the organization of this conference as a key event in the iterative process of understanding lessons learned from the entire war and, on this plenary panel, the early lessons learned from runup to war. The panelist stated that his viewpoint on the runup to the war was from that of a military practitioner on the ground in Europe.

The panelist stated that, from his perspective, neither NATO Allies nor the U.S. military component were prepared for the Russian attack. NATO state capitals and Washington had not made past investments sufficient to prepare for the scope and breadth of the Russian attack. However, the United States and the Alliance had made considerable investment in the quality and capabilities of the Ukrainian army since 2014. Thus, the Armed Forces of Ukraine were not the rag-tag military before the war that the Russians and some in the West thought. NATO and its American military component had been preparing for an anticipated Russian attack. Although not fully postured for what the Russians unleashed, U.S./NATO forces had made some considerable preparatory strides.

The panelist stated that the United States and NATO saw ongoing Russian military preparations but did not have Putin’s full “risk calculus” in view. To this extent, there may have been a bit of mirror-imaging done in the West regarding limits on Putin’s military options. European

partners also had a great deal of economic and energy dependence on Russia, and this may have biased their beliefs about Putin's intent. The panelist observed that preliminary U.S. intelligence declassifications and releases had some impact, but not at the degree necessary to convince all the NATO European partners that Russia is a serious security threat that is not going away anytime soon. The panelist observed that the Director of National Intelligence, Avril Haines, made a presentation to NATO before the war about the serious and menacing nature of Putin's intent, but many Europeans remained skeptical. Regardless of the evidence, there remained a degree of disbelief in European capitals that Putin would attack. Even today, Europeans and the NATO Allies need to better understand that the Russian threat will remain. In the best case, the ongoing war will may yet result in Ukraine reestablishing its sovereign border, but that will leave an angry Russia on those borders seeking vengeance. In the more likely case, the war will stalemate, and both sides will culminate short of absolute goals and take some period to reconstitute military forces, waiting for the right moment to resume the fighting.

The panelist observed that Russia had an incorrect assessment of the Ukrainian military. Thus Russian military exercises had practiced an attack march pace that proved unrealistic. U.S./ NATO intelligence observed these Russian exercises and gave respective leaders an estimated Russian rate of advance in line with the best pace observed in these Russian military training events. It may be the case that Russia had a solid military plan, but that it failed for several important reasons. The Russian plan had a credible deception strategy in eastern Ukraine, where Russia and its partners pinned down eight Ukrainian brigades. Russian forces advancing from the north seemed focused on speed of movement, but appeared to have only a single base plan with no ability to adapt or adjust in the face of the troubles they ultimately encountered. Russian command and control was weak during the initial invasion. Russia had no "seed plan"—that is, artillery, missile, and aviation strikes in advance of the ground assault to destroy/defeat Ukrainian air defenses, artillery, or key command and control locations. The tactical lessons now evident from the initial Russian invasion failure is that major, large-scale ground combat is a complex and difficult task against even a modestly capable adversary. Russian operational capabilities were simply not up to the task.

The panelist observed that pre-invasion warning signs were available at the strategic, operational, and tactical levels. Most of these signs were observed, but not all were processed in a manner to fully understand Putin's risk calculus or timing. Putin's demonization of NATO as a threat began in 2007. Russia's new security strategy in 2021 opened the door to a more aggressive approach to seeking military resolution for grievances against Eurasian border states, daring to interact with NATO and the European Union. Putin's 2021 article indicated he did not

view Ukraine as a legitimate, sovereign state. Intelligence at the operational level indicated that during 2020–2021 period, Russia’s military became more active and involved in border region exercises. Military intelligence intercepts also picked up on the creation or transfer of Russian military headquarters into Western regions. Finally, intelligence at the tactical level provided strong signals in late 2021 and early 2022 that something big was about to happen. Russia began to cancel soldiers’ leave, and it moved forward mobile crematoriums.

The panelist suggested that Putin may have viewed past as precedent for the manner he anticipated that NATO would respond to his aggression. He likely believed that he could endure another Western response featuring mainly economic and diplomatic consequences. He may have also observed NATO readiness as questionable, given the modest, halting steps taken by NATO since 2014 to assertively enhance the Alliance’s capability. There had not been much improvement in the NATO Response Force or expansion of U.S. rapid response forces in Europe since Crimea/Donbas. American military leaders played in an environment where plenty of their “authorities to act” were pulled up to higher levels of military and political control. Fear of prewar provocation of Putin or greater war escalation seemed the reasons for this withholding. American military forces in Europe were not set up for much more than noncombatant evacuation operations (NEOs) in Ukraine. The efforts to regenerate 30,000 U.S. forces spread across Europe since 2014 did not seem to impress Putin enough to have deterrence hold in Ukraine. Washington policymakers may need to reconsider basing posture and understand that the United States needs more forces forward and fewer in the United States. Against this backdrop, Putin may not have seen the risks to a major military attack as high, even in the short term. A lesson here seems to be that “deterrence by cost imposition” after an aggressor strike is invalid against Russia and mandates move to a “deterrence by denial” strategy.

The panelist then offered some early lessons for future wars. American forces in Europe built plenty of ad hoc systems in 2022–2023 to support and sustain the Ukrainian fight. A totally new logistics support framework was set up by the U.S. XVIII Airborne Corps not because they had not been put in place between 2014 and 2022 but because the XVIII had deployed forward to aid in an anticipated NEO event in Ukraine. Known as SAG-U (Security Assistance Group–Ukraine), this vital logistical framework came about by accident, not design. Task Force Champion was a similar ad hoc intelligence-sharing framework built on the fly, but it should have been considered before 2022 and must become a permanent feature of the future U.S./NATO military structure.

Senior U.S. military headquarters in Europe remain too organized around partner assistance structures and are not fully resourced for combat operations. They need to be reorganized

for proficient planning, exercising, and rehearsing for complex, combined arms combat. More permanent, forward-focused U.S. military structures and forces are required in Europe to counter Putin and maintain deterrence. Policymakers continue to talk about shifting U.S. military forces and structures toward China. That does not seem consistent with early lessons learned about what is necessary to deter Russian aggression in Europe.

The panelist ended with a return to the opening caution: We must be careful not to read too much into lessons learned from an ongoing war at this point. The war still has a way to go. In this context, those drawing warfighting lessons from the use of high-tech systems up to this point in the war need to be careful. Some new technology expedients early in this war may not be tenable into the future. No recent technology has yet proved to be a game changer. Russian commanders and military analysts have been learning and are adapting. Some of the technologies that enabled Ukrainian success during the 2022 phases of the war are not working against the Russians in late 2023.

Q&A

After formal remarks by the three plenary panelists, the moderator opened the session for questions and answers. The moderator took the first of seven questions in this segment of the panel. Five questions then came from audience members at the plenary panel, and one question came from an online participant.

Question 1: Given that neither the United States nor the West was postured or prepared to deter Russia in Ukraine until late 2021, how can we revise deterrence of Russia? How can the United States and the West better imagine the kinds of internal preparations and external policies necessary to sustain deterrence?

Answer: The first panelist offered that the United States was perhaps too closely focused on NATO and less on those European countries that are not members of the Alliance. Perhaps once Ukraine gave up nuclear weapons after the Cold War, it became less of a priority. In addition, greater support to Ukraine was a tough sell in the West due to Kyiv's suspect government status and the constant charges of corruption. Russia's presence in eastern Ukraine also denuded Western focus on absolute support for Ukraine. In truth, the Ukrainian-Russian standoff since the Cold War always has been an American foreign policy challenge. If the United States does now see Ukraine as a priority, Washington needs to do more to generate popular support.

The second panelist stated that the failure was one of risk assessment—that is, not protecting the borders of Ukraine with something that Putin would not wish to confront. Every government west of Warsaw has not done well in explaining to their people the importance of

the long-term struggle in Ukraine versus Russia as a key component of the evolving Western contest with Russia and China. There also seems to be a challenge accounting for U.S. taxpayer money spent in Ukraine, and the American public could be better informed. Key leader engagement will be critical to help people understand more about the security and stability stakes now engaged in eastern Europe.

The third panelist agreed that U.S. national strategy and policy does not now place a priority on Europe (or the Middle East). The panelist noted that the four basic priorities for U.S. engagement in the Russia-Ukraine war appear to be:

- avoid any direct kinetic engagements among the United States, NATO, and Russia
- allow no NATO forces on Ukrainian territory
- preserve NATO unity
- give Ukraine what it needs to defeat Russia on Ukrainian territory.

Question 2: As a follow on to the previous question, the third panelist stated that there were not yet any “game changers” in the Russia-Ukraine war. This seems to go against common wisdom. What did the panelist mean?

Answer: The third panelist stated that the evolving nature of the Ukrainian battlefield over the past year indicates that it was premature for analysts to suggest that “precision beats mass” is a lesson learned from the conflict. That may have been the case during the 2022 phase of the war. But Russia has been adapting. For quite a while, the Franco-British low-observable, long-range air-launched Storm Shadow cruise missile was a challenge to the Russians, but they have adapted tactics and techniques. The superior combined arms training of Ukrainian forces made an early impact in the war, but the battlefield has been adapting and changing in a way that has eroded this effect. In fact, the most consequential battlefield item in the ongoing conflict today is the old-fashioned 155mm artillery shell.

Question 3: Ukraine seems to have clear goals and aims, but what Kyiv hears from the West is only that it will assist Ukraine for “as long as it takes.” This suggests that the West does not know its ultimate aims or its timelines, so it is impossible to properly allocate the correct supporting resources to Ukraine for the war. Should the West not set up a goal to win the war in 1 year?

Answer: The third panelist addressed the “military piece” of these comments. NATO has a new force model and is working toward a better posture. The Alliance has a new force model—NATO 3.0. The Supreme Allied Commander Europe, General Christopher G. Cavoli, USA, has gone back to the NAC to get more preapproved authorities, and there has been a great deal of progress. This is moving NATO in the right direction for greater flexibility. We are always seeking to determine what the “ends” are, how we will allocate resources, and at what level of risk we will accept to achieve those ends and over what period. For now, we are making iterative determinations about the kinds of equipment and timelines that support more cohesive, long-term strategic objectives. U.S./NATO military commands did find out late about some kinds of equipment for Ukraine—such as the Bradleys and Strykers. Civil-military tension is necessary—and generally good—but there is a case to be made that we can do a better job. The underlying problem is that Russia is aware that the best way to get an opponent’s military operation to stop is to get its Commander in Chief to stop it. The limitations that are put on what weapons get to Ukraine are “entirely artificial” and are due to the “spectacular and catastrophic success” of past Russian malign influence campaigns to convince Western leaders that they cannot and probably should not defeat Russia. The panelist stated, “That is what is behind the Western formulation for Ukraine of ‘as long as it takes.’ And the refusal to say what ‘it’ is.” Russia’s coordinated agents across the West for the past decade have sent the message about the dangers of nuclear escalation, and this has permeated the top leadership of Western capitals. Ukraine is feeling the damage and consequences of this right now, but others may feel the consequences if Western leaders are not willing to confront Russia in a way that will cause it to stop.

Question 4: Panelists today not only talked about Western “self-deterrence” in Ukraine but also stated that we should believe Putin when he claims that he is going to do something. How are Western leaders supposed to reconcile the tension between moving lethal supplies into Ukraine in a manner to help that country without triggering Putin’s threats to use nuclear weapons if confronted directly by NATO? How do we resolve this contradiction?

Answer: The second panelist first responded by stating the questioner may have been too categorical in thinking that the West must believe every threat or bluster Putin makes. The panelist stated that Western intelligence is capable of sorting Putin’s bluster from truth about nuclear weapons. People are too eager to fear what Putin states about nuclear weapons and not look hard enough at what the Russian military may be able to do in the nuclear realm. There has been a long campaign of Russian “active measures” undertaken to convince the West of a Russian nuclear capability that may be greater than it is.

The third panelist stated that to date, every point on the timeline for sending new weapons to Ukraine that the West has thought might lead to nuclear escalation by Russia has not proved true in practice. The panelist thus suggested it would be worth revisiting the assumptions about Russia and nuclear weapons use.

The first panelist observed that Putin has stated repeatedly that Russia “will win this war”; this is an existential matter for him. Much of Russia’s and Putin’s rhetoric is performative for domestic and selective audiences. Thus, the West may have been a bit overreactive about his nuclear weapons posturing. But what if Putin comes under severe duress? Would he then use nuclear weapons in some way? The United States must take this threat seriously.

Question 5: The panel has discussed deterrence by cost imposition versus deterrence by denial in the case of Ukraine. Is deterrence by cost imposition overrated? Are permanently stationed U.S. troops in Europe necessary to generate deterrence? What are the benefits of forward positioning versus permanent presence?

Answer: The second panelist stated that imposing costs requires conveying the capability of undertaking actions at a level of pain that Putin and Russia cannot bear. Russia was not deterred from invading Ukraine because Russian society has been aligned to a national narrative by Putin that will bear high costs. The discussions since 2014 debating the need for greater American military presence in Europe should have been settled by now. Forward presence to deter—by denial—seems necessary. It also is true that Europe is still too reliant on the United States for its security forces and presence. It is urgent to challenge the assumption in too many European capitals that the United States always will be there, so they can take a “holiday” from responsible military spending. The United States may be even more forceful than it has been to insist on more appropriate European spending and resourcing of their own defense.

The third panelist agreed that immunity to meaningful Western cost imposition seems baked into the Russian risk calculus at a high threshold of pain. This was true for Ukraine in 2022 and may even be the case for the Baltic states in the future. Deterrence by denial is resource intense and the cost high. It may be the correct approach against Russia, but it is expensive. The European NATO Allies will take years to resource their militaries for proper deterrence against Russia. An enhanced U.S. military forward presence in Europe will give the United States not only more sway but also the “convening authority” necessary to focus the Alliance on rebuilding strength and standing against Russian efforts to divide and conquer it. A more robust U.S. military presence could come from forward positioning or permanent stationing.

Question 6: What do the panelists make of Russian operations aimed at supply locations in Poland and Bulgaria? What are the risks of escalation from such activities?

Answer: The second panelist stated that it is hard to know if Article V of the NATO Treaty is the reason underpinning observed Russian restraint. There is also an argument to be made that many Russian capabilities—including cyber and special operations—might be now entirely preoccupied with Ukrainian forces and thus not able to do more against the NATO Allies nearby Ukraine. It could be a bit of both. It is hard to know. What is clear, however, is that Russia could be doing a lot more here, but it is not.

The third panelist indicated that Article V is a significant deterrent. Russia has not chosen a kinetic approach against NATO states. Article V is a major reason. We know it is a priority for Russia to disrupt Alliance support activities for Ukraine in adjoining NATO countries, but we have not seen other than accidental kinetic actions, and we have detected and interrupted some non-kinetic Russian efforts to disrupt NATO support and supply. It also is hard to know what other kinds of activities Russia has inserted into NATO countries to try and disrupt the support activities or about how much of what the United States/NATO has done to disrupt the Russian activities in NATO states has borne fruit.

Question 7: What other mechanisms, authorities, or structures are necessary to better share classified intelligence insights with the nongovernmental community to get in a more cohesive preconflict understanding? How do we overcome the “ban on imagination” in Europe, the United States, and at other locations around the world?

