



National Defence University

Department of Warfare

Series 2: Research Reports No. 33

Russia's war against Ukraine

Complexity of Contemporary
Clausewitzian War

Pentti Forsström (ed.)

A watercolor illustration of a city skyline, featuring various architectural structures and spires. The colors are primarily blue and purple, with a red and white horizontal band at the bottom, resembling the Russian and Ukrainian national flags. The text 'RUSSIA SEMINAR 2024' is overlaid on the illustration in a bold, white, sans-serif font with a black outline.

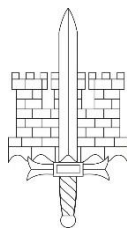
RUSSIA SEMINAR 2024

MAANPUOLUSTUSKORKEAKOULU
SOTATAIDON LAITOS
JULKAISUSARJA 2: TUTKIMUSSELOSTEITA NRO 33

NATIONAL DEFENCE UNIVERSITY
DEPARTMENT OF WARFARE
SERIES 2: RESEARCH REPORTS NO. 33

RUSSIA'S WAR AGAINST UKRAINE
COMPLEXITY OF CONTEMPORARY
CLAUSEWITZIAN WAR

PENTTI FORSSTRÖM (ED.)



NATIONAL DEFENCE UNIVERSITY
DEPARTMENT OF WARFARE
HELSINKI 2024

Pentti Forsström (ed.): *Russia's war against Ukraine – Complexity of Contemporary Clausewitzian War*

Maanpuolustuskorkeakoulu

Sotataidon laitos

Julkaisusarja 2: Tutkimuseloiteita nro 33

National Defence University

Department of Warfare

Series 2: Research Reports No. 33

Editor:

Pentti Forsström

Authors/speakers:

Bettina Renz; Dimitri Minic; Juan Carlos Antunez Moreno; Essi Tarvainen; Viktoriya Fedorchak; Katri Pynnöniemi; Kati Parpei; Nina Andriianova; Peter A Mattsson; Jakob Shapiro; Sergei Melkonian; Valerii Hordiichuk; Emma Chimbanga; Dmytro Zhukov; Dominika Kunertova; Stephen Herzog; Leonid Nersisyan; Samuel Bendett; Clint Reach; Marc R. DeVore; Kristen Harkness; Tracey German; Dumitru Minzarari; Elisa Movtayeve; Jonna Alava; Ieva Bērziņa; Kirill Shamiev; Marina Miron; Rod Thornton; Olha Meloshyna; Emil Wannheden; Sari Voinoff.

Recent publications in PDF format: <http://www.doria.fi/handle/10024/73990>

Cover picture: FNDU

Pictures and illustrations: Authors

© FNDU & Authors

ISBN 978-951-25-3454-8 (Pbk.)

ISBN 978-951-25-3455-5 (PDF)

ISSN 2343-5275 (print)

ISSN 2343-5283 (web)

Maanpuolustuskorkeakoulu – Sotataidon laitos

National Defence University – Department of Warfare



This work is licensed under the Creative Commons BY-NC 4.0 International License. To view a copy of the CC BY-NC 4.0 license, visit <https://creativecommons.org/licenses/by-nc/4.0/deed.en>

PunaMusta Oy
Joensuu 2024
Finland

CONTENTS

Pentti Forsström

INTRODUCTION TO THE THEME OF THE SEMINAR 2024 v

Mika Kalliomaa

OPENING WORDS – RECTOR OF THE FINNISH DEFENCE
UNIVERSITY xiii

Bettina Renz

1. CAN CIVIL-MILITARY RELATIONS EXPLAIN THE INEFFECTIVENESS
OF RUSSIAN ARMED FORCES IN UKRAINE? A DEBATE 1

Dimitri Minic

2. RUSSIAN STRATEGIC THINKING AND CULTURE BEFORE AND
AFTER FEBRUARY 24, 2022: POLITICAL-STRATEGIC ASPECTS 21

Juan Carlos Antunez Moreno

3. CULTURAL CHARACTERISTICS OF RUSSIAN MILITARY LEADERSHIP:
IT'S INFLUENCE ON MILITARY OPERATIONS IN UKRAINE 35

Essi Tarvainen

4. RUSSIAN MARITIME THEORIES ON PAPER AND IN PRACTICE 49

Viktoriya Fedorchak

5. THE RUSSIAN WAY OF WARFARE IN THE AERIAL DOMAIN 58

Katri Pynnöniemi and Kati Parppe

6. UNDERSTANDING RUSSIA'S WAR AGAINST UKRAINE: POLITICAL,
ESCHATOLOGICAL AND CATAclysmic DIMENSIONS 66

Nina Andriianova

7. RUSSIA'S IMPERIAL POLICY: THEORY AND REALITY 67

Peter A Mattsson and Jakob Shapiro

8. THE TRINITY OF STATE, PEOPLE AND MILITARY – A STRATEGIC
ADVANTAGE IN THE RUSSIA-UKRAINIAN WAR 2022–2024 76

Sergei Melkonian

9. THE IMPACT OF THE WAR IN UKRAINE ON THE RUSSIAN
MILITARY PRESENCE IN THE SOUTH CAUCASUS AND THE
MIDDLE EAST 100

Margaryta Kapochkina and Stanislav Kovalkov

10. THEORETICAL RELATIONS BETWEEN THE "STATE AND WAR"
IN THE POST-INDUSTRIAL ERA, TAKING INTO ACCOUNT THE
COMBAT EXPERIENCE OF THE WAR OF RUSSIA AGAINST
UKRAINE 113

Oleksandr Porypaliak

11. THEORETICAL AND POLITICAL RELATIONS BETWEEN “STATE
AND ARMED FORCES” – THE RUSSIANS WIVES OF MOBILIZED
RECRUITS 124

Valerii Hordiichuk

12. TOWARD A RUSSIA'S STRATEGY IN A HYBRID WAR AGAINST UKRAINE: SYNTHESIS OF KINETIC AND NON-KINETIC ACTIONS TO ACHIEVE A SYNERGETIC EFFECT 125

Emma Chimbanga and Dmytro Zbukov

13. A STUDY OF THE IMPACT OF MILITARY OPERATIONS IN UKRAINE ON THE CHANGING POLITICAL GOALS OF RUSSIA..... 136

Dominika Kunertova and Stephen Herzog

14. EMERGING AND DISRUPTIVE TECHNOLOGIES TRANSFORM, BUT DO NOT LIFT, THE FOG OF WAR – EVIDENCE FROM RUSSIA'S WAR ON UKRAINE 146

Leonid Nersisyan and Samuel Bendett

15. RUSSIA'S DRONE WARFARE IN UKRAINE..... 162

Clint Reach

16. HOW WILL THE RUSSIAN MILITARY ADAPT AFTER THE WAR IN UKRAINE?..... 172

Marc R. DeVore and Kristen Harkness

17. WINNING BY ADAPTING: BATTLEFIELD ADAPTATION IN THE LONG RUSSO-UKRAINIAN WAR..... 173

Tracey German

18. LEARNING LESSONS? INSTITUTIONAL STRUCTURES AND PROCESSES WITHIN THE RUSSIAN MILITARY..... 190

Dumitru Minzarari

19. ASSESSING THE LOGIC OF RUSSIA'S MILITARY REFORM AND EFFECTIVENESS: PRELIMINARY INSIGHTS FROM WAR IN UKRAINE..... 191

Elisa Movtayeva

20. RUSSIAN CONCEPTS ON CIVIL-MILITARY RELATIONS AND MILITARY CULTURE 202

Ieva Berzina

21. PATRIOTIC AND NATIONALIST ORIENTATIONS IN RUSSIAN SOCIETY 211

Kirill Shamiev

22. WICKED PROBLEMS: POLICY STUDIES PERSPECTIVE ON RUSSIA'S MILITARY PERFORMANCE 214

Marina Miron and Rod Thornton

23. RUSSIAN MILITARY ADAPTATIONS IN THE UKRAINE CONFLICT (2022-?): DEALING WITH THE COMPLEXITY OF MODERN WARFARE..... 216

Olha Meloshyna

24. FEATURES OF RUSSIA’S DEVELOPMENT OF CIVIL-MILITARY RELATIONS IN THE TEMPORARILY OCCUPIED TERRITORIES OF UKRAINE	228
---	-----

Oleksandr Porypaliak

25. THEORETICAL AND POLITICAL RELATIONS BETWEEN “STATE AND ARMED FORCES” - THE RUSSIANS WIVES OF MOBILIZED RECRUITS.....	235
--	-----

Emil Wannbeden

26. EVERYTHING FOR THE FRONT? RUSSIA’S RELUCTANT ECONOMIC MOBILASATION AFTER FEBRUARY 2022	236
--	-----

Sari Voinoff

27. RUSSIA'S ASSESSMENT OF GEOPOLITICAL THREATS AND DANGERS IN 2030 AND 2045 – FUTURE DRIVERS FOR CHANGE....	244
--	-----

INTRODUCTION TO THE THEME OF THE SEMINAR 2024

Pentti Forsström

On behalf of the organizers it gives me pleasure to offer this publication for examination by everybody those interested in the concept of war. This is not only because there was a remarkable group of researchers – in person – taking part in the Russia Seminar 2024 in Santahamina, Helsinki. It is also because, there were a prominent audience of experts discussing the themes of the seminar. I'd like to express my gratitude to all the researchers, speakers and experts for your contribution to the seminar.