Answer: The second panelist observed that we always have had tension between government intelligence organizations and those outside of government that have deep subject matter expertise. This is more of a challenge in Europe than in the United States. One does get better understanding when government insights are combined with a formal interaction with the nongovernmental expertise. This is powerful when done properly and we should do better in the future.

The third panelist stated that the imaginative actions taken in Europe to deal with Russia in Ukraine, such as Task Force Champion and SAG-U, were important to consider for the future in Europe and around the world. We need to be a bit more deliberate in the future. Taiwan needs the equivalent of a SAG-U. There may be some lessons to share from Europe but maybe not all. Some of the SAG-U structures may be useful, but the Pacific looks a lot different in terms of logistics than does Europe. The other challenge is that of resourcing. European military forces did have a lot of access to nongovernmental civilian experts but could always do with more. Resources are a constraint to doing more.

Note

¹There is no open-source reporting to suggest that any such Burns-Putin under-the-table deal was discussed.

Plenary Two: Innovation and Adaption on the Battlefield

The second plenary focused on the nature of innovation and adaptation observed during the Russia-Ukraine war and understanding their implications for the next stage of this war and future conflicts. The three panelists for this session were experts on a range of different domains, technologies, and related areas of strategic learning that have played roles in the Russia-Ukraine war. The moderator asked the panelists to address five overarching questions in their remarks:

- What has been surprising or impactful in innovations and developments in each of the different domains and technology areas during the Russia-Ukraine war?
- What accounts for this surprise or lack of preparation?
- What are the differences in how conflict actors are adapting and learning?
- How should we think about how all this relates to the future of the Russia-Ukraine war and future of conflicts?
- What lessons should we take away from the Russia-Ukraine war?

The moderator noted areas of focus for discussion would include:

- time sequencing
- mass and logistics
- offense-defense balance
- relation between above and below threshold
- the roles of allies in the conflict
- what is next in innovation.

Panelists began by stating what has been surprising or effective in each of the respective domains and technology areas during the war, and what accounts for areas of surprise or

under-preparation. Moreover, they discussed what they see as differences in the adaptation and learning by the actors involved in the conflict and how it relates to the future of the Russia-Ukraine conflict and the future of other conflicts.

Remarks

Panelist One

The first panelist framed the discussion hypothetically as if he were working for the People's Liberation Army (PLA) and viewing the Russia-Ukraine war as a source of lessons to be learned. Looking at what the Chinese military has written about fighting local wars under “informatized” or “intelligentized” conditions—wars against neighbors that are hermetically sealed off from external intervention and are meant to be short, sharp, decisive affairs in which the initial conditions of conflict are determinative—he argued the Ukraine war has indeed provided several lessons that would be relevant across regions. The speaker noted that Russia, strategically at least, did succeed in hermetically sealing off Ukraine from direct external intervention in the way that China would hope to do in a conflict in the Indo-Pacific region. But Russia failed to achieve the sort of short, sharp, decisive outcome that would be contained within the Chinese concepts of fighting local wars. He also noted that Russia's strategic frameworks for thinking about wars—whether local, regional, or global—bear more than passing resemblance to the way the PLA frames conflicts. Thus, despite geographical differences, the Russia-Ukraine conflict could provide a number of lessons for the PLA that would be relevant for their strategic thinking.

The speaker walked through key lessons that could be learned by PLA observers, looking first at the role and effectiveness of precision-strike campaigns prior to and during invasion, next at the evolving roles of the maritime and land domains over the course of the war, and concluding with observations concerning the role of innovation during the conflict.

Starting with an examination of precision-strike, the speaker discussed lessons the PLA might take regarding the relative ineffectiveness of Russia's opening strike campaign that occurred concurrently with their invasion of Ukraine. In PLA parlance, he explained, any conflict must begin with a “joint firepower campaign,” a mass precision-strike campaign that targets things like command-and-control nodes and aircraft on the ground in order to paralyze as much of an adversary's force in the initial stages of a conflict as possible. Russian thinkers, ever since the 1990s, have thought about precision-strike in quite similar terms. Both Russian and Chinese leaders and military analysts have built on a flawed set of readings of how U.S. wars in

the 1990s played out—not only the 1991 war with Iraq but also the wars in the Balkans. They assumed that long-range precision-strike, combined with pervasive intelligence, surveillance, and reconnaissance (ISR), opened the possibility to cripple an adversary at the outset of the conflict, making this initial “deep” stage of the fight much more important than the “close” fight.

But what we saw in the initial stages of the Ukraine conflict before the Russians shifted to counter-value targeting is quite an ineffectual precision-strike campaign. The Russians did not suppress most mobile Ukrainian targets. They also did not suppress the Ukrainian air force on the ground. The speaker suggested that this relatively ineffective Russian campaign could be viewed in several ways by the PLA. It could be seen as failing for reasons consistent with their own strategic thought and thus as a vindication of their own assumptions. Chinese authors have often written that missile campaigns, to be effective, must use missiles on a rather large scale. So, the relative ineffectiveness of Russia’s initial missile salvos might be viewed because of the limited scale and thus a confirmation of the validity of the PLA’s own large-scale approach.

On the other hand, the speaker suggested, PLA observers could also come to several more perturbing lessons concerning the likely effectiveness of their own strategic approach. The first such potential lesson relates to the fact that air defense systems tend to degrade quite gracefully. It is true that the Russian Aerospace Forces were especially inept at hunting mobile Ukrainian targets and that Russia’s own targeting cycles were quite rigid and inflexible. But most campaigns conducted over the last 30 years and before have seen at least the pop-up air defense threat remain in the theater. The Iraqi air defense network, with its rather rigid centralized structure based around command nodes, gave the Russians, the Chinese, and perhaps the West a slightly artificial view of how quickly an air defense network could be paralyzed. But that was an exception. Therefore, one of the first lessons to learn about a joint fire power campaign is that some of the systems would not be paralyzed and might well degrade gracefully.

The second lesson relates to the observation that point defense (at least around well-defined nodes) has been quite effective. The Ukrainians have struggled to defend against missiles like the 3M14 Kalibr, which can maneuver in flight and dispense decoys. But around key nodes such as Kyiv, intercept rates against Kalibr have been quite high, as indeed have intercept rates against more complex targets like the hypersonic Kinzhal.¹ So, the broad lesson is still that to overwhelm robust air and missile defenses around key sites, large salvos must be generated. Superficially, this could be seen as consistent with the previously noted Chinese approach to scale in planning for local wars, but it has two more challenging implications.

The first implication—which runs somewhat counter to prevailing Russian and Chinese strategy—is that an air and missile campaign should be sequenced. It should be expected to

be prolonged and ideally commence before an invasion, rather than occurring simultaneously such that effects in the deep area and the close are generated in tandem. Both Russian and Chinese strategic thought has focused on achieving the latter—simultaneous—approach through most of the post-1990s era. The way the Russians invaded Ukraine, attempting to paralyze the Ukrainian deep area as they invaded, reflected some of those theoretical assumptions. And we have seen that the levels of paralysis that it was assumed could be achieved with deep fires simply were not achieved.

The second implication—also a significant challenge for prevailing strategy—has to do with the compatibility of such a massive precision-strike campaign with surprise. Generating joint firepower, as the Chinese think of it, at the scale and with the effects they might want to achieve, seems to require the mobilization of resources (missile launchers, for example) on so great a scale that it makes it very unlikely to achieve surprise—something that has also been quite central to Chinese thinking about local wars under their informatized conditions.

A third possible lesson, the speaker noted, relates to the contested nature and changing viability and tempo of precision strikes over time. We have seen a battle for precision emerge as both sides have employed robust electronic warfare capabilities. As a result, as the conflict has continued, both Russia and Ukraine have had to employ robust shaping to use precision-strike capabilities effectively, something that was not true in the early stages of the conflict. The lesson is that, as each side comes to grips with the other's tactics, techniques, and procedures, the tempo at which precision-strike capabilities can be used tends to slow.

Moving on from the role and effectiveness of deep-strike campaigns, the speaker focused next on potential lessons that the PLA could draw from observing the uses of the maritime domain in the Russia-Ukraine war. In their doctrinal documents such as *Science and Military Strategy*, he explained, the Chinese discuss the maritime domain in relation to three primary missions: joint fire power campaigns, island-landing campaigns, and blockades. Having already discussed joint fire power campaigns in the broader context, he focused on observations and lessons concerning the latter two missions.

Looking at the Russian-Ukrainian conflict in the Black Sea, the speaker suggested a few observations and lessons about maritime activities that underpin island-landing campaigns. He noted that both sides have struggled with targeting off-shore assets (even dynamically), but that shore-based assets, in contrast, have been fairly vulnerable. The Russians, for example, did not sink Ukraine's last operational warship, the *Yury Olifirenko*, until relatively late in the war, and only did so when it was in port. Targeting shore-based infrastructure is both much more feasible and something both sides have been able to do with a range of capabilities—some of

them quite cheap. We see this, for instance, in Ukraine's use of uncrewed surface vessels against Russian vessels in and around Sevastopol and against harbors.

The challenge then, the speaker explained, is that shore-based infrastructures are at risk to a degree that the vessels they support may not be. This could be interpreted a couple ways by the PLA. On the one hand, it might be seen as vindication of the PLA's approach within the first island chain. If we look at how the Strategic Rocket Force has constructed its capabilities, a great number of Chinese missiles are short-range ballistic missiles, such as the DF-15M4—capable of land-attack missions, particularly against targets such as ports—rather than longer range missiles, such as the DF-21D, which are built to strike dynamic maritime targets. But this asymmetry of shore-based and off-shore vulnerability also poses a challenge relevant for the PLA. Even if vessels are distributed from their shore-based infrastructure and can survive, it reduces the tempo at which they can operate if the infrastructure supporting them is inherently jeopardized. We have seen this in how the Russian Black Sea Fleet has been forced by the precision-strike threat to operate from further back and increasingly away from its home port in Sevastopol. This also raises questions about how operational tempo might be maintained at sea when things such as a vertical launch system (VLS) reload may not always be possible. Second-tier solutions (such as containerized missiles on non-dedicated vessels) might be necessary to maintain the tempo of activity when dedicated vessels cannot always be supported, even when they remain survivable.

A second lesson regarding the maritime domain involves a dampening of the old assumptions built into most theories of naval warfare that the side that shoots first tends to win, and that the side that maintains early situational awareness gains an early advantage that tends to aggregate over time. These are less true when complex ground-based targets (such as coastal defense cruise missiles) as well as other relatively cheap means of sea-denial (like mines and uncrewed surface vessels) make the closing areas of the hostile shore difficult to operate against. This lesson can be seen in how Russia's sea control early in the war never conveyed the advantages that might have been expected, and, indeed, has declined through the course of the conflict. Even before the *Moskva* was sunk (April 2022), for example, when the Russians had pretty much absolute sea control in the Northern Black Sea, they abandoned a planned amphibious landing near Mykolaiv after reconnaissance elements of the 810th Naval Infantry Brigade were destroyed in their flat-bottomed craft. This was because the assessed risk from Ukrainian mines and coastal artillery was deemed too high. And this was at the peak of Russian sea control. Therefore, a key lesson might be that, even if one does seize sea control, using it to a positive effect in a landing campaign may be increasingly difficult.

A third lesson, particularly drawn from the Battle of Snake Island (February–June 2022), is that while it is possible to seize an outpost—which might be achievable relatively quickly in a limited context such as the South China Sea—sustaining it may be considerably more difficult. Despite the sinking of the *Moskva*, warships remain well protected against a range of threats, including coastal defense cruise missiles, which after all, they have dealt with in some form since the 1960s when the Egyptians sunk the *Eilat*. But sustainment of forces and outposts is a lot more difficult. Russian losses have been concentrated among landing craft like the *Novocherkassk*. These craft are considerably less well defended and have proven vulnerable to capabilities including the Bayraktar TB2, which are simply not usable against well defended military vessels. And the fact that the Ukrainians were able to effectively strike the logistical underbelly upon which Russia's sustainment of its positions on Snake Island depended meant that that position became untenable even before it came under sustained artillery fire. Therefore, the third lesson for island landings is that the ability to seize positions does not necessarily mean the ability to maintain them. And equally, to maintain them, one might need a degree of force protection and presence, which amounts to mobilizing a fairly substantial force to an area. This again makes a short, sharp, limited conflict—the sort that China fought in Vietnam in the late 1970s—difficult to achieve.

Having discussed ways in which the Russia-Ukraine war might challenge PLA thinking concerning island landing campaigns, the speaker moved on to assess the war's implications for maritime blockades. Here, he suggested, the relative potency of blockades has been reinforced. Russia has maintained the blockade of Ukraine's coasts with naval mines as well as the upstream destruction of produce with missiles. Russia maintained this capability even after it lost sea control of the Northwest Black Sea. The speaker stressed that, critically, there are few good fixes to overcome these blockades in a conflict where great powers are imposing them. This is because some of the tools, such as convoys, that might have served as palliatives in a different context (for example, the Iran-Iraq War) would exacerbate circumstances. The ability to overcome a blockade depends on private-sector actors such as insurers. During the Iran-Iraq War, when insurers saw American vessels convoying vessels through the Persian Gulf, they assumed this provided a degree of safety. But in the current context that would not be the case. Leaving aside the practicalities of operating in the Black Sea, if Western naval vessels were seen operating side by side with Russian or, in the future, Chinese naval vessels, it would not be seen as ensuring the safety of shipping; rather it would be seen as an additional crisis, which would exacerbate war risk between these powers. Thus, the dynamics of overcoming blockades have become far more complex in a great power competition context.

Turning from the maritime domain, the speaker examined potential lessons concerning the role of the land domain in the Russia-Ukraine war. Here he saw some failures resulting from the force structure which could also be relevant to the PLA. Russian armed forces, he explained, had never moved completely away from conscripts to contract soldiers. As such, they relied on a model for ensuring readiness—battalion tactical groups (BTGs)—which ended up being largely unsuccessful. BTGs were good at ensuring high readiness of forces because enablers were pushed to the lowest echelon and each brigade could produce a couple in a wartime scenario at relatively short notice. But what we have seen in Ukraine is that pushing those enablers to low levels means that commanders have tools at their disposal that exceed their span of control, exceeding the capacity of the battalion staff. This fact would arguably also be true for the PLA, which uses a similar construct—the combined arms battalion—within both its army and its marine corps, to circumvent some of the same problems of working with a conscript-heavy force.

Having discussed the particularities of specific domains, the speaker concluded with several broad observations about how both sides have innovated during the war, some Russian difficulties in this regard, and again the potential relevance to the PLA. The first observation concerned command structures and tensions between maintaining necessary degrees of coordination and operational flexibility. Russians have essentially pursued a model of command in which the army has subordinated other services to its own priorities; this was especially visible in the context of its precision-strike campaign, where targets were clearly selected by army-led military district commands. The resulting Russian (military district command level) decision-making has been relatively rigid, particularly regarding targeting, making plans inflexible in the face of changing dynamics. Russian missiles have often struck the locations of Ukrainian targets accurately a day after they have moved away. In other words, the mechanisms that the Russians had set up to achieve coordination ended up hindering flexibility. This is an issue that the PLA could also face, having been reorganized around regional theater commands, most of which are led by the army. So, the challenges Russia has faced might be of some notice.

Other lessons regarding innovation during the war have related to each side's use of innovative mechanisms for replenishing assets. This includes the importance of being able to leverage commercial off-the-shelf capabilities—which becomes particularly significant as societies and militaries expend first-tier systems quickly in a conflict. The military that exits a war rarely looks like the military that entered it. Also important here is the role of domestic production—which both sides in the Russia-Ukraine war have had to utilize. Perhaps here, the speaker noted, the Chinese might look with some satisfaction to their own domestic production system.

The speaker's final observation regarding innovation during the war concerned the importance of a country having the ability to draw on its society more broadly. One of the reasons the Ukrainians proved quite innovative, particularly at lower levels, he explained, was that mobilization made available to the military many people to whom it might not have otherwise had access. The question that a lot of militaries—including the Chinese—will struggle with is how they can get those people in peacetime when the militaries are not fully mobilized. The PLA has relied on a system of civilian contractors, which might be worth discussing as a partial solution. But this is something that many militaries will have to grapple with.

Panelist Two

The second panelist focused on the air domain. She examined the evolution of the Russia-Ukraine air war and the sources of Ukraine's surprising relative success in air-denial, drawing overarching lessons about changes in air warfare that could be relevant for future conflicts. Her observations were structured around several main topics: First, having examined Ukraine's successful air-denial strategy, she suggested a shift in offense-defense balance toward greater defensive advantage. Related to this, she argued that air contestation has played a critical role in the war as has ongoing adaptation. Considering the types of technologies enabling this contestation, she looked at the movement toward "roboticized" air forces. And, last, she considered the returning importance of "cheap mass" in air warfare.

Beginning with Ukraine's air denial strategy, the speaker noted that one of the great mysteries of the Russia-Ukraine war has been Russia's inability to gain air superiority. On the eve of the war, they had an air force that was 10 times the size of Ukraine's. It was also much more technologically advanced. Putin had invested considerably in this modernization and saw it as a status symbol. But, despite this imbalance, the Russians did not achieve air superiority. Part of this failure is likely attributable to Russian ineptitude—particularly Russia's inability to do complex air operations. The speaker suggested, however, that that is not the entire story and could lead to learning incorrect lessons. If the West simply takes comfort in believing the Russians are not good at suppressing enemy air defenses, she argued, we will be missing important changes in air warfare. Rather, there is evidence that the Russian failure here also has to do with Ukraine's strategic choices. If Ukraine were the only power that had shown an ability to use air denial, then there would be grounds for skepticism that this is about a trend in warfare. But the antecedents of Ukraine's successful approach, she explained, were there well before the current war.

The speaker noted that Ukraine's successful air denial is less mystifying if one considers the work of British naval theorist Julian Corbett (1854–1922), who conceptualized sea denial.² The Ukrainians appear to be applying similar concepts to the air domain. Corbett advised that disputing control was what naval fleets were most likely to do and could achieve. And he offered two methods for doing this: first, creating a “fleet in being” to remain a persistent threat to the adversary; and, second, engaging in minor counter attacks. While Ukraine may not have deliberately set out to apply this denial strategy to the aerial domain, she suggested that this is effectively what they have done. She provided three explanations—structural, technological, and doctrinal—for why the Ukrainians have been able to use this air-denial strategy to such great success.

First, the *structural explanation* stems from the fact that ground-based air defenders have a structural advantage. These defenders are tackling a simpler military problem, and they are fighting in terrain that is more favorable to cover and concealment. On the one hand, they are only dealing with air-based threats, whereas the air attacker must deal with a more complex combination of both air-to-air and ground-to-air threats. On the other hand, attackers are flying aircraft in a mostly featureless sky and are, therefore, easier to spot, compared to ground-based air defenders who can use cover of terrain and mobility.

Second, there is a *technological explanation*. Declining costs and technological advancements are increasing the power of air defenses—rendering them highly mobile, denser, and cheaper than crewed stealth aircraft of many attacking air forces. The Ukrainians have used mobility and dispersion well to create the persistence-enabling type of “force in being.” They have been able to survive initial salvos of missiles trying to identify and destroy their air defense launchers, and they have been adept at moving them. Far from being a unique problem for Russia, the speaker noted that even the United States has previously experienced related challenges in establishing air superiority. This was the case, for example, with its Scud hunt in Iraq in 1991. In Kosovo in 1999 it is what caused NATO to fly above 50,000 feet. Adding to that mobility challenge is the fact that air-defense networks are growing increasingly dense with more types and greater numbers of weapon systems. In Ukraine, we have seen an amalgamation of different systems. This includes, for example, medium and longer-range surface-to-air missiles (SAMs), man-portable air defense systems (MANPADS), uncrewed aerial systems, and loitering munitions, all of which are making the airspace more congested and contested. Furthermore, because many of these systems are cheaper and quicker to build than traditional manned aircraft, this means that an air defender can also potentially endure more large-scale losses.

The third explanation for Ukraine's air denial success is *doctrine*. The current era of defensive weapons *en masse*, the speaker argued, is opening new possibilities for air power strategy. In particular, it is underwriting an air-denial strategy based on what is called *volumetric defense*. This is closely related to the idea of "defense in depth," but here considered both *laterally*—in terms of range—and *vertically*—in terms of altitude. If we look at traditional contests for air superiority, the key contest was usually in the "blue skies" above 10,000 to 15,000 feet, where fighters and bombers usually operate. If one side could gain air superiority at those altitudes, then it generally conferred air superiority below that. That is no longer the case. What we are seeing is that the space below 15,000 feet—what is called the *air littoral*—is becoming increasingly competitive and congested as well as easier to access. As a result, even if you gain air superiority in the blue skies today, you will still have air-based threats standing between traditional airpower and ground forces. One consequence is that, from the perspective of air denial, these two areas of contestation—in the blue sky and the air littoral—are becoming equally important parts of the fight for air control. These two parts of the conflict are also interactive and mutually supportive. We can see these dynamics in the Russia-Ukraine war. Early in the war, Ukraine often used TB2s as a lure to get Russian aircraft to fly lower. The TB2s fly lower and slower, but they were causing a lot of trouble for the Russian convoys. So, the Russian aircraft would come lower to try to find them, and the Ukrainians would be waiting to ambush them with MANPADS. As a result of these dynamics, the speaker noted, volumetric air defense is more resilient to collapse than traditional approaches. It is harder to defeat by neutralizing command, control, and communication systems. While the pieces are mutually supportive, they are not totally dependent on each other. Here she noted some parallels with the prior speaker's discussion of developments in the maritime domain.

Based on these developments concerning Ukraine's relative air defense success, the speaker drew several overarching lessons. First, overall, we are seeing a significant defensive advantage in air warfare today. This challenges a lot of traditional views about airpower going all the way back to the foundations with Italian aerial warfare theorist Giulio Douhet (1869–1930) in the interwar period. The United States can learn from this for the future. As revisionist actors that wish to change the status quo, China and Russia will each likely need air superiority to achieve their objectives quickly and at not too great a cost. Here we see there is a lot of potential to make that more challenging for them—and, in so doing, greatly enhance deterrence. This would require more focus on these types of air defense systems that have proved effective, including uncrewed systems, missiles, and other elements supportive of a volumetric defense.

The speaker's second overarching observation was that the air war has been critical to the course of the conflict, and that this has involved a great deal of adaptation. The speaker disputed commentary suggesting the aerial domain has not been important to the overall war. Rather, she argued, the fact that Ukraine has successfully fought to keep the skies contested is precisely why Ukraine is still in the war. While we often think about offense and defense in cycles, like a sine wave, she suggested that this is probably not correct. Instead, it might be more appropriate to consider defensive stasis as the equilibrium point, punctuated at times by short periods of offensive battlefield advantage. With HIMARS, for example, we saw a period of between 4 and 8 weeks where the Ukrainians were able to do serious damage to Russian command and control and air defenses. But then the Russians adapted, and it went back to a more attritional struggle. This demonstrates a broader dynamic that can be learned from.

The speaker's third lesson concerning the observed evolution of air warfare during the Russia-Ukraine war was the emerging importance of "roboticized" air forces. This has occurred in a context in which the air war has turned into an attritional struggle of mutual air denial. The Russians have been pushed back to such an extent that they are using their aircraft primarily outside of Ukrainian airspace to lob missiles into the country using less accurate standoff capabilities. What we're seeing is that, under those conditions, the fight has increasingly turned to what could be termed *roboticized airpower*. This is an emphasis on uncrewed systems and drones of all kinds—military grade as well as commercial—as well as lots of missiles and air defense systems. (The term "drone" itself has become almost too general to be useful, the speaker noted, given the wide variety of such systems in use.) This an important trend, and we are likely to see many small and medium powers move toward more roboticized air forces. The speaker argued that the United States would do well to do the same.

The speaker's final lesson was that we are seeing a return to cheap mass, where quantity has a quality and importance all its own. The Russia-Ukraine war has turned into an attritional struggle—for which mass is critical, particularly cheap mass. The speaker noted a deep concern that Ukraine's air-denial strategy might be at risk, depending on how it is sustained. While air superiority was never a birthright of the United States and other Western countries, for the last 30 years it has felt as if it were. Western air forces made it look easy, so we under-invested in air defense systems. We also now lack air-defense systems that are sufficiently mobile. They are exquisite and highly capable, but they take a long time to move. According to open source, for example, a Patriot missile takes about 60 minutes to pack and move. The Russians, however, can move an S-300 in about 15 minutes and an S-400 in 20 minutes. If accurate, this is a significant difference. The speaker noted the vulnerabilities created by relying on smaller

numbers off exquisite systems. This can lead to acute tradeoffs about whether you want to place those assets at risk or have them pushed back, where they are safe but not as relevant to the fight. Increasingly, she argued, there is a need for the United States and Western powers to think critically about cheap mass and its importance for defense, particularly for deterrence by denial. Part of denial, the speaker concluded, is turning the confrontation into a long hard slog. This will require significant investment in missile and drone capabilities.

Panelist Three

The third panelist addressed the cyber domain. She examined prior Western understandings of the cyber domain, new insights that could be gained from the domain's role in the Russia-Ukraine war, and implications for the domain's role in future conflicts. Before diving in, she stated that she would prefer to talk in terms of "insights gained" or "lessons taught" rather than "lessons learned." This is an important distinction because lessons are not always learned.

The speaker began with a discussion of prior understandings of the cyber domain that are being built upon. Since it is a relatively new operational domain, she explained, it is important to first lay down a baseline of what we have known already, prior to the Russia-Ukraine war. Specifically, we know that competition in cyberspace below the threshold of armed conflict is continuous, ongoing, has become routinized, is a norm, and has strategically consequential effects. Democratic states have faced strategic losses in this competition. The Russia-Ukraine war has not changed this. It is worth noting that one of the number-one priorities now at U.S. Cyber Command is election security. Priorities such as these do not stop with the rise and fall of other contingencies. The speaker also noted the power of enduring information and influence campaigns that are shaping the battlespace, now, years in advance. Efforts to *deter* such sub-threshold aggression have failed, but we can *disrupt* it without escalation, the speaker noted. She stressed the importance of this point, explaining that many political leaders may not have yet internalized the fact that, below the threshold of armed conflict, cyber operations are not inherently escalatory. Because of these dynamics, the United States determined that it needs a campaigning approach. In addition to integrated deterrence, *campaigning* is a core element of the National Defense Strategy. In cyberspace this means operating continuously and proactively to defend and advance the interests of the United States and its allies.

What then are the takeaways from the Russia-Ukraine war? At the broadest level, the speaker argued, the key takeaway is that cyber operations are "come as you are." There is a limited ability to rapidly provide new accesses and options for crisis management and conflict targets—particularly hard military targets—at the speed of operational relevance. This means

that posturing for a contingency—such as something in the Indo-Pacific region—begins with campaigning and competition now. Nonetheless, in relation to the Russia-Ukraine war, we did surge. There were some incredibly innovative target-development processes put in place that allowed us to surge the development of options for senior leaders. But, for the most part, particularly for hard military targets, these need to be developed months or even years in advance. We have to think about what we are doing now to posture for those future activities. And, if we buy the argument that those activities are not escalatory, that means we have a lot of room to maneuver in terms of preparing.

The speaker noted that the Russia-Ukraine war has been a tremendous learning environment because it is really the first above-threshold conflict involving ongoing robust cyber operations. She emphasized several areas of learning. The first is that, operating before and during a contingency allows tremendous insights, opportunities, and options to constrain the adversaries' freedom of maneuver. If done early, this can deny the adversary leverage in a contingency. To do this effectively requires considering how to leverage capabilities to undermine the adversary's desired crisis in war conditions. We must think about how they want to fight, and how they think they are going to succeed. How can we erode their capabilities, their confidence, their freedom of maneuver, and their ability to shape the information environment? How can we sow doubt in their confidence that they can execute a *fait accompli*? We should consider how we can weaponize friction to have them focusing internally versus externally. Likewise, how we can constrain their freedom of maneuver? One approach by which the United States was able to achieve this prior to operations in Ukraine was through the use of hunt-forward operations. These allowed the U.S. and allies to work with the Ukrainians to clean their networks and make sure that they had secure command and control and communication networks.

The speaker explained that all these elements of how to think about setting favorable conditions for future contingencies will continue to be very important going forward. In this light, she also noted several lessons the United States and allies could draw concerning the importance of their own cyber security and resilience. A first is that we should be thinking now about whether adversaries are within our critical infrastructure. To the extent that they are, that presence could be used to threaten us in a future contingency. So, it is important to prioritize getting adversary malware out of critical infrastructure now.

Another critical observation here is that enhancing resilience for mission assurance of forces is key to bolstering deterrence. Resilience is incredibly important and continuously evolving. A final area that the United States and allies should be focused on, the speaker suggested, is having a much more robust information operations campaign to deny the adversary—China,

or in this case Russia—control of the global narrative. This was something that Russia seized on early. And while they were not as successful in Europe, outside of Europe—in the Global South and in other parts of the world—the Russian narrative is still quite impactful. Working to address this will be another important element of setting conditions for the future.

The speaker next offered several specific operational insights. First, *strategic warning* is key, and requires timely, accurate, and agile intelligence-sharing. If we are going to fight as a coalition, if we are going to fight with partners, we all need to have secure networks for intelligence. We were able to do this rapidly on the fly in the case of Ukraine, but we should not wait until there are troops deployed at the onset of a contingency to think about how we are going to accomplish that. Direct intelligence-sharing with foreign partners requires preplanning and routinization, and we need to do that now.

Second, in terms of *intelligence-sharing*, there is this notion of exposure and diplomacy. Regardless of the extent to which the intelligence that was released prior to the Russian invasion was accepted by members of the international community (which can be debated), one takeaway is that information exposure is a powerful weapon. We need to leverage our diplomacy to do that. We need to expose what malicious actors are doing to our coalition partners through our hunt operations. This creates an element of trust—which is very important. Sharing that information is key to bolstering and building up alliances. We have learned that we can rapidly sanitize intelligence to share the “what” without sharing the “how.”

A third specific operational insight is that we are learning a lot about pivoting our forces from competition to contingency. Operating in competition really professionalizes forces, making them adept and capable. But what you need to do in terms of operating at a contingency can be a different target set and a different operational tempo. We are trying to figure out a way to pivot back and forth and recognize that when the conflict is over, we are going to have to pivot back out of the contingency space again. So, what we are doing is “concurrent campaigning”—campaigning across a whole range of adversaries at different levels of competition and conflict simultaneously.