The title of the seminar was “Russia’s war against Ukraine – Complexity of Contemporary Clausewitzian war”. This topic reflects the discrepancy of theory and practice first of all regarding the definitions used in the discourse of opponents. We had been monitoring the longest ever Russian “special military operation” in Ukraine for almost two and a half years and the final stage of the war is yet uncertain. That is absolutely not what the Russian definition of the concept of the operation is about. Of course, one could argue that Russia was referring to the form of military activity and not to the methods. Yes, one could accept this argument, but only if the operation would have ended according to its original plan in a couple of days in February - March 2022. Apparently, there are few of those thinking that what we see is nothing more than a “traditional clausewitzian” interstate war in its purest sense. This also means that there are still many questions to be asked and answered by research.

In Russian military science an operation is defined as possible form of military actions (форма военных действий),¹ an entity of coordinated actions of subordinates in terms of objective, tasks, area and time. Actions may consist of battles, strikes and maneuvers according to a single basic idea and unified plan. When we add the word “special” to this we might be closer to the original operation plan of the Russian high command. But the definition did not materialize and reality was not a success for the Russian military – the Ukrainian were resisting. As von Clausewitz put it – a plan for operation is essential, but it isn’t an absolute key to success on the battlefield. When planning, one has to take into consideration a large number of factors affecting warfare, and there is always something one cannot anticipate.

The form of military activity in this Russian endeavour involved all services, branches and in practice all peacetime army formations, which, when put together, makes the operation strategic in terms of level of warfare, also in Russian military thought. This in turn implies that the decision on the operation was made by the Russian high command, i.e. by the president Vladimir Putin. The problem is that the decision was apparently made with biased assumptions and assessments enhanced with a firm belief in their own threat-perceptions. A question still remains about who drafted the operation plan.

The number of forces used at the beginning of the operation and their disposition suggest that control over Kiev with regime change and occupation of Ukraine at least partly was the grand idea. President Putin said in his speech on 24 February 2022 that

¹ My notes on Operational Art in the General Staff academy 2008–2009.

the goals were “denazification and demilitarisation” of Ukraine. But troops at the lower level of hierarchy were not aware of these plans nor were the goals properly delineated into tasks and guidelines for the units in the first echelon.

According to von Clausewitz, the political leader must know the military instrument and how should it be used for the achievement of specific political objectives. At the same time military planners must understand the principles of warfare and have some appreciation of the correlation of forces in order to create feasible plans. Either way, one of these parties or both miscalculated or neglected these principles or overruled the other’s estimates. As I wrote last year – after 8 years of fighting against Ukraine, it is hard to believe that, Russia’s military-political leaders would have not known what kind of defence and resistance was to be expected in Ukraine².

In more than two years of fighting and warfare, we have witnessed both offensive and defensive actions, seizing and giving up territories, attritional warfare, losses and re-enforcements, battles in air, land, sea - all dimensions of traditional Clausewitzian war. Both sides in the war are following their objectives and try to operate accordingly. There are, in terms of the future, at least two questions to be answered. The first is, how will resources affect the correlation of forces, duration of the war and do they give any ground for assumptions about the outcome? The second question is, does Russia have an exit-strategy? And if, so, what does it look like? One has to remember that nobody starts a war knowing that it will be lost. That said, scenarios for negative alternative must be planned during the war. So far it seems that the Russian answer is predictable – turning the state in the war mode, if not totally, but a relatively large share of resources will be dedicated to increase the military-industrial output and military power respectively. Is there a turning-point for Russia anymore? No, apparently, there is a long, hot war ahead of us.

This publication consists primarily of articles presented in the 6th annual Russia Seminar 2024 organised by the Department of warfare of the Finnish National Defence University (FNDU) and titled as “Russia’s war on Ukraine – Complexity of Contemporary Clausewitzian war”.

The purpose of the Russia Seminar was “*to increase discussion on the Russian war on Ukraine and produce new knowledge on Russia’s military policy and power. Furthermore, the Russia seminar offers a meeting forum for Finnish and international researchers in pursuit of establishing a research forum on Russian Art of War in Finland as a member state of NATO*”. It should be noted that the publication is neither a complete collection of all the presentations given in the seminar nor a comprehensive source of information what comes to Russian war against Ukraine. This, and also the fact that the war continues when writing these lines, leaves room for themes and questions to be researched also in the future.

The use of force is one of the two main functions of the Russian military power, the other one being deterrence, which was discussed at the Russia seminar 2021³. One

² See also: С.А. Денисенцев, А.В. Лавров, Ю.Ю. Лямин, А.А. Хетагуров; под ред. М.С. Барабанова (2023): Алгоритмы огня и стали; Центр анализа стратегии и технологии, Москва, p. 71.

³ See: Pentti Forsström (Ed.) 2021: Russian Concept of Deterrence in Contemporary and Classic Perspective, National Defence University, Department of Warfare, Series 2: Research Reports No. 11. The permanent address of the publication: <https://urn.fi/URN:ISBN:978-951-25-3250-6>.

objective of deterrence is to influence the consciousness of the adversary and this constitutes an interesting topic again due to the prolongation of the war.

Aspects and methods of deterrence conducted by Russia and its military during the years 2021–2022 were not only aimed at preventing war, but also, they were actual preparations for a war. Despite the fact that these means and capabilities were partly escalatory and threatening by nature, they did not enable Russia to achieve its political, military-political or military objectives. Perhaps, Russia saw no alternatives to save its status and prestige than to start a war against Ukraine, despite of the fact that it wouldn't be a surprise to Western world. The conceptualisation of the Russian war against Ukraine was the main idea of the Russia seminar 2022⁴, which was held a week before Russia started the invasion on Ukraine.

Last year's Russia seminar 2023 was organised on the first anniversary of the Russia's war on Ukraine. The various themes were discussed under the topic of strategic and operational designs. The main focus was on Russia's means of conducting the war. For the first time we had the honour to experience the results of research from representatives of the Ukrainian Armed Forces.⁵

In your hands there is now the newest volume of publications concentrating on Russia's war against Ukraine. The Russia seminar 2024 concentrated on strategic and broader aspects of warfare under the relations of the triangle "state–society–armed forces". The following 27 contributions of prominent researchers and Russia specialists give you, dear reader, a solid amount of paramount knowledge on Russia's way of war and military thought. In this respect, once again, I also have the great pleasure to express my gratitude to all the contributors of the Russia Seminar 2024. The war in Ukraine goes on and the Finnish National Defence University and Russia Research Group will stay focused and motivated to carry on its tasks of research, education and partaking in public discussion about the Russian military.

The contributors to the Russia seminar 2024 are briefly introduced below in the order of the appearance in the seminar⁶. The abstracts and introductions to the articles or presentations are placed in beginning of the contributions.

All the presentations and discussion can be found on the FNDU YouTube-channel: <https://www.youtube.com/watch?v=P8VA1bT8ADs>. In each article there is a clock time showing the beginning of the presentation in question.

⁴ See: Pentti Forsström (Ed) 2022: Russian Concept of War, Management and Use of Military Power – Conceptual Change, National Defence University, Department of Warfar, Series 2: Research Reports No. 19. The permanent address of the publication: <https://urn.fi/URN:ISBN:978-951-25-3288-9>.

⁵ See: Pentti Forsström (Ed.) 2023: Russia's War on Ukraine – Strategic and Operational Designs and Implementation, National Defence University Department of Warfare Series 2: Research Reports No. 29. The permanent address of the publication: <https://urn.fi/URN:ISBN:978-951-25-3400-5>.

⁶ Those experts' names which didn't take part in-person are written in brackets.

Contributors

DAY 1

Dr Bettina Renz is a Professor of International Security at the University of Nottingham. Her expertise is in strategic studies with a particular interest in contemporary Russian defence and security policy. Her research is grounded in context-based area studies and strategic studies. She has an MA and MSc in Russian Studies (Edinburgh) and a PhD in Russian and East European Studies from the University of Birmingham and has previously worked as a senior researcher at the Aleksanteri Institute, University of Helsinki (2015-16) and a distinguished visiting professor at the Canadian Forces College (2020). She has published widely on Russian military and security policy since 2005 and is currently engaged in a British Academy funded project on Ukrainian military reforms (since 2019). Dr Renz is serving as a visiting professor the spring semester at the FNDU.

Dr Dimitri Minic is a Researcher at IFRI's (French Institute of International relations) Russia/Eurasia center. He holds a PhD in History of International Relations from Sorbonne University (2021). His PhD thesis was intitled "Bypassing armed struggle: Russian strategic thought and the evolution of war, 1993–2016". His research focuses on Russian strategic thought, the Russian army, and Russia's hybrid and high-intensity capacities. He also studies the strategic culture of the Russian politico-military elites, and threat perception. He recently published *Russian Strategic Thought and Culture: From Bypassing Armed Struggle to the War in Ukraine* (Paris, Maison des sciences de l'homme, April 2023), the book derived from his thesis, for which he received the Thibaudet Prize.

Dr Juan Carlos Antunez Moreno is a Sociocultural Analyst NATO JFC Brunssum. "Master in Civil Military Interaction (MCMI)" (Helmut Schmidt University, Hamburg, Germany) (On going, pending on dissertation). Master Degree in International Relations: Conflict Prevention and Resolution", Catholic University of Avila, Spain. "PhD in Arabic Philology" (University of Seville, Seville, Spain). His professional experience includes Socio-Cultural Analyst, NATO JFC HQ OPS J2 IKAP, Analysis Section, Brunssum, Netherlands (Since January 2014); Intelligence Analyst, Information and Analysis Division, EUFOR HQ, Sarajevo, Bosnia i Herzegovina (Since 1 June 05 to 31 December 2013) and Chief Military Analyst Team, Spanish National Intelligence Cell, EUFOR HQ, Sarajevo.