Another valuable insight, the speaker noted, has been the recognition of the roles and importance of different partners and actors—including nonstate and private sector actors—that are in this space. This includes recognizing the need to expand our foreign partner outreach and think about developing relationships with nontraditional allies and partners. It also includes the role of the private sector. Public-private and operational integration in the cyber environment is critical. What we have seen in this conflict, the speaker noted, is that private-sector actors have cyber power. We saw that with the roles played by Starlink and Elon Musk—really being

able to have an impact on the course of the conflict. We see it also in the context of volunteers working with Ukraine to crowdsource insights about what Russia is doing. The key point here is that Russia made it easy for the private sector to support Ukraine. We cannot count on that in a conflict with China. The cost of private-sector actors making a choice between the West and China is going to be different. So, we need to think about that now—having conversations with the private sector and considering how to operationalize it.

The speaker's final observations concerned several key implications for future conflict. First, she argued, all war now has a cyber dimension, but there is no such thing as "cyber war." It is going to be part and parcel of conflict, and we need to think about how cyber can enable conventional operations and how it can shape the dynamic space to the point where maybe we do not actually go to war in the first place. We can also prepare for it in advance. There were several critical things that the Ukrainians did, for example, such as setting up legal frameworks so that they could move their data outside of Ukraine. The Biden administration altered its rules for intelligence-sharing to make doing so much easier with Ukraine. At the same time, we need to be careful that we are not over-extrapolating from this case into a Taiwan scenario because things would be very different there.

In terms of what was most surprising, the speaker noted, it was perhaps the prewar expectations that Russia was going to launch a massive cyber attack. These expectations were wrong. That speaks less about Russia than it does about our preconceptions. She suggested that this expectation had actually not aligned with Russia's strategic approach. So, we need to question our own assumptions. This also concerns a range of other cyber orthodoxies—for example, that the offense is dominant. What we see here is that the defense can be very powerful and robust, but it shifts. It is not a static balance. That is the nature of cyber: It is extremely fluid, and we must continuously seek the initiative to make sure that we are shaping the space, and our adversaries are not.

Finally, the speaker concluded, however this war ends—whether a Ukrainian victory, a Russian victory, or a stalemate—we know we will be facing an environment that we have never faced before: We will have a Great Power with a robust nuclear capability and a deeply degraded conventional capability. And whether this country believes it has achieved a victory and wants to build on that, or has lost and wants revenge for that, there is going to be action afterward. Therefore, she predicted, we are likely going to see much more active cyber activity across the NATO arena after this war ends—regardless of how it ends.

Q&A

After formal remarks by the three plenary panelists, the moderator opened the session for questions and answers.

Question 1: The moderator noted the common threads in the opening remarks of each panelist and posed them into four questions for the panelists:

- How do we think about surprise and failure of surprise in this conflict?
- How do we gain an immediate advantage in the air or cyber domains or through emerging technologies?
- What are the next new technologies or systems that could be leveraged to avoid long-term stalemates in each domain?
- How long does it take for the adversary to adapt to new technologies?

Answer: Panelist one answered that one of the lessons of the conflict is that not only does an overemphasis on surprise perhaps end up being counterproductive, but it can also run counter to sound military logic. So arguably, much of what we regard as the failures of Russia's initial war plan were the products of an overemphasis on the part of its high command and its ability to achieve surprise. The reason that troops advancing through Belarus were not properly briefed until approximately 48 hours before going into Ukraine—the reason they were not properly stocked—was precisely because Russia was attempting to keep the Ukrainians off balance, which they did. The Ukrainians were convinced until the last day that the fighting would be in the Donbas. But it also meant that the Russian forces were almost as surprised to be going into Ukraine.

A lot of what the Russians envisioned in terms of paralyzing the Ukrainian system by precision strikes assumed both that it would not take a lot to overwhelm the system and that it needed to be kept intact for occupation. Sound military logic would have suggested perhaps a 30-day suppression of an enemy air-defense campaign before beginning an invasion, along the lines of the first Gulf War.

An overemphasis on things like precision paralysis and surprise has been a characteristic of how the Russians have thought about war over the last 30 years. But not just the Russians.

How can we avoid the grinding fight? I might challenge the premise, which is it is the revisionist power, as we have seen with Russia, that needs to avoid the grind because otherwise the game becomes not worth the candle. In many ways, the question for us, whether it's in the Indo-Pacific or Europe, is how do we present the adversary with the *prospect* of the grinding fight? Some of the dynamics regarding cheap [mass] and the many capabilities that can overwhelm disproportionately expensive assets might very much work in favor of that objective.

The second panelist agreed about the idea of surprise and decapitation. If there is a lesson here, it is that throughout history there is a seduction around the notion of achieving a rapid, decisive victory. Clearly, the Russians fell for that seduction. The danger we are worried about is the Chinese coming to similar conclusions regarding Taiwan. But in some ways, this belief also narrows the problem set for the United States, because it becomes about trying to communicate to the adversary that we can prevent it from achieving that *fait accompli*. And what we have seen historically is that when Great Powers go to war, one side starts the war because it is convinced that it has found a way to achieve that quick, decisive victory—but then it never works. It always becomes a war of attrition, and I don't think there's a way to avoid a war of attrition when it involves Great Powers. We must be honest with ourselves because that is the reality and that's why wars are best avoided.

In addition, because the Russia-Ukraine conflict is a land war, the second panelist wanted to address leveraging capabilities. The panelist has spent a great deal of time studying Cold War military planning and looking at campaign analyses and things from that period. Thankfully, there never was a Warsaw Pact–NATO confrontation. But in some ways, the Russia-Ukraine war is the closest we get to that. Therefore, there are two things to take away from looking at the war from a Cold War perspective.

First, during the Cold War, there was this rule of thumb often used in planning that three brigades or divisions could hold about 25 to 30 kilometers—two brigades up front, with one held back, so 25 to 30 kilometers. The second panelist had tried to do some back-of-the-envelope calculations at one point around June 2022, and from what the panelist could discern, it looked like brigades on both sides are regularly holding about 30 kilometers or more during this war, which means that a Western division could potentially hold 50 to 60 kilometers or more, double what our Cold War planning assumptions potentially were. That is a radical change, and it has significant implications for NATO, in particular, its force planning, and what might be required in terms of force requirements to hold territory. The change from the Cold War to today mostly has to do with antitank missiles, with the range and rate and numbers all increasing. In

the past, maybe 15 to 25 kilometers was the range for an antitank missile; today it is more like 30 to 50 kilometers. This is all good news.

Second, during the Cold War, NATO invested heavily in logistics and command and control and spent much more than the Russians. As a result, we would often look at the balance of power and do bean-counting and state, “Well, they have more tanks, so they’re ahead in military power.” We invested in things that were essentially invisible, such as command and control and logistics, but then did not give ourselves credit in calculating the balance of power. The Russia-Ukraine war has validated the money that was spent in NATO on logistics and command and control. There is a lesson there for us moving forward, both about how critical those investments are, if we are thinking about the European or the Indo-Pacific theater, and about factoring into the balance of power if, for instance, we’re comparing the number of missiles that China has and the number of missiles that we have.

The third panelist stated that when future wars start, the role of cyber is going to be different. It is an enabler and can shape what occurs prior to that time. No one goes to war hoping it is going to be an attrition fight; all parties want it to be over quickly. The question then is twofold. First, as we look toward the Indo-Pacific region, how do we convince China that it cannot win quickly if it invaded Taiwan? And second, people believed that we were not taking Putin for his word. Let’s take Xi at his word when he states that he wants to win without fighting. We, as an allied community, a defense community, are focused on the fight. We need to be careful because in terms of new technologies, such as artificial intelligence, they give our adversaries a way to shift the distribution of power without war. And if they can win without war, why would they go to war?

Question 2: What lessons are important *not* to make the mistake of learning too soon or ways in which we can avoid drawing the wrong lessons for the future of this conflict or others?

Answer: The first panelist mentioned that a lesson he sees being drawn from this war, which he regards as being incorrect, is that the rates of attrition suffered by both sides, but especially the Russians, mean that entire blocks of capability are obsolete. The right lesson is that war at scale is pricey and wasteful.

The second panelist answered that the problem for the Russians is that technology was not necessarily a problem for them—it was strategy and doctrine. She warned that we should focus on getting strategy and doctrine right and not be fascinated with technology because if we do not get strategy and doctrine right, the rest will not matter.

- The third panelist shared a few thoughts:

- Logistics is important, and protecting supply chains is important.
- There is no NATO for Asia, so there is a real need to work on coalition relationships.
- Russia and China are different and present unique problem sets.

Question 3: Why do you think that prepositioning cyber forces in anticipation of a conflict would not be perceived as escalatory?

Answer: The third panelist clarified that she was talking about hunt teams going forward at the invitation of a host nation. While not a theater security operation, they often gain intelligence insights and discover malicious activity on their networks. The panelist added that this method builds trust and signals a developing relationship with a partner.

Question 4: Could you provide your insights on the notion that some cyberspace activities are not inherently escalatory because there is a certain amount of uncertainty about attribution? Also, could you discuss the Russians holding back capabilities they could introduce in the conflict but have not because it favors them to wait out the U.S. political process?

Answer: The second panelist answered that the Russians are reluctant to go all out with their air force because they want to avoid high attrition. Pilots are expensive to train, Russia has pilot shortages, and aircraft are expensive. Moreover, the Russians knew that the Ukrainians put an emphasis on protecting civilian infrastructure and civilians, so the Russians caused them to use a lot of missiles, which was another way of gaining air superiority—if you cannot destroy the launchers, just run them empty. The second panelist, however, was pleased to see the coalition supporting Ukraine in coming up with creative solutions. She closed her response talking about the F-16 debate, stating that she does not think the F-16s to Ukraine will transform the battlefield in the way that people expect.

The first panelist added that there is a risk that the Russian strategy does deplete critical Ukrainian ammunition stores, such as the SA-11. He added the Russians have committed more fixed-wing aircraft deeper into Ukraine but still prefer longer standoff weapons.

The third panelist addressed the cyber aspect of the question. She stated that activity below the use-of-force threshold has not escalated. The cyber community has not seen a breach to the use of force threshold despite the increased activity below that. All the activity is designed so that other actors cannot succeed, and capabilities are denied.

Question 5: Regarding your points about the underinvestment in air defense and the need for more mobility in air defense—given those vulnerabilities—in the event of a contingency

missile war with Russia, could NATO prevent significant civilian casualties? What would sufficient air defense for NATO look like?

Answer: The first panelist responded that Western nations cannot avoid civilian casualties in a war with Russia; the scope and scale of the weapons systems make it impossible. The third panelist added that we may need to reconsider our Technology Readiness Level (TRL) system because the Russia-Ukraine war has taught us the value of quickly introducing and adapting commercial off-the-shelf technologies, such as the DJI Mavic or Ukrainian sea drones, of which none would have passed the TRL process. The panelist advocated for a contingency process to relax TRL standards.

The second panelist agreed that the image we have of defense is that it is a shield. She noted that the number of air defenses needed to prevent a missile from coming through is difficult. She advocated for more investments in air defenses in NATO, including older air defense systems to add variety and mass. The second panelist voiced concerns over the initiative to field interchangeable systems because doing so simplifies the problem for adversaries. Instead, she advocated for integrated systems of multiple varieties to strengthen air defenses and improve resiliency.

The third panelist quipped that “it’s not the big that eat the small, it’s the fast that eat the slow,” in reference to the U.S. acquisition system. She expressed concern that the processes built to develop platforms to fight can manage new and emerging technology. Also, she is concerned with data and how we decipher it to operationalize faster than adversaries.

Question 6/7: First, do you see a roles-and-mission discussion between the U.S. Army and U.S. Air Force regarding close-air support and air interdiction? How are foreign airpower theorists viewing this concept? Is U.S. doctrine adapting to this concept?

Second, in 2022 there were many reports claiming that 40 percent of microchips that Russia is receiving from China are defective. How is China adapting and learning? Has it improved the quality of its components and microchips, and what can this tell us about the future of the Russian defense industry since we know that it has relied a lot on Chinese components throughout this war?

Answer: The second panelist answered the first part of the question with an emphatic yes. She noted that the U.S. Air Force, not having primary responsibility for air defense, means that it only has one part of the air control mission, essentially the offensive part. If we want an air force that thinks about the entire air domain and air control in a more cohesive way, then it would need primary responsibility for air defense.

She also believed there is much interest in air denial, particularly in the Indo-Pacific region. Countries are thinking about similar problems of confronting a quantitative and qualitative advantage adversary. They want to deny air superiority, even if they cannot gain it, against China. Those countries are buying more air defense and uncrewed systems. She closed by noting that the U.S. Air Force is undergoing a time of change and flux, stating that “The United States is focused on gaining air superiority and that’s about it, so I think we need to create better balance in terms of strategy options and force structure.”

The first panelist pointed out the risks of long-range and denial threats by surface-based systems against fixed-wing aircraft and from the air base threats. This insight is relevant in the Indo-Pacific because the PLA Air Force concept for air denial is not aimed at American fighters, but at the enablers that allow them to operate at tempo.

The first panelist’s response on Russian preference for Western chips highlighted the weakness of Russia’s smuggling network, and we can learn little about the quality of the Chinese chips. Russia is increasingly constrained by export controls. They may find themselves buying Chinese systems rather than individual components. The Russians may have a bargaining chip in quiet nuclear submarines but have been reluctant to share technologies with the Chinese. The Russo-Chinese relationship is becoming more asymmetrical in terms of the balance of power.

The plenary concluded with a thought-provoking challenge by the moderator that encouraged everyone to think about the big picture and small picture simultaneously, across domains and technologies, without becoming overly fixated on the technologies as decisive. The moderator closed with a plea for more creativity by our partners in their thinking about the problem sets.

Notes

¹ Russia’s Kh-47M2 Kinzhal is a newly deployed air-launched hypersonic cruise missile. See Lyle Goldstein and Nathan Waechter, “China Evaluates Russia’s Use of Hypersonic ‘Daggers’ in the Ukraine War,” *The RAND Blog*, January 12, 2024, <https://www.rand.org/pubs/commentary/2024/01/china-evaluates-russias-use-of-hypersonic-daggers-in.html>.

² Broadly speaking, Corbett argued that the goal of maritime operations in wartime was to deny the adversary freedom of action at sea. This concept grew out of but also pushed back against the focus on securing command of the sea advocated by Alfred Thayer Mahan. See Kevin D. McCranie, *Mahan, Corbett, and the Foundations of Naval Strategic Thought* (Annapolis, MD: Naval Institute Press, 2021).

Breakout Session One: Russia After the War

The first breakout session was dedicated to considering the future of the Russian Federation. Panelists were asked to address the following questions in their remarks:

- What scenarios for a postwar Russia are most likely?
- What vulnerabilities has the war exposed in the Russian social, political, and economic systems? How serious are these vulnerabilities?
- Assuming Russia's basic political order does remain unchanged at the end of the war, what lessons are President Vladimir Putin and his inner circle likely to take from the conflict?
- How will these lessons affect Russia's postwar engagement with the rest of the world?

The session brought together experts on Russian politics and foreign policy to address these questions and engendered a rich discussion. Though all speakers expressed humility and uncertainty around the exact course of future developments, they reflected on several potential scenarios involving Russian areas of strength and vulnerability, and what the regime might look like after the war. Given the Putin regime's long endurance and grip on power, speakers found it most likely that Russia would remain authoritarian with Putin at the helm, that neither elites nor the state would fracture, and that bottom-up regime overthrow would not occur. While less likely, however, speakers also allowed for possibilities involving a change in the tenor or nature of the regime and public attitudes, particularly in the case of a catastrophic defeat in the war. On the other hand, something short of that—such as an armistice or cease-fire, which could be spun by the regime as a victory—might do more to solidify its hold on power and encourage continued expansionist thinking into the next generation.

Speakers expressed a range of views on potential Russian vulnerabilities—both in relation to the regime's international influence and domestic stability. Internationally, Russia's influence and relations with states in its region have been strained by the war, with new tensions in relations with some former Soviet states of the South Caucasus and Central Asia. It also has become more dependent on China and, in some ways, Iran and North Korea. While its overall global standing has been tarnished, the regime has had success using narratives around the war to bolster its image in the Global South.¹ Domestically, while speakers addressed possibilities of

elite fracture, public overthrow of the regime, or long-term economic downturns, they generally saw these as unlikely soon, and only feasible in circumstances where the war goes dramatically worse for Russia. The panelists also noted the risk of overemphasizing Russian vulnerabilities as potentially leading to policies premised on the hope for unlikely outcomes rather than addressing the more probable enduring challenges.

Nonetheless, examining trends in public opinion does show some potential risks for the regime or possibilities for more positive developments after the war. Most notable, surveys conducted just prior to the full-scale invasion and even more recently demonstrate relatively weak and unenthusiastic support for the war with Ukraine. Combined with widespread negative emotions and an increasingly repressive environment, these conditions could facilitate regime fragility, particularly if confronted with a new crisis such as a sudden economic downturn or dramatic failure in the war. While other recent polling shows growing public positivity in how people feel about their own lives and the country's direction, these findings appear connected with social and economic trends that may not be sustainable in combination with the war's continuing attrition rates, especially if a broader mobilization is required. For now, however, the panelists noted that the Russian economy is doing well and projected to return to growth, that sanctions have not had a catastrophic effect—allowing coffers to still be filled on hydrocarbon exports—and that the regime is quite resilient with Putin personally having significant reservoirs of trust and authority with much of the public. While a decisive defeat in the war would most likely undercut this stability, panelists worried that this looked increasingly unlikely—and extremely dependent on the sustained commitment of Ukraine's Western supporters.

Regarding lessons that Putin and his circle might take from the war and how these might affect postwar Russian engagement with the world, the panelists emphasized that Russian leadership has a different worldview than that of the West. They are unlikely to draw the exact lessons that we might hope or expect about the costs of the war, especially if it is seen as having led to some measure of success. Instead, if the Russians emerge with something that can be framed as a victory, the leadership may conclude that the high risks paid off and be reinforced in expansionist thinking.

Panelists also stressed the degree of complicity in the war among the governing elite and the lack of an obvious alternative faction seeking to mend fences and build the economy. Instead, they noted a sense of willful defiance and desire to challenge the West and prove their own fearsomeness. Likewise, for those junior cohorts coming up today within the Russian military and government elites, the regime's extreme risk-taking over the last decade is likely to be seen as having led to many successes, instantiating a belief in such confrontational and

defiant approaches. Constant fighting with an existential enemy (that is, the West) has emerged as an unofficial regime ideology, creating fear, encouraging support for aggression abroad, and justifying increasingly tight domestic control. The extremity of current propaganda, changes to textbooks, and degree of repression could expand these attitudes more broadly in the next generation.

Yet speakers also expressed slivers of optimism, based partly on the changes in Russian society that have occurred since the collapse of the Soviet Union. One speaker acknowledged the existence today of many “potential Gorbachevs,” noting the civil society and more empowered populace that still visibly existed just prior to the war. Now highly repressed, these actors have not been completely eliminated. Likewise, the public’s relative lack of enthusiasm for the war could ultimately turn to a renunciation if it were to be seen as having led the country into catastrophe. All speakers thus agreed on the criticality of continuing Western support for Ukraine and the denial of Russian objectives in the war.

Remarks

Panelist One

The panelist began his remarks with a call for humility in relation to predictive judgment. Invoking his 20 years of history in the American foreign policy community, the panelist noted how, in the early days of Putin’s rise through Russia’s political ranks, no one predicted what a dominant figure he would become in Russian and global politics.

The panelist also addressed changes in the capacity for analytical tradecraft resulting from the changes in Russia’s political regime and its relations with the West. He noted that, when Putin came to power in 1999, there was significantly greater access to data for understanding the region. Today, Western diplomats and military attachés are much more constricted in their access to information, leading to a sense of “operating in a vacuum.” Under such conditions, sometimes flawed assumptions can easily spread without immediate correction—a dynamic the panelist indicated had played an apparent role in predictions of a rapid Russian victory early in the war with Ukraine.

To highlight the relative uncertainty of the predictive enterprise, even where vast amounts of data are available, the panelist recalled a *Wall Street Journal*’s 1990s feature titled, “Pros versus Darts,” which pitted the profitable stocks predicted by Wall Street investment analysts against those selected at random by an “investment dartboard”—with the dartboard often faring about equal. Russian analysts have far less data and more uncertainty to contend with.

Despite these challenges, the panelist indicated several areas of relative certainty:

- Russia is an authoritarian state and is likely to remain so if Putin is alive. Noting a lack of indication of elite fracture or grassroots anti-regime sentiment, the panelist stressed the regime's resilience and argued that Putin is unlikely to be forced from power as a result of the war. While the Russian political system has weaknesses, he argued that analysts sometimes are too indulgent of wishful thinking about single points of failure—such as during the mutiny by former Wagner Group leader Yevgeny Prigozhin in the summer of 2023.
- Current Russian leadership's "will to power" is not irrational. They believe that they can outlast the West, and, in even the worst outcome, Ukraine will become only a heavily dependent ward of the West, not truly independent. Based on relative sustainment numbers, he noted that the Russians probably like their position. U.S. artillery shell production rates have fallen behind predicted levels. The speaker noted the U.S. Army's 155mm artillery production is currently at 28,000 per month, while Russia has, at peak, expended 20,000 shells per day. While the United States aims to ramp up production to 80,000 by the end of 2025, the panelist noted that even this number was a downgrade of the previous goal of 100,000. The challenge, the speaker stated, is that of engaging in a World War I–style competition with a country that never "mothballed its defense industry" and never adopted the "Amazon Prime model" of warfighting.

Given these premises, the panelist argued, the United States and the West should be candid about the type of Russian regime and circumstances they are dealing with. He suggested we do ourselves a disservice when we engage too heavily in "magical thinking" that ignores these facts, whether it is about regime fracture, the Russian public overthrowing the regime, or extreme Ukrainian counteroffensive successes. Instead, the panelist recommended recognizing the Russian political system's endurance and the degree of elite complicity in the war as indicative of the Russian regime we will be dealing with going forward.

The panelist ended by contrasting this state of affairs with the Soviet regime of the Mikhail Gorbachev era. In that case there were competing elites with different visions. Gorbachev and his cohort sought to engage internationally. They wanted to reform the country's political system and remedy economic failures resulting from the arms race with the United States. Today, the panelist stressed, there are no credible voices from within the Russian political system seeking to liberalize, mend fences, or become a normal country within the international system.

Instead, there is only a willful “defiance”—to ignore the opprobrium Russia will face for its actions in Ukraine.

Panelist Two

The panelist focused his remarks on what sort of Russia we might expect after the war. While noting that what happens in the war will be an important determinant of this trajectory, the panelist highlighted the potential role of domestic public opinion within Russia in shaping what comes next. The panelist drew attention to a recent round of surveys conducted in Russia by a team of researchers working with the Levada Center. The surveys sought to probe respondent feelings toward the war and Putin. The surveyors also made use of experimental techniques to measure sincerity of responses.

The panelist described relevant polling patterns prior to February 2022. Historically, he explained, public opinion polls in Russia showed that approximately 40 percent of the population wanted a larger Russia. They wanted to reincorporate other Slavic republics or return to the old borders of the Soviet Union. But polls also showed that they did not want to use military means to achieve this endstate. In a survey conducted in December 2021 that asked Russian respondents directly what Russia should do in Ukraine, for example, only 8 percent selected the use of direct military intervention and only 9 percent favored arming Ukrainian forces “fighting against the Kiev authorities.” This was even after Russian domestic media had ramped up coverage of Ukraine and tensions with the North Atlantic Treaty Organization (NATO) and the West. In February 2022, the speaker noted, Putin essentially presented Russians with a *fait accompli*: The war had been launched, so people reoriented their opinions accordingly.

The October 2023 Levada Center survey built on the previous survey work. This included reinterviewing many of the same respondents from the December 2021 survey. One finding was that only 25 percent of people stated they thought the launching of a full-scale military assault had been the right thing to do. Others responded that they would have preferred keeping the status quo or pursuing Russian goals through diplomacy, negotiation, or other peaceful approaches—or they found it hard to say. Faced with the ongoing war, 44 percent stated they supported continuing it, while 33 percent stated that they opposed continuing the war. This was asked as a direct question, so the speaker noted that it is likely to be an overestimate of actual support for the war. Of the 44 percent supporting the continuation of the war, the panelist explained, approximately one-fifth are what could be called “soft” supporters. When given a chance to talk about reasons why they support the war, these individuals avoided responses like “Russia was correct in doing this” or “just used the wrong methods” or “should have gone

harder.” Instead, they relied on rationalizations such as “my country right or wrong” or “regardless of whether the war was right, those are our boys fighting and we must support them now.” The survey used novel techniques to estimate how real respondent opinions were and the degree of overestimation of support.

Put together, these findings suggest that about one-third of Russian society are true supporters of the war in Ukraine. While this is substantial given the criminal nature of the war, it also suggests that about two-thirds of people either have some kind of misgivings about the war or are withdrawing from it—a morally problematic stance but not the same as full support. Negative emotions such as sadness and anxiety were also found to dominate, while voting experiments further found low support for further conscription or mass mobilization—results that could create problems for political leadership.

Even among those who self-identify as supporters of Putin, support for the war is not overwhelming. Among Putin supporters, 47 percent were not strong supporters of the war, with one-quarter stating they opposed the war outright. Why, the speaker asked, would people support Putin if they disagreed with his decision on the war. The answer, he argued, is the economy. Perceptions are that the economy has held steady or improved, so people are still doing well economically. This fact, he stressed, has two implications: The good news is if the Russian economy were to weaken substantially, this could undercut some of Putin’s support. The bad news is that Putin has a base of support unrelated to the war effort. Thus, if the war goes badly, he still has support to fall back on. Taken together, these findings suggest that Russia’s ability to circumvent sanctions and keep its economy afloat has been quite important and that the state of the Russian economy going forward might influence Putin’s longevity in power.

The panelist concluded by arguing that how the war ends could have significant repercussions for Russia going forward. While cautioning against unrealistic optimism, the panelist suggested that a decisive defeat for Russia in the Ukraine war could discredit the whole idea of militaristic revisionism in a way similar to how Nazism was discredited in Germany after World War II. Such a defeat might not eliminate the idea of territorial expansion, but it could lead most of the population not to want to get involved in something like this conflict again. Unfortunately, given the current state of the war, the panelist noted, this kind of decisive defeat is looking unlikely. The panelist also noted that, even in the context of a catastrophic defeat, he found little likelihood that the Russian state would break apart in a manner similar to the Soviet Union.

Panelist Three

The panelist spoke about the roles of public opinion and the wartime economy in Russia. While noting the extraordinary challenge of really understanding what Russians are thinking under current wartime repressive conditions, the panelist argued that polling data is still valuable if correctly caveated. She noted, for example, assuming a 10- to 20-percent inflation in positive polling numbers about the president, and emphasized the importance of focusing more on trends in data rather than outright numbers.

The panelist referenced a different set of recent Levada Center polling numbers that asked Russians about their mood. The results indicated an increase from 74 percent to 81 percent in the portion of respondents answering that they feel “excellent” or “normal.” At the same time, the percentage answering that they feel “stressed” or “fearful” has gone down from 25 percent to 18 percent. The more negative emotions mostly are among the older and economically insecure population, while the more positive are among the younger and well-off. The speaker particularly noted the positive sentiment expressed by well-off 18- to 24-year-olds in major cities. Overall, one-third of respondents stated they believe the country is moving in the right direction. There also was substantial belief in Putin’s leadership.

The panelist noted that these numbers reflect only a snapshot of the current moment, as Russians tend to think short-term in weeks or months, aware that things can go wrong quickly. But she suggested a major reason for the positive uptick in emotions has to do with the economy. Not only had the economy done satisfactory despite the war, but for the substantial portion of the population working in government or government-related jobs or the military industrial complex, the war had improved the economic outlook. In less central cities and towns where factories had been waning, they have suddenly sprung back to life cranking out weapons.

While there is a disconnect between individual feelings of well-being and political views of the war, the panelist noted, the question for Putin’s regime is whether it can keep this up: Can the regime keep factories humming and younger populations in major cities happy without requiring a general mobilization? She suggested that a change in this balance could lead to a change in attitudes.

Turning to the question of what a postwar Russia might look like, the speaker argued that Putin does not want the war to end. He has “bodies to spare,” including the pardoned prisoners released to fight. As an ultimate example of the regime’s defiance, the mastermind behind the 2006 assassination of the famed journalist Anna Politkovskaya—who reported on human rights abuses in the war in Chechnya—has now been pardoned by Putin and freed to fight in Ukraine.

So, overall, Putin has given up on the West and sees himself at war with it. In the war, he feels he is not losing, even if he is not exactly winning. His economy is cranking along, and the war is now central to his ideology. While the Russian constitution does not permit official state ideology, there now is one, based on Putin's view of the world, including constant fighting with an existential enemy—the West and the United States. And Putin thinks the West is in shambles economically and politically and believes he can wait us out.

The panelist noted that Putin is determined to destroy Ukraine and to claim victory in the war, whatever its outcome. Russia does not need to win the war in the traditional sense, the panelist explained, for Putin to spin the war as a victory to his own people and to the Global South. It matters far less to him if he convinces audiences in Washington, DC. The panelist noted how the current war in the Middle East fits into Putin's narrative efforts as well. In the Global South, in particular, Russia uses narratives about the West being imperial and colonial and trying to tear Russia apart and overthrow regimes but projecting Russia as the champion of the developing world and the liberation movements supported by its Soviet predecessor during the Cold War. These narratives undergird substantial current Russian outreach campaigns in Africa and other parts of the Global South.

The panelist doubted Russia would curb its expansionist ambitions in the foreseeable future, reminding the audience of the joke that "Russia borders on whatever country it wants," suggesting Russia would remain intent on dominating its neighbors. She also doubted the regime would disintegrate but did note significant undercurrents of brittleness and unpredictability. As far as lessons that Russian leadership might have learned from the war, the panelist thought that they might consider it to have been a mistake but that they have since found that the prolonged war can be good for the country. The war footing can strengthen the economy and revive old industries. The food shortages in Africa and other international problems can provide new jobs for Wagner-type Russian mercenaries. The war also helps justify a firmer hand at home (do not jeopardize stability) and further propels the Kremlin's "don't mess with Russia" messaging abroad.