Essi Tarvainen is a Doctoral reseacher at the Finnish National Defence University and visiting fellow at the Swedish National Defence University.

Dr Viktoriya Fedorchak is a Lecturer in War Studies, at the Swedish Defence University, Air Operations division, which she joined in September 2022. Previously, she taught both civilian and military audiences at the Norwegian University of Science and Technology (Norway), Maynooth University (Ireland), and the University of Nottingham (UK). Dr Fedorchak taught courses in Modern Strategy, Air Power, Military History, Global Security, Geopolitics, International Relations, and European Studies. Her research interests and expertise include air power, modern warfare, military doctrine, and the Russia-Ukraine war. She is the author of textbook on air power 'Understanding Contemporary Air Power' (Routledge, 2020) and monograph 'British Air Power: The Doctrinal Path to Jointery' (Bloomsbury Academic, 2018). Dr Fedorchak did her PhD on the Development of the RAF doctrine 1999-2014, at the University

of Hull (UK). Her upcoming book ‘The Russia-Ukraine War: Towards Resilient Fighting Power’ (Routledge, 2024) explores various aspects of fighting power of the two countries in the land, air, maritime and cyber domains during the first year of the Russian full-scale invasion of Ukraine.

Dr Katri Pynnöniemi is the Associate professor, Mannerheim Chair of Russian Security Studies, University of Helsinki and the National Defence University of Finland since 2017.

Dr Kati Parppe is a University lecturer, Faculty of Social Sciences and Business Studies, Department of Geographical and Historical Studies, University of Eastern Finland.

Lieutenant Colonel Nina Andriianova is the Leading researcher of Research Department, Center for Military and Strategic Studies, National Defence University of Ukraine. PhD (Political Science). Areas of interest: Russian-Ukrainian war, hybrid war, Euro-Atlantic integration, international relations.

Dr Peter A. Mattsson is a Senior lecturer at the Department of War Studies at the Defence University in Stockholm.

Jakob Shapiro is a Research Assistant at the Department of War Studies at the Defence University in Stockholm.

Dr Sergei Melkonian is a Research Fellow at APRI Armenia on Armenia-Russia relations, Assistant Professor at Yerevan State University and Russian-Armenian University. From 2020 to 2022 served as the Assistant to the President of Armenia for foreign affairs. Author of dozens of academia and analytical articles.

(Margaryta Kapochkina) is a researcher at the research center of the Armed Forces of Ukraine "State Oceanarium" of the Institute of Naval Forces of the National University "Odesa Maritime Academy", personnel officer, captain-lieutenant, doctor of philosophy, and has more than 90 scientific works, including 4 monographs. Took part in 10 research projects commissioned by the General Staff of the Armed Forces of Ukraine, including as a responsible executor.

(Stanislav Kovalkov) has a master's degree, personnel officer, major, and the commander of the Marine Infantry Company of the Armed Forces of Ukraine. In March 2014, he voluntarily went to serve in the Armed Forces of Ukraine. Takes direct part in hostilities.

(Colonel Valerii Hordiichuk) is the Head of Research Department, Center for Military and Strategic Studies, National Defence University of Ukraine. PhD (Technical Science), Senior Research Fellow. Education and grades: BA (specialist) – military institute of IT; MA – National Defence University of Ukraine (operational level), Naval field; PhD – IT (signal processing), Senior Research Fellow – “weapons and military equipment”. Areas of interest: art of war; military policy and military strategy, transformation and integration processes in military sphere; IT.

(Major Emma Chimbanga), Master's Degree in Onboard Equipment Systems and Complexes for Military Aircraft, qualified as a professional in the field of aviation and rocket and space technology, is the Head of the Department of International Military Cooperation in the Field of Armaments and Military Equipment of the State Scientific Research Institute of Armament and Military Equipment Testing and Certification.

(Dmytro Igorovich Zhukov), Master's Degree in Law, Master's Degree in International Economic Relations, Bachelor's Degree in Philology, is a Postgraduate student at the Flight Academy of the National Aviation University, specialising in Air Transport, second lieutenant of justice, Officer of the Department of International Military Cooperation in the Field of Armaments and Military Equipment of the State Scientific Research Institute of Armament and Military Equipment Testing and Certification.

Dr Dominika Kunertova is a Senior researcher at the Center for Security Studies of ETH Zurich, the Swiss Federal Institute of Technology. She is also a Non-Resident Fellow at the Cornell Brooks School Tech Policy Institute. Previously, Dominika worked at NATO Headquarters in Brussels and NATO Allied Command Transformation in Norfolk. She received her PhD from Université de Montréal.

Dr Stephen Herzog is a Senior Researcher at the Center for Security Studies of ETH Zurich, the Swiss Federal Institute of Technology. He is also an Associate of Harvard's Belfer Center for Science and International Affairs. In Summer 2024, he will become Professor of the Practice at the James Martin Center for Nonproliferation Studies, based at the Middlebury Institute of International Studies at Monterey. A former U.S. Department of Energy arms control official, Stephen received his PhD from Yale University.

Leonid Nersisyan is a defense analyst and a Senior Research Fellow at the Applied Policy Research Institute of Armenia (APRI Armenia). He focuses on military reform, defense technologies, and the interplay of geopolitical and regional stability. Leonid's research interests include Russia and CIS countries' armed forces, defense industry and technology, armed conflicts, and arms control. He co-authored the *Waiting for the Storm: The South Caucasus* and *Storm in the Caucasus* books.

(Samuel Bendett) is an Adjunct Senior Fellow at the Center for a New American Security's Technology and National Security Program, and a Senior Associate (Non-resident) with CSIS Europe, Russia, and Eurasia Program. His work involves research on Russian military technology developments; uncrewed, robotic, and autonomous military systems; and artificial intelligence. He is also an honorary "Mad Scientist" with the U.S. Army Training and Doctrine Command's Mad Scientist Initiative. Mr. Bendett's analyses, views, and commentary on Russian military robotics, combat autonomy, uncrewed systems and artificial intelligence capabilities appear in major domestic and international news and media outlets.

(Dr Clint Reach) is an International Defense Researcher at RAND Corporation. He is an International Defense Researcher at Rand. Reach served nine years in the U.S. Navy as a Russian linguist in various positions in the Department of Defense.

DAY 2

Dr Marc DeVore is a Senior Lecturer at the University of St. Andrews. He Co-Chairs, alongside Professor Sir Hew Strachan, the Ukraine Working Group, whose members include academics and retired high-level military personnel from across the UK and USA. He is currently a British Academy Fellow and advises the UK's Foreign Commonwealth and Development Office (FCDO) on technological sanctions targeting Russia's defense industries. He has published in *Review of International Political Economy*, *Security Studies*, *Journal of Strategic Studies*, *Cooperation and Conflict*,

New Political Economy, Defence Studies, Small Wars and Insurgencies, Cold War History and Foreign Policy.

Dr Kristen Harkness is a Senior Lecturer at the University of St. Andrews. She is director of the University's Institute for the Study of War and Strategy (ISWS). She is also an ESRC Fellow and the Research Lead for the House of Commons for Defense and Security Issues. She has published extensively on military adaptation and the inner workings of authoritarian regimes. Her articles have appeared in *Journal of Peace Research*, *Journal of Strategic Studies*, *Journal of Conflict Resolution*, *International Affairs* and the *European Journal of International Security*.

(Andriy Zagorodnyuk) is the Director of Ukraine's Centre for Defense Strategies and is also Senior Advisor to Ukraine's Ministry of Strategic Industries. Between 2019-20 he served as Ukraine's Minister of Defense. His professional background was in heavy engineering, an interest that he has taken forward into his work since 2014 on Ukrainian defense reform.

Dr Tracey German is a Professor of Conflict and Security in the Defence Studies Department at King's College London. Her research focuses on Russian foreign and security policies, particularly Russia's use of force, and how its neighbours have responded, as well as Russian strategic culture and military thought. Her latest book, *Russia and the Changing Character of Conflict*, was published by Cambria Press in 2023.

Dr Dumitru Minzarari is a Lecturer in Security Studies at the Department of Strategic and Political Studies, Baltic Defence College (Estonia). Prior to this, Dumitru was a Research Associate with the Eastern Europe and Eurasia Division, Stiftung Wissenschaft und Politik (German Institute for International and Security Affairs) in Berlin. Dumitru also had tenures both as a fellow and visiting scholar with the Research Division of the NATO Defense College in Rome. He has a PhD in political science from the University of Michigan-Ann Arbor and a MA degree in international affairs from the Columbia University in New York. Dumitru held expert and management positions with the Moldovan Ministry of Defense, Organization for Security and Cooperation in Europe (Georgia, Kyrgyzstan, and Ukraine) and worked with a few think tanks in Eastern Europe.

Elisa Movtayeva is a Research assistant at the Finnish National Defence University. She has worked in the Russia research group more than a year.

Jonna Alava is a M.A. is a Doctoral Researcher at the University of Helsinki and a member of the Russia Research Group at the National Defence University since August 2019. Her article-based dissertation examines gender aspects in the military-patriotic education in Russia.

Dr Ieva Berzina is a Professor and senior researcher, National Defence Academy of Latvia, Center for Security and Strategic Research. Her research interests include comprehensive state defence, patriotism, strategic communication.

Dr Kirill Shamiev is a public sector consultant and researcher of Russian politics and security sector reforms with a PhD from Central European University. He works as a visiting fellow at the European Council on Foreign Relations. He is a founding member of the MethodsNET methods excellence network and member of the Inter-University Seminar on Armed Forces and Society. His comments on

current events appeared in Foreign Affairs, Foreign Policy, The New York Times, The Hill, iNews and other media.

Dr Marina Miron is a Post-doctoral researcher at King's College London in the Defence Studies Department of King's College London. As well as works on counter-insurgency she has several publications in the sphere of Russian information warfare. She has worked on several projects related to emerging technologies including the use of drones and the development of offensive and defensive cyber tools in the context of information warfare as used by Russia and China.

Dr Rod Thornton is an Associate Professor at King's College London. He has served in the British Army and has lived and worked in both Kyiv and Moscow. He teaches across a range of courses and subject areas, mostly related to the Russian military and strategic studies.

Olha Meloshyna is an Officer of the Armed forces of Ukraine, currently pursuing a master's degree in military political science at the Military Institute of Taras Shevchenko Kyiv National University.

(Dr Oleksandr Ponypaliak) has a PhD in History (Taras Shevchenko National University of Kyiv). He is working as an Assistant of the department of modern history of foreign countries (History faculty, Taras Shevchenko National University of Kyiv). From 26 February 2022 to present – in Ukrainian Armed Forces, senior lieutenant.

Emil Wannheden holds an M.Sc. in Development Economics from the University of Florence, and is currently working as an analyst within the Russia and Eurasia Project in the Swedish Defence Research Agency (FOI). His work focuses on Russia's economy and military expenditure. He has previously worked as a diplomat and civil servant for the Swedish Ministry for Foreign Affairs.

Sari Voinoff is a Principal Scientist at the Finnish Defence Research Agency, Concepts and Doctrine Division. Voinoff is a researcher on Russia and the global environment, focusing on future research methods.

OPENING WORDS – RECTOR OF THE FINNISH DEFENCE UNIVERSITY

The opening words by Major General Mika Kalliomaa in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://youtu.be/P8VA1bT8ADs> starting from 17:15.

“Welcome to Finnish National Defence University and to the Sixth international Russia Seminar. The main topic of the seminar is “Russia’s War against Ukraine – Complexity of contemporary Clausewitzian war”.

The topic itself reflects the discrepancy between the opposing sides not only in conceptual perceptions but also on practical terms and definitions. Russia is still in its rhetoric speaking of military operation. Actually, in practical and Clausewitzian terms it’s self-evident, that the actions Russia is conducting are nothing else than a war, which is a continuation from 2014 when Russia attacked against its neighbour, Ukraine.

The war gave us, unfortunately, a good reason to bring together scholars around the world to Santahamina Helsinki. I have the pleasure to welcome you all, distinguished 35 speakers from over 20 different research establishments and organizations. In this respect, one can say that the Russia seminar has experienced “an escalation” both in time and in contents.

This “escalation” one can see also in the number of speakers and experts in the audience, which witnesses that there is a growing interest in the Russia research and its military thought. The seminar has grown to be bigger and more international than ever before. On the other hand, for us it means that we are on a right, but challenging course in contributing to military research as a member of NATO. One example of our growing interest and development in Russia research in the National defence university is, that we’ve managed to introduce a post of a visiting professor to our Russia research group. And in this respect, I’m happy to welcome you, professor Bettina Renz as the first visiting professor. We have the honour to work with you and we’ll have pleasure to hear your keynote speech after a while.

Concerning the seminar, we have found practical to work in a hybrid manner. That is – some speakers are sharing your views and knowledge via web, some have had the opportunity to come to us in person. The virtual environment allows interaction between scholars and experts and the larger audience. Of course, we would have liked to welcome all of our Ukrainian colleagues in person here in Santahamina. For obvious reasons this was not the case this time, but we are convinced that the day will come and we are definitely working to make it reality.

I would like to express my gratitude to all the speakers and the experts at the seminar for taking their time to contribute to the discussions on the theme. Our seminar offers a platform to exchange views and knowledge on Russian strategy, military and security. In terms of research the seminar will offer a venue to look into the Russian strategic and military thinking and practices with a wider approach: there will be discussions on the societal and informational aspects of war, kinetic and non-kinetic methods of warfare, not to mention pure military strategic and operational questions and views on the strategic context around Ukraine. This is just to mention a few themes in the seminar’s program.

Due to the nature of theme, its inherent complexity, and the fact that the war is far from being over, the debate on Russia's concept of war, resources of waging war and military development has no end in sight either. We will come back to Russia's thinking, development and way of warfare with a variety of themes in next year's seminar as well.

As I said last year, I'd like to repeat and bring forward the key importance of continuity and long-term endurance of Russia's military and security studies. Discussing and understanding the fundamentals and patterns in the Russian military and security thinking and developments has a crucial role while developing respective policies and defence for the future. As of now, we Finns are responsible for the defence not only of our country and people but also of the frontline between Russia and NATO.

To conclude, I would like to thank the Russia research group of the Department of Warfare for organizing this seminar and all the speakers for contributing to the discussion. Further, I would like to express my gratitude to everyone who has taken their precious time to attend the seminar.

With these remarks, I wish you all fruitful days of debate within our National Defence University - I declare this seminar open."

1

CAN CIVIL-MILITARY RELATIONS EXPLAIN THE INEFFECTIVENESS OF RUSSIAN ARMED FORCES IN UKRAINE? A DEBATE

Bettina Renz

The presentation by Bettina Renz in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=P8VA1bT8ADs> starting from 26:40.

Abstract

To what extent do civil-military relations determine the effectiveness of a country's armed forces? In the case of the February 2022 invasion of Ukraine, patterns in the civil-military realm offer plausible explanations for some of the unexpectedly poor performance of Russian troops. The interface of Russian civil-military relations and military effectiveness requires careful investigation, however. Analytical difficulties of operating the nexus between civil-military relations and military effectiveness and the lack of systematic data on the interaction between the Russian political and military leaderships mean that any hindsight-based assessments must remain open to interpretation.

Introduction

Until 24th February 2022, it was widely assumed that Russia's military power was vastly superior to that of Ukraine.¹ At the beginning of the full-scale invasion, some observers even expected a Russian victory within a matter of days or weeks. When these expectations did not come to pass, a debate developed asking why Russian military power had been overestimated and how to avoid similar intelligence failures in the future (O'Brien 2022). Somewhat of a consensus emerged, holding that material indicators of military strength, such as quantitative superiority in equipment, budget and personnel, had been overemphasised at the expense of human factors, including effective leadership, command and control, motivation, and morale (Renz 2023). These would have to be considered in the future for a more accurate assessment of Russian military might.

Civil-military relations is a broad, interdisciplinary field of study. It is concerned with all aspects of relations between a country's government, society, and the military (Owens 2017:1). Political science approaches focus on the relationship and exchange of power between the state and the military as institutions, and sociological approaches

¹ This paper is an amended and extended version of the author's keynote speech delivered at the FNDU's Russia Seminar on 14th February 2024 entitled 'Civil-military relations and military effectiveness: lessons from the Russian invasion of Ukraine'. I would like to thank Juha Kukkola, Katri Pynnöniemi, Julian Waller and Sarah Whitmore for their helpful comments on earlier drafts of the paper. All remaining mistakes are my own.

on the integration or disintegration of civilian and military values (Feaver 1996). The field's focus on relationships and values makes it well-suited for studying non-material factors of military effectiveness, which tend to be underappreciated in 'traditional' military analysis (Rosen 1995: 30-31). It is widely acknowledged that civil-military relations and military effectiveness are closely related. As Peter Feaver summed it up, the 'civil-military problematique' is the state's dilemma of having 'to reconcile a military that is strong enough to do anything civilians ask them to with a military subordinate enough to do only what civilians authorise them to do.' (Feaver 1996: 149). Although civil-military relations analyses often focus on civilian control over the armed forces, this concerns only 'one side of the civil-military problematique [and] military effectiveness concerns the other (Kuehn and Croissant 2017: 5).

The study of Russian civil-military relations was a popular subject of enquiry by Western experts during the first two decades after the collapse of the Soviet Union. From around 2010 onwards, the topic fell out of favour as significant Russian military reforms and the operations in Crimea, Donbas and Syria started to dominate analytical interest (Westerlund 2021). The quest for a more nuanced understanding of Russian military capabilities since the start of the Russo-Ukrainian war led to a revival of analytical interest in civil-military relations. Some observers suggested that problems in this realm, such as the politicisation of the military through the appointment of military leaders based on loyalty to the regime, and the civilian leadership's disregard of the military's professional autonomy, significantly constrained the armed forces' effectiveness in Ukraine (Jarasli 2023; Gomza 2023). As Kirill Shamiev put it, 'the root cause of Russia's problems in Ukraine lies in the civil-military domain ... Despite Russia's comparative advantages in economy, technology, population size, and human capital, its government has failed to generate a sufficiently effective military power' (2024).