The panelist concluded by noting the important dynamics of generational change currently under way and their potential future repercussions. Just a few years ago, prior to the war, she noted, Russian young people were studying foreign languages, traveling, and felt increasingly part of Europe. But now there has been a complete revision of the history textbooks that goes together with the public weaponization of history. The propaganda claims that Ukraine is not a separate country—it's Russian—and glorifies sacrifice and death for the motherland. This will shape the minds of youth growing up today in Russia. The panelist did note, however, that

even in the late Soviet period, after years of exposure, many students had ambivalent attitudes toward official propaganda. Another critical element today, the panelist noted, is the instantiation of a sense of fear—even more than aggression—that another country is “coming after us” as a framing to justify aggression and war. She suggested that this sense of danger explains much of the support for the war that exists today.

Q&A

After formal remarks by the three plenary panelists, the moderator opened the session for questions and answers. The panelists responded to one question from the moderator and six questions from audience members.

Question 1: The moderator began the session by asking the panelists follow-on questions about two themes that had recurred through their initial comments. First, the moderator asked what factors apart from oil prices and the relationship with China will be critical in determining the future of Russia’s economy. Second, the moderator asked panelists to discuss the methodological challenges of figuring out what Russians think.

Answer: On the question of the Russian economy, the first panelist began the response by cautioning skepticism about economic determinism. He noted that there is a long history of arguments suggesting the Putin regime’s various foreign policy choices have emerged because of economic ups and downs. When the cost of oil is high, for example, the country can throw its weight around and be more of an international player. But the panelist noted that many of Russia’s engagements are cheap by comparison to the types of international projects and support for allies undertaken by its Soviet predecessor. Too much focus on the Russian economy, the panelist argued, was another flawed search for some issue that could undermine the regime. At the same time, Western policymakers have made deliberate decisions not to maximize damage to the Russian economy, due to fear that the actions required to fully cut off Russia’s ability to sell hydrocarbons would also have significant negative impacts on Western economies.

In addressing the question of what Russians think, the panelist stated that he bristled at the focus on average opinion because Russia is in fact controlled by an exceedingly small group of people. He emphasized the importance of not mirror-imaging our understanding of that ruling elite and how they think, rather recognizing that they have a different—and narrow—worldview. Putin’s perspective, for example, is shaped by years of experience with distorted information from Russian intelligence and bureaucratic organizations in addition to his policymaking interests and experiences.

The less-experienced elites around Putin are even more provincial in their worldviews, unlikely to share similar coordinates with Western decisionmakers. He noted that the level of “mortgaging” of the country’s future—involved in turning back 25 years of globalization and national wealth to instead choose war with Ukraine and become dependent on China, Iran, and North Korea—defies normal rational explanation. In this context, the lack of obvious high-level dissenters or defectors demonstrates a lot about whom we are dealing with. The fact that all we hear is arguments blaming the West suggests there are not going to be reasonable interlocutors as counterparts for Western diplomats and military officers soon. The panelist further questioned the value of a focus on the views of average Russians who have no vote and no mechanism for expressing discontent except for street protests.

About Russia’s economy, another panelist agreed that we should be cautious about monocausal explanations such as thinking that Putin’s support will collapse if the economy declines. But the panelist also argued that the future of Russia’s economy is an important question and a potential soft spot. Generally, he noted, a large determinant of support for incumbent leaders is their ability to compensate people for losses resulting from disasters, crises, and wars. In the current case, this will involve, for example, convincing key Russian businesspeople that there will be new opportunities (such as seizing and taking over assets of departing Western companies) and showing people that the economy can keep going without hardship. Hydrocarbons, the panelist agreed, are a key component of this calculus. The panelist, however, reminded the audience about Putin’s staying power through previous economic downturns, including the economic crisis of the 2000s. Putin has used other means to generate support, including rallying around the flag, the beginning of the war in Ukraine, and the annexation of Crimea in 2014. Now that the Russian economy is projected to return to growth, and while some “sanctions optimists” suggest the Russian economy will eventually feel more of a bite, the panelist noted uncertainty as to when and to what effect.

The second panelist provided a different perspective on attempting to understand views of average Russians in the current repressive regime context. He noted how, when authoritarian systems are closed so that people do not have any real outlet, when combined with a high prevalence of unease and negative emotion, these regimes can become fragile. Simple events that normally have no effect can suddenly trigger major changes, though this is difficult to predict. We saw this with contagion effects igniting the region and the downfall of leaders in charge for decades in the Arab Spring. In the case of Russia right now, the panelist noted, the most obvious trigger for such a chain reaction and regime downfall would be a sharp downturn in the war. But this is incredibly unlikely, due to both the current state on the battlefield and the usual

long-term resilience of authoritarian regimes. Furthermore, in the case of the Russian regime, the panelist noted that Putin has a deep reservoir of trust among a large portion of the population. Despite the likely 10- to 20-percent inflation of numbers, there is still a large amount of support for Putin. Indeed, this assertion is based in part on the economy but also on elements of personal appeal and leadership style. And these people look to Putin and state-controlled media to tell them what to think—not completely unlike the top-down formation of opinions that we also see among partisans in democracies.

The panelist noted ways in which these domestic public opinion dynamics have implications for Russia's war effort and the stakes of Western support for Ukraine. This includes the possibility of flashpoints if the regime pushes too hard and potential room for change in Russian public opinion about the war. Part of Putin's leadership style for a long time, the panelist noted, is that Putin has not presented himself as highly aggressive, but instead as taking reasonable steps to counter the threat from a hot-headed aggressive West. In line with this idea, he has sought to downplay the war in Ukraine as a "special military operation" and generally to demobilize rather than mobilize the public. Asking the public to be willing to sacrifice, the panelist suggested, could be extremely unpopular. While the panelist argued against the notion of a "Homo Sovieticus" mindset, he characterized the apparent malleability of Russian public opinion as typical of authoritarian regime contexts in which respondents might fear consequences of expressed contrary opinions.

In this context, the panelist suggested, the low numbers of support and lack of enthusiasm for the Ukraine war demonstrated in recent polling responses are particularly noteworthy. Certainly, he noted, this situation by itself will not translate to the downfall of Putin. But potentially, combined with other things, it could be a trigger. The panelist saw the greatest hope for medium-term optimism if there is an eventual Ukrainian victory. While radical elements would likely remain for a long time in Russian society, the panelist stated a thorough defeat could prompt many in Russian society to question the leadership that had led to such a failure. But any such outcome is highly dependent on continued NATO solidarity and the West continuing to mount strong support for Ukraine.

On the question of the future of the Russian economy, the third panelist reflected on several factors that could have long-term implications. The Russian economy's substantial dependence on global carbon energy markets will not be indefinitely sustainable, she suggested, noting the accelerated movement toward green energy in Europe. At the same time, the panelist argued, Russia is not in line to be a major competitor in the next wave of cutting-edge technologies. The United States and China are leading in the development of artificial intelligence, for example,

and the war has engendered a massive wave of brain drain—with emigration particularly high among the young and highly educated.

While Putin has seen many of these people as troublemakers and welcomed their departures, the panelist noted, the economic cost will be significant. With so many of the younger generation lost to war and emigration, those who remain will be those who, in keeping with Soviet tradition, have learned to keep their heads down even when they disagree—not the entrepreneurs who could build the economy. What is more, the Soviet tradition of silent disagreement often went together with cynicism and deceiving the state in ways that reinforce corruption. This has been a problem for Russia in the war, in the military and procurement systems, as well as in Wagner forces, and corruption will likely continue as a problem for the Russian economy.

Regarding the views of normal Russians, the third panelist saw both causes for concern and optimism. On the one hand, she worried about the lasting influences of Putin’s “turbocharging of negative forces,” including, for example, through the generational effects of changes such as school textbooks. But the panelist also noted still remembering the surprising emergence of Gorbachev following years of Soviet rule and the existence even today of “could-be Gorbachevs.” The panelist recalled how, just a few years ago in Moscow, there were signs of Russian civil society—from women’s rights to helping animals and supporting the elderly. Though Putin has tried to destroy this independence and put civil society under enormous pressure, the panelist expressed a belief that people in Russia today are nonetheless more psychologically empowered than they were 25 or 30 years ago—which gives some hope for the future.

Question 2: Since many of the panelists’ comments were premised on some form of “forever war”—that is, an ongoing state of war or conflict between Russian and Ukraine, can the panelists comment on how some form of cease-fire or durable armistice would affect Russia internally and how it would impact future relations between Russia and Ukraine?

Answer: While noting that much depends on the exact nature of the armistice, the second panelist expressed concern that such a development could be successfully “spun” by Putin’s regime as a victory for Russia. Although the large losses already experienced might prevent Putin from gaining a huge boost in domestic support, being able to show that they successfully sued for peace and reclaimed stability would bolster the Kremlin’s grip on power, weaken opposition, and potentially reinforce the view that something can be gained through military expansionism. It also would give the regime time to rebuild. On the other hand, ongoing conflict, even in stalemate, lends the greatest likelihood to some form of regime collapse.

Along the same lines, the first panelist noted grave concern about the hubris and over-confidence a perceived victory could foster in Russia and the Russian military if, after all the Western military and intelligence, surveillance, and reconnaissance support for Ukraine, the Ukrainian ability to regain territory stalls out or Western support abruptly ends. This not only would give Russia a break to reconstitute and limit the reckoning faced for their aggression, but it also would be viewed as a success. The panelist commented that he sees the strategic and policy community searching for some kind of “new equilibrium,” but that search will likely be hard to accomplish. Instead, the panelist expects a continually contested and combustible dynamic along the Ukraine-Russia frontier for the foreseeable future.

While the first panelist thought such a scenario was unlikely in the 2024–2025 time frame, the third panelist added that even if Putin somehow loses the war—at least according to a Western interpretation—this will not be the end of his efforts to undermine Ukraine. He will continue these efforts by other means, whether economic, political, or covert machinations. The panelist noted that Putin’s main power is negativity, not solving problems, and that he will continue to seek ways to create and exacerbate tensions.

Question 3: If the war does end in a way that Putin can sell as a Russian victory domestically, how could this impact Russia’s role in the wider region going forward? How could it also affect Russia’s role vis-à-vis other global powers such as Brazil, Russia, India, China, and South Africa (the BRICS states), as well as Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates?

Answer: The second panelist responded that anything that frees Russia from being embroiled in the war and allows the regime to claim some sort of victory will allow it to gradually regain strength, which will be relevant to the regime’s relations both in the region and globally. He noted that, because of the war, Russia has lost much of its authority and influence in the region that it will have to work to rebuild. This is clear, for example, in the South Caucasus and Central Asia. Some regimes, such as Georgia, are still quite connected with Russian leadership and seek to balance between this and international influences. But in other countries, most notably Kazakhstan, public opinion has largely swung against Russia because of the war. Many leaders in the region are frustrated with the Kremlin. Once the war ends, Russia will be able to work to rebuild frayed relations, channel resources for other ends, and its international partners will face dwindling pressure to enforce sanctions and restrictions. Given Putin’s centrality, much might depend on the longevity of his personal hold on power. But the regime can be expected to gradually reemerge as a regional and international power.

Question 4: During the Cold War, the United States used “political warfare,” “information operations,” and other disruptive activities to influence internal narratives or politics within the Soviet Union. The United States also created Radio Free Europe/Radio Liberty and Voice of America to provide alternative sources of information. Today, however, the United States seems to have either consciously or unconsciously chosen to forgo such options. Are there opportunities like those used during the Cold War to stabilize the relationship with Russia or make the Russian regime less dangerous?

Answer: The third panelist commented on the need to counteract Putin’s message to Russians that the West hates them and wishes them ill. Putin has made great use of the narrative that it is a mistake to seek membership in the West because the West does not want Russians. Travel and visa limitations, even before the war, helped support this message. Today, many Russians feel even more cut off and pulled away from the West. A powerful counter message—particularly to young Russians—would be not to cut themselves off and that the West wants them to stay part of the global community.

While indicating that conducting appropriate foreign policy to ensure that Ukraine wins the war was likely most important, the second panelist suggested two areas of importance to consider. First, he suggested, it is important not to cut off people-to-people exchanges, keeping opportunities open for ordinary people to gain experiences in the United States. Second, in relation to media projects, it is useful to keep alternative information sources available to Russians. The panelist noted neither of these is a silver bullet, but each could prove valuable in the long run. Russians currently still do have access to a variety of alternative information sources, but such access does not necessarily transform public opinion. The regime is skilled at providing the public with reasons not to trust alternative news sources. Moreover, research has confirmed that Russians tend to trust Western sources less than they do domestic media outlets, even if they also treat these with a degree of cynicism. While those who get past censorship through use of VPNs tend to be less supportive of Putin, the causality of this relationship is unclear. Anti-Putin Russians disproportionately seek alternative sources.

In addition to focusing on increasing Ukraine’s ability to stay in the fight, the first panelist emphasized that the single most important thing the United States can do is to articulate a long-term vision and commitment. We see a dangerous Russia, even if it is not quite as scary as the Soviet Union or China, and we must show we are ready to continue to confront it confidently with the resources and capabilities we can bring to bear and with our alliance system. We cannot be constantly looking for a magical breakthrough or engaging in politicized 6-month planning cycles. These things damage our strategic heft. Articulating a longer term vision requires being

upfront with the American people that this war will go on for a long time and that not all allies and populations are pulling the same weight.

During the Cold War, the first panelist noted, the West did not predicate its strategy on the hope that Joseph Stalin might “fall down in the shower.” We currently risk projecting to Putin and Russia’s leadership that we are either unable or unwilling to continue to resource this war and stick by Ukraine—which will require an enduring commitment over the next decade. The panelist expressed concern, however, that with an election year kicking off and a deep sense of fatigue and foreign policy overreach in the American electorate, there might not be any good near-term solutions to avoid this sense of retreat.

Question 5: Several significant geostrategic changes have occurred as direct and indirect consequences of Russia’s war in Ukraine and that are threatening to Russia: The Baltic Sea has become a “NATO lake” with a Russian harbor; the Black Sea is no longer dominated by the Black Sea Fleet; and there is more Allied activity in the north near Russian strategic bases. Can the panelists comment on how these changes are likely to shape Putin’s vision now and into the future?

Answer: Having “strategic depth” has always been important in Russian conceptions of national security, the first panelist noted. From that perspective, things are indeed trending in the wrong direction for Putin. Russia’s actions have created an adversarial country of 40 million on its border armed to the teeth with Western weapons and have also reinvigorated NATO. But the panelist cautioned against mirror-imaging. Russia has decided, he argued, that it does not want to be a prosperous resource-rich country like Canada but will instead be a fortress. Russian leadership over the past decade has shown a willingness to take dangerous risks repeatedly and has seen these risks largely paying off. The panelist suggested imagining the perspective of a rising Russian flag officer today who would have been a major in 2013. This officer has seen a succession of events: Edward Snowden coming to Moscow in 2013, Russia’s annexation of Crimea and war in the Donbas in 2014, Russia’s role in Syria in 2015, and its interference in the 2016 U.S. Presidential election, followed by tumultuous U.S. domestic politics. Meanwhile, the West’s commitment to defend “every inch” of NATO territory does not apply to countries outside of NATO, to which existing Western commitments seem dicey. So, although they are mindful of their own frailties and limits, the Russians also do not see the world the way we might want them to. They do not see resuming open relations with the West as their only option.