The study of civil-military relations is important for a nuanced understanding of the Russian military. This article argues that assessments of how this relationship impacts military effectiveness needs to be approached with caution, however. As explained in the next section, the comparative scholarship on civil-military relations suggests that, on a theoretical and conceptual level, the nexus between civil-military relations and military effectiveness is complex and difficult to operationalise. There is no discernible pattern of what kind of civil-military relations produce the most effective military, with outcomes varying widely within the context of different states. The identification of causal processes, moreover, is complicated by the contested nature of the concept of 'military effectiveness', which is difficult to define and to measure. With the analytical difficulties of operationalising the civil-military and effectiveness interface in mind, the final section of the paper interrogates some preliminary conclusions analysts have offered about the impact of civil-military relations on the effective performance of Russian troops in Ukraine. On the one hand, these studies address important questions about previously neglected aspects of Russian defence policy and offer plausible explanations for some of the problems its troops experienced in Ukraine. On the other hand, considering the closed nature of the Putin regime and lack of data on elite interactions and decision-making, preliminary conclusions remain open to challenge.

Assessing the interface between civil-military relations and military effectiveness

The existence of a link between civil-military relations and military effectiveness is uncontested, but the exact nature of this link and how to study it continues to be a matter of debate. Various authors have highlighted the weak theorisation of the civil-military and effectiveness nexus as a shortcoming of the existing literature, especially compared to the systematic literature assessing mechanisms and patterns of civilian control (Nielsen 2005; Brooks 2019). A range of work has been dedicated to the subject in the past, but the question of how exactly civil-military relations impact military effectiveness remains unanswered. Two relatively recent volumes sought to illuminate in depth the link between civil-military relations and military effectiveness in new democracies (Croissant and Kuehn 2017) and across different political regimes, including in Russia (Bruneau and Croissant 2019).² A major finding of both volumes was that operationalising the nexus of civil-military relations and military effectiveness into measurable indicators and causal links is extremely challenging. The reasons for this are the importance of historical, political, cultural and ideational context, which varies from state to state, and the difficulty of defining military effectiveness in a precise yet meaningful way.

Historical, political, ideational and cultural context

What exact patterns in civil-military relations facilitate a more effective military is not obvious. As Croissant and Kuehn's 2017 volume found, 'there is little agreement in the scholarly literature on what factors facilitate or obstruct civilian control and military effectiveness in new democracies (Croissant and Kuehn 2017: 7). Their 2019 volume dealing with the subject across regimes came to similar conclusions. It highlighted that even in countries sharing democratic systems of civilian control (the United States, Germany and Japan) the mechanisms for civilian control differed widely, as did their impact on military effectiveness. Likewise, the lack of democratic systems of civilian control in nondemocratic states (Turkey, Chile, China and Russia) did not mean that their militaries could be deemed uniformly ineffective (Bruneau and Croissant 2019: 241). Several of the country case studies explored in both volumes experienced serious changes in their civil-military relationship during the time period of investigation, but the impact of this on the effectiveness of their armed forces was not uniform. This means that theoretical concepts and comparative literature can highlight potentially salient research questions and areas for enquiry, but it must not be assumed that insights into one case will necessarily be relevant for another, or even that insights into one case will apply at a different point in time. To overcome these analytical difficulties, Bruneau and Croissant noted, studies of a state's civil-military relations and how they impact military effectiveness 'must be grounded in deep contextual knowledge, must deal with politics [both domestic and international] and must consider causal processes over time' (Bruneau and Croissant 2019: 228).

² Bruneau and Croissant's 2019 volume categorises Russia as a 'hybrid or semidemocratic political regime' along with Turkey, rather than as a 'nondemocratic system' alongside China and Egypt. By 2019 when the book was published, this categorisation was at least questionable.

Studies seeking to estimate the impact of civil-military relations on the effectiveness of a country's armed forces need to appreciate how these concepts are understood within the state under investigation itself. This is important, because this understanding might diverge from key assumptions in the comparative literature. For example, it cannot be taken for granted that the Western norm of democratic civilian control is also seen as the only functional, desirable, or legitimate configuration of civil-military relations outside of the West (Kuehn 2019: 24). Ideas about what exactly constitutes an effective military are also context dependent. As Ofer Fridman suggested in his chapter about Russia, within its specific political, cultural, and historical context, the Russian understanding of military effectiveness differs significantly from potentially more narrow Western perceptions (Fridman 2019: 159). Deep contextual knowledge is required for the assessment of any cultural factors determining a country's civil-military relations and military effectiveness. As previous research warned, cultural explanations can be prone to stereotyping when it comes to issues like 'ways of war', casualty acceptance, morale, and motivation, especially during times of heightened tension and in situations when access to the field and to systematic data is restricted (Rosen 1995: 8-9).

The contested meaning of military effectiveness

The difficulties of defining and measuring military effectiveness in a precise yet meaningful way make the interface of civil-military relations and military effectiveness hard to operationalise (Bruneau and Croissant 2019: 3-6; Eschenauer-Engler and Kamerling 2019: 35-52). The sources of military effectiveness are diverse, ranging from quantifiable material assets (such as personnel, technology, budget) to factors that are much harder to measure, including training, command and control, civil-military relations, morale and motivation, social structures, cultural traditions, and the global environment (Brooks and Stanley 2007). Even if the assessment of a country's armed forces was based on the biggest possible range of factors, this would not amount to an estimate of their effectiveness as an absolute value. This is because military effectiveness is highly circumstantial. A military has many functions and how good it is at dealing with specific missions, which may vary from deterrence and peacekeeping to wars of aggression and territorial defence, is not uniform (Bruneau and Croissant 2019: 5-6). Military effectiveness can also ebb and flow throughout a conflict, especially in protracted wars, because the utility and availability of specific assets, such as skilled personnel, suitable equipment, and morale can vary at different stages of the war (Eschenauer-Engler and Kamerling 2019: 48). Militaries can learn from their mistakes and adapt. Moreover, war is a duel fought between two (or more) intelligent foes, and as such one side's military performance will hinge on the strength and effectiveness of opposing forces.

Finally, the relationship between military effectiveness and victory is not straightforward. Although there is little disagreement that the Russian military operated a lot less effectively than its Ukrainian counterpart, especially during the early stages of the invasion, the outcome of the war at the time of writing remains unpredictable. It is possible, but not guaranteed that the side deemed to be fighting more effectively in an ongoing war will emerge victorious (Millett et al 1986: 37). On the flipside, the pursuit of objectives through the ruthless exploitation of numerical superiority with no regard for human and economic costs may also lead to victory in some cases, but this would be hard to reconcile with anything but the narrowest definition of military

effectiveness (Biddle and Long 2004: 541). As Bruneau and Croissant warned, there are limitations to the general insights to be gained from studying the interface of a state's civil-military relations and the effectiveness of its armed forces (Bruneau and Croissant 2019: 4).

Civil-military relations, military effectiveness, and the Russo-Ukrainian war

To what extent did patterns in civil-military relations cause the Russian armed forces to fight ineffectively in Ukraine? This section of the working paper interrogates some explanations that have been offered on this question since the start of the war. It argues that these explanations are plausible and aligns with some core assumptions in the civil-military relations literature. In view of the above discussion, however, it suggests that alternative interpretations are also possible. As such, any findings should be considered preliminary and subjected to further investigation.

Politicisation of the armed forces

One important issue in the Russian civil-military relationship identified by analysts as a cause of the armed forces' ineffectiveness in Ukraine is the politicisation of the military. This politicisation happened under Putin's reign in the form of officer appointments, promotions and dismissals based on their perceived loyalty to the regime, rather than professional competence and merit (Arasli 2023). This loyalty-based approach accelerated over the course of the war, as demonstrated by various high-profile dismissals and replacements of military leaders, for example, in December 2022 and January 2023 (Luzhin 2023) and following the failed mutiny staged by the Wagner Private Military Company under the leadership of former Putin ally Evgenii Prigozhin (Jastrzębska 2023). The Kremlin's reason for politicising officers in this way is to 'coup proof' the Russian armed forces, seeking to ensure the military leadership's loyalty and preventing the armed forces from becoming a threat to the regime (Troianovski 2023). Prioritising loyalty over professional competence eroded the quality of military leadership over time (Gomza 2023). Moreover, the regular replacement of military leaders deemed to be disloyal during the ongoing war led to 'command chaos' and ineffectiveness in Ukraine (Bowen 2023: 25-26).

Suggestions that politicisation and 'coup proofing' affected Russian military ineffectiveness in Ukraine align with key assumptions in the civil-military relations literature. These conceptualise the political and military leaderships as institutionally and ideologically distinct actors, whose relationship needs to be carefully managed. The key to a harmonious civil-military relationship enabling the maintenance of powerful armed forces that will not threaten the state they are intended to serve is a balance of military professionalism and civilian control. The civilian leadership, whose ideological outlook is variable, takes political decisions on behalf of the state (Huntington 1957: 89-97). Bound by a professional military ethic, the armed forces remain beyond politics because, not unlike any other professional group, their motivation is to serve their client (the state's) within their specific area of expertise (military science) (Huntington 1957: 71). If the armed forces are politicised, for example, by making loyalty a condition for appointments, this can have serious repercussions for the quality of leadership and military effectiveness (for example, Biddle and Long 2004: 532; Pilster and Böhmelt 2011).

It is widely understood that in Putin's neo-patrimonial regime, personal allegiance and loyalty has been central in personnel decision-making. Research on Russian domestic politics and the economy suggests that power relationships are highly personalised at all levels, significantly impacting the quality of governance in all areas of the Russian state (Gel'man 2016: 455). As such, there is little reason to assume that the military is an exception and it is plausible to suggest that politically motivated military appointments and dismissals at the senior level constrained the effectiveness of Russian troops fighting in Ukraine. However, this causal process is hard to prove and may not reflect the complexity of leadership dynamics in the Russian context (Shamiev 2023). The fact that elite recruitment in Russia is highly personalised is not in doubt. In the absence of institutionalised channels of elite recruitment, this practice dates to the Yeltsin years, when it also regularly resulted in seemingly arbitrary 'hire and fire' practices of civilian and military office holders alike (Renz 2006: 906-7). This does not necessarily mean, however, that Russian military appointments at the senior level are motivated by the perceived need to 'coup proof' the armed forces, rather than by patronage and nepotism characterising personnel decisions in other sectors. After all, Putin's leadership (like Yeltsin's) was never challenged by an insubordinate military.

The assumption that Russian civil-military relations are driven by mistrust and fear on the part of the political leadership aligns with the core notion of clearly delineated civilian and military spheres that are prone to conflict. This leaves little room for the possibility that things may be viewed differently in Russia. Although Western analysts produced a large volume of work on Soviet civil-military relations during the Cold War,³ the subject or issue as such did not exist in the Soviet Union itself, not least because the country 'did not have the institutional mechanisms for representing different group interests' (Gudkov 2003). As Vladimir Serebriannikov (1995: 44) explained, the Soviet political and military leaderships were not seen as distinct actors prone to conflict and with one subordinate to the other:

"Until the beginning of the 1990s ... it was an a priori assumption that the military and civilians coexist in full understanding of each other, that military and civilians constitute equal masters (khoziaeva) of the state, that both support the state's politics in unity, have the same ideology, and that their interests fully correspond with each other."

The country's leadership often was referred to as a united 'military-political leadership' [*voenno-politicheskoe rukovodstvo*]. This is a concept alien to Western civil-military relations thinking, but one that is still used widely in Russia today (Arbatov 2002: 14; Golts 2018: 236; Sharovskii 2019). This suggests that, based on historical experience, the institutional and ideological boundaries between the civilian and military spheres in Russia may be viewed as much less distinct. It might also explain why neither

³ Some of the major works are Kolkowicz, Roman, *The Soviet Military and the Communist Party*, Princeton, NJ, Princeton University Press; Kolkowicz, Roman and Andrzej Korbonski, *Soldiers, Peasants and Bureaucrats: Civil-military Relations in Communist and Modernizing Societies*, Boston: G. Allen and Unwin, 1982; Odom, William E., 'The Party-Military Connection: A Critique', in Dale R. Herspring and Ivan Vogyles (eds.), *Civil-Military Relations in Communist Systems*, Boulder: Westview Press: 1978; Timothy J. Colton, 'The Party-Military Connection: A Participatory Model', in Dale R. Herspring and Ivan Vogyles (eds.), *Civil-Military Relations in Communist Systems*, Boulder: Westview Press: 1978; Timothy J. Colton, *Commissars, Commanders, and Civilian Authority: The Structure of Soviet Military Politics*, Cambridge: Harvard University Press, 1979; Timothy J. Colton and Thane Gustafson (eds.), *Soldiers and the Soviet State: Civil-Military Relations from Brezhnev to Gorbachev*, Princeton, NJ: Princeton University Press, 1990.

Yeltsin nor Putin considered a strongly institutionalised system of civilian control as essential.

Civil-military relations became part of discussions about the newly established Russian Federation's democratic transition in the early 1990s. Although Western concepts of civil-military relations entered the Russian lexicon at the time, these never became a part of the mainstream, neither in scholarly or analytical circles, nor on the political level. In the State Duma, only political parties with a democratic outlook, such as Yabloko or the Union of Right Forces (SPS) advocated for democratic civilian control (Korguniuk 2001). However, these parties were always marginal and were no longer represented in the parliament after the 2003 elections. Rather than something to aspire to, Western concepts of civil-military relations tend to be seen as alien in Russia. During Putin's first term, an advisor to the State Duma's defence committee described civilian control as nothing more than a 'fashionable topic for political demagoguery', asserting that this was not an 'important cause for the state' (Cheban 2003). An article in *Krasnaia Zvezda*, the Ministry of Defence's mouthpiece, dismissed the notion of problematic civil-military relations as a delusion of 'newly minted "democrats"', who viewed the Defenders of the Fatherland with suspicion'. In that author's eyes, the idea that the military needed to be controlled by civilians was nothing less than 'antimilitary propaganda' (Peven' 2015).

At the executive level, problems in the relationship between the political and military leadership were never recognised or addressed (Zolotarev 2002: 53). No more than lip service was ever paid to civilian control even before the country took an increasingly authoritarian turn towards the end of the 1990s (Vorob'ev 2003). Putin prioritised fundamental military reforms from the outset of his presidency, not least because he recognised that years of neglect had degraded and demoralised the armed forces, with serious implications for their standing in society and for military effectiveness (Renz 2018: 61-62). However, the reforms he pursued were limited to 'questions at the strategic and military-technical level' and did not involve efforts to institutionalise a system of civilian control (Golts 2018: 256). This implies that Putin did not see potential military insubordination as a problem that needed to be addressed. As Fridman also suggested, the Russian context challenges 'the common assumption of constant competition between the civilian and military leadership presented by the literature on civil-military relations (Fridman 2019: 172).

Loyalty vs competence

In Putin's highly personalised, neo-patrimonial regime, loyalty is an important consideration for all leadership appointments, and not only in the military. This need not necessarily mean, however, that relevant skills and experience do not also factor into decision-making, because loyalty and competence are not mutually exclusive. When the Kremlin launched a radical programme of military reforms in 2008, this involved significant personnel changes in the military leadership. Many key role holders were replaced and a civilian defence minister with a background in finance and accounting (Anatolii Serdiukov) and new Chief of General Staff (Nikolai Makarov), who consistently supported the extensive changes decreed by the civilian leadership, were brought in (Herspring 2008). The size of the General Staff and the Russian officer corps was reduced significantly with way over 100,000 positions cut in a move to 'clean a rusty military machine' with a 'metal brush' (Pukhov 2008: 8). Although loyalty factored in these personnel decisions in the sense that they created an officer

corps supportive of radical reforms, it is likely that new postholders' skills and competence for embracing change and running a modernised military were at least as important. Previous attempts at reforms had failed not least because of the resistance by conservative officers stuck in the Cold War and unwilling to let go of the ineffective Soviet mass army (Barany 2005: 35). Predictably, the radical changes and significant cuts of officer positions during the 2008 reforms were not popular with everybody in the military (Gorenburg 2009). However, the Kremlin evidently did not fear that criticism or resistance to the reforms would lead to mutiny or insubordination. The purge of the military conservative military establishment, as Pukhov put it (Pukhov 2008: 7), was pursued to make the armed forces more effective, and not to coup proof them.

Until the invasion of Ukraine in February 2022 it was widely believed that the radical military reforms launched in 2008 had led to significant improvements in Russian military effectiveness. Few doubts were expressed about the military leadership's loyalty to the Putin regime, but this loyalty was not generally seen as an impediment to improving the prowess of the armed forces. Russian operations in Crimea in 2014 and Syria from 2015 were largely judged successful. There, the modernised Russian armed forces demonstrated skills in planning and executing operations, performed well at the tactical level and used this ongoing experience to learn lessons and to innovate (Norberg 2014, Adamsky 2020). Although it was noted at the time that these were limited operations in scale and scope and some problems persisted in command and control, there was no sense, as Ivan Gomza argued after the start of the invasion of Ukraine, that Russia's wars were fought by 'inept loyalists' (Gomza 2023: 435).

It could be argued that centrality of loyalty in power relationships in Putin's neo-patrimonial regime has the potential to impact military effectiveness irrespective of the competence of military leaders. This is because loyalty is a two-way process, where personal allegiance is offered to a superior in exchange for access to gains and benefits in power and material assets (Gel'man 2016: 460). This mechanism can stifle initiative and motivation because office holders might fear losing gains and benefits for airing views that do not align with those of their superior, or could be perceived as 'disloyal'. For example, it is widely believed that in the period leading up to the invasion of Ukraine FSB officers told the president what he wanted to hear, rather than the truth about the situation on the ground, because they feared marginalisation or dismissal (Abdalla et al 2022; Galeotti 2016: 13) This led to intelligence failures setting up the armed forces with unachievable objectives from the outset when the war was launched (Dylan et al 2022). Similar claims have been made about the military leadership, who were suspected to mislead the president about the true preparedness and state of the Russian armed forces and problems encountered on the battlefield (Holland and Shalal 2022). It is not unreasonable to expect that the military's failure to offer not only qualified, but also honest advice in this way led to poor decision-making both before and during the invasion with serious implications for battlefield performance (Arasli 2023).

Russian military leaders' fear to deliver honest information and advice to the president because this could result in the loss of privileges, reprisal or dismissal, is a plausible explanation for some of the poor performance of Russian troops in Ukraine. It is well understood in the civil-military relations literature that the preparation, planning and conduct of a war requires open dialogue between political and military leaders to ensure that available operational capabilities and plans can be matched to realistic objectives (Feaver 2003: 145). There is a caveat to applying this argument retrospectively

for explaining the poor performance of Russian troops on the battlefield in Ukraine: very little systematic information is accessible about Russian strategic decision-making and the nature of interactions between the Kremlin and the military leadership. Up until the invasion, there were suggestions that Putin's increasingly aggressive foreign policy and use of military force had in fact heightened the Kremlin's reliance on advice from the General Staff. Moreover, the successful operations in Crimea and Syria not only strengthened the Kremlin's support of the armed forces, but also may have increased the military's influence on elite decision-making (Blanc et al 2023: 95-97).