Question 6: Ten years ago, Russia was often discussed as a form of “hybrid regime” that used “low-intensity coercion” rather than more overt repression. It also commonly used more covert forms of “hybrid warfare” internationally, thus frequently relying on some forms of

“plausible deniability” in its actions, both at home and abroad. In the interim, there has been some change to this strategy on both fronts and a replacement to some extent with more overt coercion mechanisms of fear and aggression. How do the panelists see this evolution of Russian tactics in relation to any change in the role of—or need for—public support in the Russian regime’s dynamic with society? Second, related to this, Putin kept ultranationalism at bay early in his rule, but this form of discourse has perhaps gained more tolerance in recent years, as free expression has been increasingly restricted. Can the panelists comment on any risks associated with this growing tolerance for ultranationalism not yet highlighted in the discussion?

Answer: Considering long-term trends, the second panelist noted that the Putin regime has been growing in its level of authoritarianism. Historically, however, Putin has also been cautious about not taking actions radically at odds with prevailing public opinion. He was often willing to back down when he ran into resistance, especially early in his rule. In the war with Ukraine, however, the panelist suggested that Putin has decided to act now on his own long-held beliefs, perhaps considering his own age and desired historical legacy. Accordingly, Putin knowingly pursued a course of action that might come at the cost of public opinion, but he probably also calculated that this could be managed. Given Putin’s existing high approval rates, Russia could demobilize people that did not approve while trying to convince as much of the population as possible.

Similarly in the international and military realm, the second panelist noted that Russia might previously have tried to expand its influence and achieve desired ends without alienating people. Probably the election of Volodymyr Zelenskyy was originally viewed by the Kremlin as a step in this direction, with him being seen by Putin as basically pro-Russian and easy to manipulate. But when Zelenskyy began to strengthen Ukraine’s movement toward European aspirations, Putin might have viewed this as a turning point and decided to take more extreme action. He likely knew this would come at a significant cost in terms of having to crack down more harshly domestically, harming relations with allies and consolidating the West against him. This goes with the shift to fear and repression domestically. But Putin probably also thought he had accumulated enough power to pull it off, that he could eventually regain these losses, and that the risk would be worth it. Putin is still working to sell it to the Russian people, for example.

Commenting on the current role of nationalism, the third panelist also described how ultranationalism has been around in Russia for a long time, but that Putin kept it at bay—again, until he needed it. He long balanced various groups and kept them in check, but, since 2014 the panelist suggested, Putin has generally seen these groups as benefiting his regime and allowed them to grow—exemplified by the rise of Yevgeny Prigozhin and the military bloggers. These

actors resonate with many Russians, the panelist argued, because they speak to the prevalent Soviet nostalgia and desire for their country to still be great. Recent Levada Center polling showed one common motivation to be “putting the United States in its place.” Prigozhin’s actions in summer 2023 demonstrated just how dangerous this unconstrained ultranationalism had become even for the regime, and it has led to a crackdown. If it persists, this public sentiment of wanting their country to be harsh and threatening will continue to make Russia dangerous in the future.

Question 7: The final questioner described two characterizations of Russia commonly presented in commentary. First, the version from 2014 to 2022 was ascendent and felt empowered enough to undertake this war in Ukraine, and second, the one we have today, which is hollowed out militarily and economically, on its back foot and bound to lash out. Can the panelists comment on whether both characterizations are accurate and how to ascribe different escalation dynamics and relative danger to U.S. interests from these two versions of the Russian state?

Answer: The first panelist worried much more about Ukraine’s ability to stay in the fight than about the danger Russia posed to NATO member states. He noted how, in a 2013 interview, President Barack Obama stated that Russians would always care more about Ukraine and that this asymmetry of interest would ensure they had ongoing influence. Now, 10 years later, the panelist suggested that the U.S. policy community needs to reflect on this and ask themselves if it is still true such that the United States is willing to just let the war end in a way that rewards Putin for his aggression. Or does Ukraine matter now to the United States?

The second panelist noted risks on both sides but did not see them as weighed against each other. In particular, he noted nuclear escalatory risks associated with each version of Russia, including if an ascendent Russia of the 2014–2022 variety went unchecked. When things go badly for someone with so much unchecked power, one never can be certain. But nuclear use would also be extremely unpopular within Russia, including among the elites. The panelist described potential nuclear use as a suicidal step for Putin. On the other hand, if the West does not push back against Russian expansionism, the panelist argued, this opens the doors for other nuclear powers to take similar actions to what Russia has done in Ukraine—and that could open the door to all sorts of subsequent dangers of nuclear proliferation and escalation.

Note

¹ The UN Conference on Trade and Development identifies the Global South as countries in Africa, Asia (excluding Israel, Japan, and South Korea), the Caribbean, Latin America, and Oceania (excluding Australia and New Zealand).

Breakout Session Two: Seeing Kyiv, Thinking Taipei

The second breakout session focused on how the lessons of the war in Ukraine apply to a potential conflict in the Indo-Pacific involving China. The moderator asked panelists to address the following questions in their remarks, with a focus on the implications for China:

- Will war between the United States and China be more or less likely based on the results in the Russia-Ukraine war?
- What are the key lessons China's People's Liberation Army (PLA) has learned to date?
- What are the key lessons Taiwan should learn to counter the threat from China?

This breakout session brought together a multinational group of speakers with expertise about the Chinese military and the geopolitical situation in the Indo-Pacific. The panelists focused their remarks on how the war in Ukraine is being perceived in Beijing and what lessons it can convey about what a possible Chinese operation against Taiwan would look like. Understanding how China perceives the war in Ukraine is therefore essential as the United States and Taiwan seek to deter (and, if necessary, defeat) a Chinese attack on Taiwan. The United States, in other words, needs to focus not only on drawing the right operational-tactical lessons from the war in Ukraine (for example, the efficacy of weapons systems), but also on understanding what lessons Beijing is drawing given its own political, institutional, and ideological framework.

Panelists acknowledged that because the Chinese and Russian militaries are similarly structured and share a common institutional and organizational culture, they are designed to fight in similar ways. Though a China-Taiwan conflict would be fought primarily in the air and maritime domains while the fight in Ukraine is mostly on land, there are clear parallels between how Russia is fighting in Ukraine and how China could be expected to fight against Taiwan. Both China and Russia are also revisionist powers in their respective regions. Xi Jinping has portrayed establishing Chinese control over Taiwan as a goal of major strategic and political import—much as Vladimir Putin has done with Ukraine. The deepening strategic alignment between Moscow and Beijing also means that the two states have been increasingly sharing information and learning from one another.

For all these reasons, the strategic, operational, and tactical level lessons from Russia's invasion of Ukraine will be particularly relevant—for China, for Taiwan, and for the United States—in thinking about how a hypothetical Chinese assault against Taiwan would unfold.

Remarks

Panelist One

The panelist posed the question, “What is Xi Jinping thinking?” First, all opinions on Xi’s thoughts are speculation because there is little to no transparency in the Chinese political system. Second, the outcome of the Ukraine war will shape Xi’s thinking, and that thinking will be different if Putin loses.

Several other key factors are shaping Xi’s thinking: the durability of the U.S.-led coalition (which is already showing signs of fraying); the long-term effects of sanctions on Russia’s economy; and how much do Ukraine and the Middle East distract the United States from its China First strategy.

Unification of China and Taiwan is fundamentally a political problem so any use of force will be in a political context. Xi told the PLA to be ready to take Taiwan by 2027, but he knows that peaceful integration would be much better for China. As for lessons learned by China, the panelist discussed the following.

First, war is unpredictable, and firepower does not assure victory. The failure of Russia to date highlights for Xi just how difficult the conquest of Taiwan could be. The Ukrainian resistance was unexpected, so China must redouble its information campaign to undercut Taiwanese willingness to resist. Beijing’s daily theme focuses on undercutting Taiwanese confidence that the United States will come to its support if China invades. China repeatedly notes that the United States has not sent any troops to Ukraine.

Xi has deep concerns about the impact that massive Russian corruption had on Russian forces. Therefore, Xi will redouble his efforts at anti-corruption within the PLA and defense industry. Xi was surprised at the strength of U.S. and allied support to Ukraine. The European Union and the Global South is each pivotal to any U.S.-China struggle, and each will continue as a focus of China’s information campaigns.

For Xi, the geopolitical interests of Europe surpass Europe’s economic interests in this conflict. For instance, to support Ukraine, Germany accepted economic losses to cut its energy imports from Russia. Xi is also acutely aware of the social instability the conflict is causing in Russia that has resulted in protests, the Wagner mutiny, and Russians leaving the country. He believes that if China invades Taiwan, the Chinese people must be prepared to “eat bitterness.”

The United States took the use of nuclear weapons off the table immediately in the Ukraine conflict; therefore, a key question is what Xi will conclude concerning the value of threatening to use nuclear weapons in a potential conflict with Taiwan. The panelist doubted, however, that

the U.S. stance on nuclear weapons is the same for Taiwan as for Ukraine. The desire to ensure that nuclear weapons are off the table in Taiwan may be a driver for Xi's goal of 1,000 nuclear warheads by 2030.¹ Xi is particularly concerned about the damage economic sanctions are causing to Russian industry.

Today, the Chinese economy is Xi's top priority. He seeks to achieve the "irreversible path to rejuvenation" and knows a Taiwan conflict will have a massive impact on the economy. International leaders remind Xi that a war will devastate China's economy and they point to the fact that 500 foreign corporations have left Russia already. Thus, China is taking actions to insulate itself from the economic impacts of a future conflict with Taiwan. A key question remains: Can the United States counter these efforts?

The panelist concluded that the Russia-Ukraine war has reinforced Xi's focus on peaceful unification. But if either Taiwan or the United States crosses China's redlines, Xi, again, will invade despite the cost.

Panelist Two

The panelist began with the caveat that it is difficult to know what the PLA may be learning from Ukraine. All available information comes from open-source publications, so politically sensitive issues are not discussed. Moreover, even in these open-source publications, PLA views continue to evolve. Finally, PLA views are being affected by the Western world's writing about Ukraine.

That said, the PLA is putting immense intellectual energy into understanding the implications of this conflict and has identified four shocks:

- The Russian invasion itself was a shock because PLA leadership did not think it would happen.
- The swift response of the international community to the invasion surprised the PLA.
- The Russian military failure and its apparent ineptitude shocked the PLA as much as it did the West.
- In any conflict, concern for the potential of nuclear escalation must be taken seriously.

Public trends and conversations mean that every Chinese university and think tank is studying the conflict and publishing papers. The panelist noted that high-level PLA personnel

have stated that Ukraine has not changed PLA concepts on warfare but has increased PLA concerns about the difficulty of conducting coordinated operations. The panelist noted the following takeaways from the PRC literature:

- There is significantly more discussion of protracted war. The majority view is shifting to the idea that war over Taiwan will be protracted. In fact, any conflict has the potential to be protracted, so the PLA must build stockpiles of warfighting materials and be prepared for major attrition of key weapons and people. There is a renewed appreciation that quantity really does matter. One effect is that the PLA must think about cost versus efficiency, particularly the actual cost of air-ground operations.
- War will be an all-of-society effort that requires much greater civil-military fusion than China currently has attained; the Russia-Ukraine war has shown that the PLA must prepare the nation. The PLA sees that Russia's failure to prepare the nation resulted in insufficient public resolve, which was magnified by Russia's failure to mobilize its economy. The PLA is seeing the impact of economic sanctions on the Russian economy and military and is thinking through how to mitigate that impact.
- War will be all-domain and will require coordination of crewed/uncrewed platforms in the land, sea, air, space, electronic warfare, and cognitive domains. The PLA is generating massive new literature on all-domain coordination as it tries to understand the implications of such. There has been, however, no fundamental rethinking on the issue of all-domain warfighting, rather than on improving coordination among the different warfighting domains.
- No domain of warfare can be ignored. No magic weapon will be decisive, but Russian use of nuclear weapons as a saber-rattling tactic is getting lots of Chinese commentary.
- Man-portable air defense systems (MANPADS) and mobile anti-air systems have proved that low-altitude superiority is critical. Currently, neither Russia nor Ukraine sends manned aircraft into the other's airspace.

In summary, the PLA is analyzing all aspects of the conflict and is still considering the lessons learned. The PLA seems to think its reforms are on track but has a new appreciation for the difficulties of modern warfare.

Panelist Three

The panelist began by stating that the Taiwanese people now see that war is possible. They think Xi may overestimate PLA capabilities and underestimate Taiwanese determination, which could lead him to attempt an invasion. In a total war with China, Taiwan must use the same approach that has helped Ukraine. Of primary importance, it must organize to use all available manpower because the PLA has 2 million troops, while Taiwan has only 200,000. Furthermore, mobilization processes and training must be upgraded. Currently, Taiwan is upgrading from 7 coastal defense brigades to 12 and fielding up to 18 city defense brigades. Early warning is critical to allow time to mobilize.

To date, Taiwan has underemphasized logistics and must make this an important focus. Taiwan must anticipate a long war. Many nations provided logistics support to Ukraine, but unfortunately, Taiwan is an island, so it cannot count on supplies getting through. It must preposition more material.

Taiwan is beginning to get more serious about civil defense. It may develop an armed civilian defense organization in the future. The fact that the Ukrainian leadership stayed in Kyiv was critical. They stayed and led. Just as important, the Ukrainians defeated Russian decapitation efforts. Moreover, Ukraine declared a national emergency, so no men were able to leave the country. Taiwan needs to be prepared to do the same.

Urban warfare provides major advantages for the defense. Taiwan must consider how it can use its coastal cities to slow Chinese invasion forces. Similarly, Ukraine's use of psychological operations and information operations via online videos were powerful tools in Ukraine's defense. Taiwan needs to develop these capabilities and be ready to employ them even before conflict starts.

Drones for intelligence, surveillance, reconnaissance, and attack have been major combat power multipliers for both Russia and Ukraine. Taiwan is buying and producing 3,000 drones, which will be insufficient. Ukraine is purchasing drones globally and is buying tens of thousands. Russian mines and trenches have stopped the Ukrainian counteroffensive in its tracks. Taiwan needs to invest in both.

Finally, new political opinion surveys indicate that 65 percent of Taiwanese are willing to fight against a Chinese invasion. Post-Russian invasion of Ukraine, many Taiwanese volunteer civil defense organizations have sprung up, but they are training with toy guns.

Q&A

After formal remarks by the three breakout panelists, the moderator opened the session for questions and answers. The panelists responded to four questions from audience members.

Question 1: How much of the PLA's confidence (that is on the right track) can be attributed to "confirmation bias" in that the PLA focuses on the elements of the Russia-Ukraine war that confirm its stated policies for modernization?

Answer: The second panelist stated that there seems to be a mix of confirmation bias and limited views that might be expressed publicly in China. Chinese write, "Here's what Russia did wrong" and then state confidently that "We won't make the same mistakes."

Question 2: What is the impact if Donald Trump is reelected as U.S. President?