Since the start of the war, both Russian and Western media have regularly reported visits by the president to various troop headquarters, including inside Ukraine. These involved meetings with military leaders commanding the operations to receive updates and, in Putin's own words, 'to hear your opinion on how the situation is developing, to listen to you, to exchange information' (Armstrong 2023). It would be naïve, of course, to take these reports at face value, but perhaps so is the idea that Putin's desire for loyalty has silenced most qualified input by the military fighting his wars. Significant turning points in the war suggest that some difficult decisions were taken, not because the Kremlin saw them as politically expedient, but for reasons of military necessity on the back of hard truths delivered by the military leadership. For example, the retreat of Russian troops from Kyiv and northern Ukraine in the very early stages of the war and the withdrawal from Kherson in autumn 2022 did not align with Putin's maximalist political aims and represented considerable political and reputational setbacks for the Kremlin (Eckel 2022). As Dimitri Minic found, there has been no shortage of critical views in Russia of the conduct of the operations in Ukraine, including recommendations from senior military leaders for improvements in the battlefield performance of Russian troops. In his view, this led to various successful adaptations allowing the armed forces to overcome problems they had encountered in the early phases of the campaign (Minic 2023).

Interference in the military's professional autonomy in war-planning

Leaving aside the Russian military leadership's competence and courage to offer qualified advice to the Kremlin, observers have argued that the military was largely excluded from strategic planning, especially in the run-up to the invasion and this had serious implications for military effectiveness. Although defence planning and appraising the political leadership about available military options are central tasks of the Russian General Staff (Blanc et al 2023: 10-11), it has been suggested that decisions about how to conduct the invasion were made in secret by President Putin with a small circle of trusted advisors that included, at best, the very highest level of the military leadership. There are suspicions that the driving force behind the campaign was the Federal Security Service (FSB), rather than the General Staff (Dalsjö and Norberg 2022: 14), setting up the armed forces with unachievable objectives and leaving the latter with too little time for preparation and planning after the decision to invade had been made. Commanders at the operational and tactical levels, not even to mention the soldiers that were sent to the front, reportedly were not informed about the plans until the day before the invasion (Blanc et al 2023: 98-99). These restrictions placed by the Russian executive on the military's autonomy in war planning have not only caused further tensions in the civil-military relationship (Shamiev 2023), but also had serious implications for battlefield effectiveness, especially during the initial phase of the war (Arasli 2023, Blanc et al 2023: 77; 98-99).

It is, of course, entirely plausible to suggest that excluding the military from planning and preparing a major war led to inefficiencies on the battlefield. It is widely understood that civil-military relations both are more harmonious and more conducive to military effectiveness if there is a clear division of labour between politicians and the armed forces. Political decision-making about when to go to war is the realm of civilians alone, but the professional military must be given broad autonomy and influence within its field of expertise of warfighting (Huntington 1957: 84). This not only requires skilled military leaders unafraid of offering advice, but also a political executive allowing military leaders to “communicate with and influence [them] to seek militarily logical national goals” (Millett et al 1986: 44). Research in comparative contexts has suggested that disregard of the military’s professional competencies on the part of political leaders can lead to the pursuit of militarily illogical goals and unwinnable wars, resulting in battlefield failures and strategic defeat (for example Brooks 2008; Freedman 2023).

In the case of the full-scale invasion of Ukraine, as was the case for the annexation of Crimea and the intervention in Syria, there is little reason to doubt that the decision to go to war was taken by the Kremlin. However, given the nature of executive decision-making in Russia’s neo-patrimonial regime, which is characterised by secrecy and dominated by Putin’s small inner circle, observers justifiably raised questions about the extent of the military’s involvement in strategic planning in the run-up to the campaign. There is a strong possibility that the decision to invade Ukraine in February 2022 was made by a small group of core advisors around the president. Who exactly was involved in this group is unknown, however, as is the degree of guidance and expertise sought from and offered by the military leadership at any stage of the planning process. When it comes to discussions of the feasibility and chances of success of a full-scale invasion, it is far from guaranteed that a significant involvement of military advisors, if this was absent, would have led to a fundamentally different outcome such as, for example a more limited intervention in eastern Ukraine. A 2009 study detected some differences in foreign policy priorities between Russian civilian and military elites, but also found a more ‘permissive’ view by the latter on the utility of force as an instrument of foreign policy. It concluded that ‘military conservatism – the view that military professionals are a voice of restraint in foreign policy – does not adequately reflect the dominant patterns of civil-military relations in the contemporary Russian state’ (Stewart and Zhukov 2009: 336). Although Russian military leaders rarely air their political views in public, there is evidence to suggest that, especially since the successful annexation of Crimea, Putin’s increasingly militarised foreign policy had led to a further convergence of civilian and military views on Russian foreign policy goals (Bruusgaard 2014: 87; Westerlund 2021: 42).

When the prospects of a full-scale invasion of Ukraine heightened throughout 2021, some Russian military analysts warned of the dangers and difficulties of such an undertaking, not least because of Ukraine’s improved military capabilities (Khodarenok 2021; Khodarenok 2022). However, this was not a consensus view. Many others dismissed Ukrainian military power as weak and negligible compared to those of Russia (Boltenkov 2021; Al’shaeva 2021; RIA Novosti 2022). The achievements of military reforms and operational successes in Crimea and Syria had significantly improved the Russian armed forces’ confidence and attitude (Giles 2017). As such, it is not inconceivable that, like the Kremlin, the military leadership believed that a quick and decisive victory over Ukraine was a very realistic prospect. If this is the case, then it was

hubris, on the part of the ‘military-political leadership’, rather than dysfunctional civil-military relations, that dragged Russia into a protracted and costly war.

Based on the conceptualisation of Russian civil-military relations as fundamentally conflictual, analysts suggested that the Kremlin’s secrecy in decision-making and the exclusion of military expertise in the planning process were the result of mistrust in those outside of the ‘inner circle’. This left too little time for planning the campaign and led to military effectiveness, especially during the early phases of the war (Blanc et al 2023: 98-99; Gomza 2023: 459). In an in-depth study of the ‘Russian way of regular land warfare’ spanning several decades of Russian military operations, Amund Osflaten offers an alternative interpretation. In his eyes, within the Russian context, the decision to keep exact plans for the February 2022 invasion as secret as possible until the last minute was a conscious decision that aligned with traditional Russian thinking on operational art, and not a miscalculation (Osflaten 2023: 156). He suggested that, in historical perspective, the 2022 invasion was planned in accordance with a ‘standard Russian approach’ to invasions, which focuses on achieving surprise in the initial stages of an operation under the cover of secrecy (Osflaten 2023: 174). Within this ‘standard approach’, operational level planning, preparing what is viewed as the optimal force structure, and maintaining an element of surprise is prioritised above all else. The fact that this comes at the expense of preparedness at the tactical and individual level is accepted as a calculated risk (Osflaten 2023: 168). This approach had proven to be effective in previous invasions, such as Georgia in 2008 and Crimea in 2014, but it could not be scaled up for the full-scale invasion of Ukraine. According to this interpretation, tactical ineffectiveness during the early stages of the invasion was the result of calculated risk inherent in the ‘Russian way of war’ that did not pay off on this occasion, but not evidence of faulty civil-military relations (Osflaten 2023, especially pp. 150–180).

Views on Russian military effectiveness

The difficulties of defining and measuring ‘military effectiveness’ and the implications this has for any findings about its interface with civil-military relations in the Russo-Ukrainian war have been left largely unspoken in the analysis of the topic so far. As noted by Fridman above, considering the meaning of military effectiveness in the Russian context is important (Fridman 2019: 159). For example, the ability to achieve goals and missions ‘at an acceptable cost in lives and resources’ is central to the Western understanding of military effectiveness (Bruneau and Croissant 2019: 1). In the Russian perception, this measure of effectiveness does not seem to be as central. Excessive force protection, for example, tends to be perceived not as a strength, but as a weakness characteristic of Western militaries relying heavily on advanced technology (Brychkov et al 2019). This is a weakness that Russia can exploit effectively with a ‘much higher resistance to its own losses’ (Khramchikhin 2020) and stronger preparedness for ‘conscious self-sacrifice’ (Khramchikhin 2019). The economic costs of the war in Ukraine, too, are seemingly not seen within the framework of Western military effectiveness. During a meeting with military district commanders in May 2024, Putin proudly announced that, although Russian military spending had not yet reached the 13 percent of GDP that had been spent by the Soviet Union, it had been raised to almost 9 percent that year (President of the Russian Federation 2024). In his eyes, clearly, this was an achievement, and not a problem related to military effectiveness.