Answer: The third panelist stated that Taiwan is currently focused on its own January election (Lai Ching-te was elected president on January 13, 2024, and will be inaugurated on May 20, 2024). China does not like Lai's Taiwan's Democratic Progressive Party (DPP), which will continue the focus on strengthening Taiwan's defense. China was actively trying to influence the election to defeat the DPP. A Trump reelection worries the Taiwanese. The panelist stated that he believes Trump would stop supporting the war in Ukraine. The Taiwanese also that fear Trump would cut aid to Ukraine, which would have implications for Taiwan. On the other hand, China does not like Trump, either. In sum, the panelist was not sure what the impact of a Trump reelection might be.

The first panelist stated that a Taiwanese contact told him that a Ukraine loss is an existential threat to Taiwan because Taiwan's security is directly tied to the outcome in Ukraine. Unfortunately, there is a group of U.S. Republicans pushing to cut aid to Ukraine. Even worse, Taiwan worries that even U.S. President Joe Biden may not be able to sustain support for Ukraine.

Question 3: Do the Chinese see Putin's support from Viktor Orbán in Hungary as a lesson in how a power can divide Europe?

Answer: The first panelist stated that China seeks any opportunity to divide Europe. The 17+1 group was an attempt to do so.² There is no doubt that Hungary stands as a potential wedge, but China seeks relationships with any individual country that could reduce European unity. However, there is a difference. Putin seeks chaos in the international community. Xi does not.

Question 4: What is the PLA's thinking about the offense/defense balance? Does it think defense is gaining an advantage? Does the fighting in Ukraine turn China away from an amphibious invasion toward a strike or blockade campaign?

Answer: The second panelist stated that he has not seen any discussion of the offense/defense balance, but that discussion may well be outside the list of acceptable topics. The panelist was not sure if Russian blunders are causing China to rethink an invasion, but the discussion demonstrates that such an invasion may be too costly.

The third panelist stated that China uses an ends-ways-means formulation of strategy. If the end is to control Taiwan, then only an invasion and occupation will work. Taiwanese people will not accept Chinese control. The panelist did not think a blockade would work.

Notes

¹ *Military and Security Developments Involving the People's Republic of China 2023: Annual Report to Congress* (Washington, DC: Office of the Secretary of Defense, 2023), <https://media.defense.gov/2023/oct/19/2003323409/-1/-1/1/2023-military-and-security-developments-involving-the-peoples-republic-of-china.pdf>.

² The 17+1 was a China-sponsored initiative to deepen economic and investment cooperation with a group of 17 Central and Eastern European countries. At its peak, European partners included Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, and Slovenia. The three Baltic states withdrew in 2022. See Andreea Brînză, "How China's 17+1 Became a Zombie Mechanism," *The Diplomat*, February 10, 2021, <https://thediplomat.com/2021/02/how-chinas-171-became-a-zombie-mechanism/>.

Breakout Session Three: Training, Equipping, and Securing Allies and Partners

Preceding and underpinning the remarkable—even surprising—resilience of the Armed Forces of Ukraine has been a coordinated effort on the part of the United States and the North Atlantic Treaty Organization Allies to reform, train, and equip Ukraine’s defense ministries and military forces. The third breakout panel session, thus, explored the successes and failures of these efforts and the broader lessons implied for future conflicts. It asked panelists to address the following questions in their remarks:

- What, if any, impact did foreign training, equipment, and advice have on Ukraine’s defense posture, strategy, doctrine, or combat performance from 2014–2022?
- What could the foreign providers of this assistance have done differently to be more effective or influential?
- What factors allowed the United States, its allies, and partners to ramp up material assistance to Ukraine in 2022, and what challenges did they have to overcome in the process?

Panelists acknowledged the progress that the Armed Forces of Ukraine and defense institutions have made since 2014. Nevertheless, the panelists underscored that both provider and recipient limitations inhibited the effectiveness of foreign initiatives to train, equip, and reform Ukraine prior to Russia’s full-scale invasion. In 2014, Ukraine’s military and defense institutions were rife with corruption and bureaucratic inertia, rendering reform efforts particularly challenging. Foreign initiatives were not always able to overcome these barriers. Advisers’ short deployments, lack of cultural competence, and limited access to the Ukrainian ministry of defense limited effectiveness. Under these conditions, *more* advisers and assistance did not always yield more success. Instead, foreign efforts were able to make the greatest achievements when they focused on short-term, achievable goals, circumvented the often-disruptive influence of senior officials, and teamed with reform-minded personnel within the ministry.

After Russia’s full-scale invasion, the U.S. security cooperation enterprise was able to rapidly respond to the materiel and tactical training requirements by invoking in extremis authorities. In execution, this required ad hoc adaptations and the adoption of processes and procedures that should be sustainable. Among the main deficits the Ukraine conflict has exposed are shortcomings in U.S. stockpiles and the consequences of poor “pre-crisis” coordination with

allies and partners on readiness gaps. Although platform-specific training has been adequately quick and responsive to Ukrainian needs, more advanced, collective training has at times been divorced from the frontline realities of the Ukrainian military.

Remarks

Panelist One

Although acknowledging that the United States, its allies, and partners had made admirable progress in improving the Armed Forces of Ukraine and defense institutions prior to 2022, the first panelist emphasized that there was much room for improvement. Specifically, the political and social realities of the Ukrainian military in 2014, mixed with suboptimal advisory efforts, placed a modest limit on what external actors were able to meaningfully achieve. Many of these challenges, the panelist believed, endure to this day.

Among the inhibitors of success was a mismatch between the cultural proclivities of Ukrainian defense officials and soldiers and those of their foreign advisers. “The United States and Ukraine are like chalk and cheese,” the panelist described. The vestiges of Soviet culture are indeed apparent throughout the Ukrainian defense establishment and evident in issues ranging from subordinates’ fears of making decisions in lieu of their superiors to the number of personnel in a battalion. Political challenges compounded these cultural barriers, as political leaders in Ukraine failed, at times, to provide the necessary “top cover” for meaningful reforms after 2014.

These barriers worked in tandem with a “peacetime, bureaucratic approach” by assistance providers that hampered external efforts from 2014 to 2022. Advisers’ short deployments to Ukraine ensured that external actors would be unable to establish a meaningful understanding of these political and cultural barriers or to develop solutions that aligned with wartime imperatives. The ephemeral adviser presence in Ukraine’s defense institutions notwithstanding, the panelist acknowledged that U.S. Embassy staffing shortages undermined the ability of senior defense officials/defense attachés from “doing anything strategic.” “This peacetime approach did not fit with a war,” the panelist pointed out.

The panelist thus attributed the success of foreign advisory, train, and equip efforts to having at times circumvented the interference of Ukraine’s security elites and adopting a more proactive and responsive approach after 2022. The panelist emphasized that the successful development of the Ukrainian navy was enabled by a lack of Ukrainian general staff involvement. The advances made by Ukrainian special operations forces were similarly facilitated; the highest echelons of Ukraine’s defense ministries were relatively aloof or disinterested from the issue. In

other areas, such as Ukraine's success in air defense, the U.S. ability to quickly respond to technical questions from Ukraine's military personnel has facilitated success.

Panelist Two

Echoing many of these themes, the second panelist attributed much of the progress witnessed in the Ukrainian military to the initiatives of reformers who came to power in Ukraine after the 2014 Euromaidan (Revolution of Dignity), rather than efforts by external actors alone.¹ Overly ambitious reform initiatives were often ill-suited to the political realities in Ukraine. The panelist described how the ministry of defense consisted of a mix of the Soviet and post-Soviet generation. The challenge of finding effective reform champions within the ministry proved to be an impediment to the success of greater reform efforts.

These impediments interacted with advisers who often lacked the access and cultural competence to navigate them. Many were reticent to delve into the internal machinations of Ukraine's defense ministry and military. Unrealistic expectations, delays in staffing technical advisers, an unwillingness on the part of foreign countries to deploy advisers to Ukraine due to hazardous conditions, and a dearth of foreign personnel with the appropriate technical skills to advise the Ukrainian ministry of defense further hampered foreign efforts. "We had more than 120 advisers, half of whom were never seen in the ministry," the panelist reflected.

The panelist thus attributed much of the progress witnessed in the Ukrainian military since 2014 to the initiatives of Ukrainian reformers in post-Maidan Ukraine, instead of efforts by external actors alone. The panelist indeed described an intensive approach by Ukraine's civilian-manned Office of Defense Reforms to finding "the right people" on Ukraine's side to push reforms through.

It was when foreign initiatives were responsive to Ukrainian requests and oriented toward measurable (and achievable) outcomes that they achieved success. The panelist described the "task force" approach adopted to develop niche capabilities in the Ukrainian military, including special operations forces, military intelligence, and national police. In these instances, a modestly sized, focused foreign advisory effort achieved disproportionate results. The panelist concluded with a call for greater foreign engagement with Ukrainian civil society, the need to align Ukraine's training doctrine with the realities faced by its troops on the frontlines, and, most critical, for foreign advisers to be open to learning from their partners.

Panelist Three

The third panelist focused remarks on the immediate run-up to and aftermath of Russia's full-scale invasion. Emphasizing the intentionally cumbersome, deliberate, and methodical processes underpinning the U.S. security cooperation enterprise, the panelist described how a "system designed to work slowly, was able to achieve a huge amount." These achievements were numerous and, per the panelist's description, "not how we usually do business." By sheer volume and variety alone, these transfers entailed billions worth of U.S. Presidential Drawdown Authority packages, including new sets of capabilities that had never been provided to Ukraine or any post-Soviet country, and where no technical manuals were immediately available.

Meeting these demands was not easy. For one, it required an unusually high degree of Presidential and Secretary of Defense time, attention, and involvement. It also necessitated invoking in extremis authorities to cut through bureaucratic processes that were inappropriate for wartime. And, in turn, the security cooperation enterprise developed an ad hoc set of procedures, processes, and systems to manage the new demands being placed on it. For example, as the volume, speed, and salience of Ukrainian requirements increased, the [U.S.] security cooperation office was quickly overwhelmed and the need for an operational headquarters became apparent. In this instance, the presence of XVIII Airborne Corps was able to step into that role.

The adaptive nature of the security cooperation enterprise notwithstanding, the panelist went on to describe some of the challenges encountered in accelerating security assistance during wartime. Among the main deficits the Ukraine conflict has exposed are shortcomings in U.S. stockpiles, particularly when it comes to ammunition and spare parts. The size of the industry was indeed scaled to peacetime requirements, rendering it ill-suited for the magnified demands the Ukraine conflict placed on it. "We have to fundamentally rethink our stockpiles," the panelist noted. The panelist further cautioned that this crisis posture may not be sustainable for the enterprise, even if donor political will holds strong.

Beyond gaps in the ability of the U.S. defense industrial base's ability to quickly produce at scale, the Ukraine experience demonstrates the need to further coordinate sustainment and logistical requirements with allies and partners. "We, in the United States, do not really understand the overall readiness challenges that our allies and partners have," the panelist concluded, stressing the need for pre-crisis dialogue with allies and partners about these shortcomings.

Q&A

After formal remarks by the three breakout panelists, the moderator opened the session for questions and answers. Panelists and audience members discussed the nature and effectiveness

of training initiatives, how the Ukrainians might provide latitude for donors to better source their requests, and the role of foreign initiatives in shaping Ukrainian approaches to “mission command.”

Question 1: The first question focused on the effectiveness of foreign training initiatives.

Answer: All three panelists agreed that the pre-2022 training initiatives generally fell short and, although platform-level training had improved, gaps remained. First, a lack of “partner-centric” collective training inhibited large-scale, combined arms maneuvers by the Ukrainian military. In other instances, foreign training has remained stubbornly adherent to foreign standards, without accounting for the tactics, techniques, and procedures the Ukrainians have adopted in the field. Related, training has at times been divorced from the realities that Ukrainian forces are facing on the ground. Being told to “take another road” to avoid minefields, for example, failed to appreciate the depth of Russian minefields. Some training has even failed to incorporate unmanned aerial vehicles. Furthermore, in other instances, foreign trainers have lacked combat experience comparable to their Ukrainian counterparts.

Question 2: How can Ukraine better craft its requests for materiel to account for its capacity for innovation?

Answer: The panelists noted that the Ukrainians have demonstrated the value of blending old foreign equipment with new technologies to fill capability gaps. This activity has ranged from the so-called FrankenSAMs² (surface-to-air missiles) seen on the battlefield as well as the Ukrainian commanders’ use of mobile phone applications to deliver fire support to ground forces. This ability has been, in large part, buoyed by the influx of indigenous technical expertise into the Ukrainian military from 2014 forward. Nevertheless, donors do not fully appreciate this innovative capacity, and Ukrainian requests for arms are too specific to fully harness it.

Question 3: To what extent was the small-unit initiative the Ukrainian military has demonstrated since 2022 evidence that pre-2022 foreign training and education efforts were successful?

Answer: Some panelists cautioned against Western observers “seeing what they want to see” and overstating the influence they had in driving Ukraine’s decentralized approach to decisionmaking. In fact, the initiative demonstrated by the lower echelons of Ukraine’s armed forces may be more due to poor or limited senior leader guidance than the success of foreign educational initiatives. This decentralized approach raises concerns about creating robust standards across the force and may portend challenges in promoting adaptive and motivated commanders through the system.

Notes

¹ Constant Méheut, “Ukraine Remembers Popular Uprising That Foreshadowed War,” *New York Times*, November 21, 2023, <https://www.nytimes.com/2023/11/21/world/europe/ukraine-maidan-revolution-anniversary.html>.

² David Axe, “Ukraine’s FrankenSAMs Are Soviet Launchers Firing American Missiles. They Just Scored Their First Kill,” *Forbes*, January 17, 2024, <https://www.forbes.com/sites/davidaxe/2024/01/17/ukraines-frankensams-are-soviet-launchers-firing-american-missiles-they-just-scored-their-first-kill/?sh=34199f3b26e3>.

About the Editor

Dr. Jeffrey Mankoff is a Distinguished Research Fellow in the Center for Strategic Research, Institute for National Strategic Studies, at the National Defense University, and a Non-Resident Senior Associate at the Center for Strategic and International Studies (CSIS). His research focuses on Russian foreign policy, Eurasian geopolitics, and the role of history and memory in international relations. He is the author of *Empires of Eurasia: How Imperial Legacies Shape International Security* (Yale, 2022) and *Russian Foreign Policy: The Return of Great Power Politics* (Rowman & Littlefield, 2009, 2012). He also writes frequently for *Foreign Affairs*, *War on the Rocks*, and other outlets.

Dr. Mankoff was previously a Senior Fellow with the Russia and Eurasia Program at CSIS and served as an adviser on U.S.-Russia relations at the Department of State as a Council on Foreign Relations International Affairs Fellow. From 2008 to 2010, he was Associate Director of International Security Studies at Yale University and an Adjunct Fellow at the Council on Foreign Relations. He also held the John M. Olin National Security Fellowship at Harvard University (2006–2007) and the Henry Chauncey Fellowship at Yale University (2007–2008).

Dr. Mankoff received undergraduate degrees in international studies and Russian from the University of Oklahoma, and an MA, MPhil, and Ph.D. in diplomatic history from Yale University. He is a Truman National Security Fellow and a past Term Member of the Council on Foreign Relations.

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