The complex relationship between military effectiveness and military victory, both of which are contested concepts, needs to be borne in mind when the interface between Russian civil-military relations and military effectiveness is studied. Since war is a strategic activity, its objectives are rarely limited to military success in the theatre of operations, but ‘fit into a broader picture of diplomatic and economic activity’ (Monaghan 2022). As such, victory in war does not simply equate to the attainment of objective benchmarks like territorial gains and losses or the achievement of fixed strategic goals articulated at the outset of the war. Moreover, belligerents’ objectives regularly change over the course of the war because of changing battlefield conditions, meaning that ‘states rarely finish wars for the same reasons they start them’ (Mandel 2007: 461-4). Victory in war is also subjective since the assessment of success and failure by foreign onlookers might not be shared by political leaders or populations involved in the war (Mandel 2007: 265). As Johnson and Tierney put it, ‘victory is in the eye of the beholder’ and perceptions of who ultimately won a war are not always ‘linked to the results on the ground’ (2007: 61).

At the time of writing, more than two years into the Russo-Ukrainian war, the war’s outcome is still unpredictable and a decisive military victory for either side is difficult to envisage. The Russian military failed to subjugate and occupy all of Ukraine and it is likely that this objective will remain elusive. The extent to which the failure to reach this goal, and tactical problems encountered on the battlefield, are shaping Russian views on the effectiveness of its armed forces now and will do so in the future is uncertain, however. It is not unlikely that the Kremlin perceives the war as effective in other important ways aligning with longstanding foreign and domestic policy objectives. These include maintaining and expanding strategic interests in its ‘near abroad’, projecting dominance over its ‘sphere of influence’, raising its status as a Great Power able to stand up to Western pressure, and regime consolidation (Götz and Staun 2022, Fridman 2019).

Osflaten raised the possibility that the defeat and occupation of Ukraine may never have been the exclusive measure for the war’s success in the Kremlin’s eyes. Rather than a strategic miscalculation, he speculates, the full-scale invasion could have been a conscious ‘gamble’ by Russian military planners. Although they believed that using surprise as a force multiplier would enable success, they also accepted the risk that these plans might fail (Osflaten 2023: 175). In his eyes, the swift withdrawal of Russian troops from the Kyiv region and northern Ukraine only a month into the invasion, might suggest that ‘Russian forces were partially ready for a failure and prepared for contingency operations’, focusing on eastern and southern Ukraine during the second phase (Osflaten 2023: 176). Be that as it may, it cannot be taken for granted that the Kremlin interprets the failure to subjugate the entirety of Ukraine as evidence of significant problems with the effectiveness of its armed forces. More than two years into the war, the Kremlin’s portrayal of success in Ukraine remains ‘flexible, opportunistic and subjective’ (Provoost 2023). Unless the war results in a decisive defeat of Russia and the end of the current political regime, Putin will seek to convey its outcome as a victory for Russia to domestic audiences and to parts of the international community, irrespective of how effectively the country’s troops performed on the battlefield.

Conclusions

The Russian military performed much less effectively during the invasion of Ukraine than many observers in the West had expected. This raised questions about the merits of military analysis before the war and revived the debate about how to enable more nuanced future assessments of adversaries' capabilities. It was suggested that the lack of attention paid to Russian civil-military relations and how these related to military effectiveness had been an important oversight. To fill this gap, analysts have put forward various explanations of how civil-military relations can account for Russian military failures in Ukraine. This article argued that, although these explanations are plausible, the nexus between Russian civil-military relations and military effectiveness requires serious investigation. Considering the difficulties of establishing causal links between civil-military relations and military effectiveness, the contested meaning of 'military effectiveness', and the lack of accessible data on elite decision-making in contemporary Russia mean that preliminary conclusions must remain open to interpretation.

The paper highlighted that existing civil-military relations frameworks might not fully capture the idiosyncrasies of the Russian case and, as such, might skew interpretations of how perceived dysfunctions in the relationship limited military effectiveness in Ukraine. For example, the assumption of clearly delineated civilian and military spheres conceptualises the relationship between the Kremlin and the armed forces as fundamentally prone to conflict, which does not seem to reflect how the relationship is viewed in Russia. This raises questions about some of the claims made by observers about the politicisation of the Russian armed forces, the efforts and effects of coup proofing, and civilian interference in the military's professional autonomy as causes for the poor performance of Russian troops in Ukraine.

There are other idiosyncrasies in Russian civil-military relations that are beyond the scope of this paper and deserve further investigation. The attempted mutiny by the Wagner Private Military Company under the leadership of Evgenii Prigozhin in summer 2023 was widely interpreted as evidence of serious dysfunctions in the Russian civil-military relationship (Arasli 2023, Komin 2023). This event in fact is hard to capture within existing frameworks focusing on the exchange of power between civilian leaders and the military. As an erstwhile close ally of Putin and member of the 'inner circle', Prigozhin was as much a member of the civilian elite as he was the leader of an armed organisation. Although some military leaders were dismissed after the mutiny in an apparent intensification of the regime's coup proofing (Gomza 458-9), the mutiny ended fast and was not joined or actively supported by the regular armed forces, who remained loyal to the regime (Economist Intelligence Unit 2023). The Prigozhin mutiny was certainly troubling, but what it tells us about Russian civil-military relations and how it affected military effectiveness in Ukraine is not obvious (Baev et al 2023).

As is the case for quasi-private military companies like Wagner, the significance of Russia's uniformed services other than the regular armed forces, such as the FSB with its sizeable armed units or the National Guard, remains underexplored in many studies of civil-military relations. As Dmitry Trenin noted, when studying civil-military relations 'we must consider the whole complexity of the meaning of the military in Russia, where shoulder to shoulder with the "first army" there is a second one' (Trenin 2001: 74). Within existing civil-military relations frameworks, these 'other' services,

which in their entirety constitute the Russian power bloc or *silovye struktury* alongside the regular troops under the Ministry of Defence, tend to be skimmed over as coup-proofing measures or a power base for the political leadership (Renz 2005: 560). A deeper investigation into their position within a potentially less conflictual model of Russian civil-military relations and the effect they may have on military effectiveness could yield important new insights,

The paper also suggested that the complexity of defining and measuring ‘military effectiveness’ and how Russians themselves view the effectiveness of their own armed forces need to be addressed more explicitly in analyses of how effectiveness is impacted by civil-military relations. This is important to prevent the learning of potentially problematic lessons. It should not be forgotten that the effectiveness of Russian military operations in Crimea and Syria also took many observers by surprise at the time. These events significantly increased analytical interest in the Russian armed forces, resulting in a wealth of new research on aspects that previously had been understudied. Ultimately, these insights did not prevent renewed surprise when Russian troops failed to repeat this effective performance in Ukraine. In this sense, analyses of the interface between Russian civil-military relations and military effectiveness not only require in-depth contextual knowledge of Russian history, politics, and society, but also a solid grounding in strategic studies and the complex nature of war. This includes the acknowledgement that military effectiveness cannot be comprehensively defined or measured and is heavily circumstantial. Ultimately, this limits the utility of insights gained from the Ukrainian case for the estimation of Russian military capabilities in different contexts. Even if problematic civil-military relations seriously hampered military effectiveness in this case, this tells us little about how its troops will perform in future conflicts, which will be fought under completely different circumstances. As Bruneau and Croissant concluded: ‘we must be realistic about what is required for security measures to be effective, our ability to measure it, and how to explain success or failure (Bruneau and Croissant 2019: 4).

Finally, it must be noted that for Ukraine, any limitations in Russian military effectiveness caused by civil-military relations will offer little consolation. Although Russian troops did not perform as well as many observers had expected and the full occupation of Ukraine is an unlikely prospect, the Kremlin inflicted immeasurable cost, pain and destruction that will take decades to overcome no matter how the war will end. It is not only effective military capabilities that make a potential aggressor state threatening. What is even more important are its leadership’s intentions and preparedness to use them with no consideration of the costs this may entail.

References

Abdalla, Neveen S. et al (2022): ‘Intelligence and the war in Ukraine: Part II, War on the Rocks, 19th May, <https://warontherocks.com/2022/05/intelligence-and-the-war-in-ukraine-part-2/>.

Adamsky, Dima (2020): ‘Russian lessons from the Syrian operation and the culture of military innovation’, George C. Marshall Centre Security Insights, No 47, February, <https://www.marshallcenter.org/en/publications/security-insights/russian-lessons-syrian-operation-and-culture-military-innovation>.

- Al'shaeva, Irina (2021): 'Ukraina sobiraet voiska v Donbasse. Na chto oni sposobny', *Gazeta*, 1st December, <https://www.gazeta.ru/army/2021/12/01/14267797.shtml?updated>.
- Arasli, Jahangir (2023): 'Russian civil-military relations (CMR) and the long open-ended war', George C. Marshall Centre Security Insights, No 78, September, <https://www.marshallcenter.org/en/publications/security-insights/russian-civil-military-relations-cmr-and-long-open-ended-war-0>.
- Arbatov, Aleksei G. (2002): 'Parlamentskii kontrol' nad voennoi organizatsii i politikoi Rossiiskoi Federatsii', in Aleksandr I. Nikitin (ed.): *Demokraticheskii kontrol' nad voennoi sferoi v Rossii i stranakh SNG*, Centre for Political and International Studies (Moscow) and Centre for Democratic Control of the Armed Forces (Geneva). Moscow: Izdatel'stvo "Eslan".
- Armstrong, Kathryn (2023): 'Ukraine war: Putin visits occupied Kherson region in Ukraine', BBC News Website, 18th April, <https://www.bbc.com/news/world-europe-65308470>.
- Baev, Pavel et al. (2023): 'Russia's coup d'etat: nature and implications', George C. Marshall Centre Clocktower Security Series, 26th June, <https://www.marshallcenter.org/en/publications/clock-tower-security-series/strategic-competition-seminar-series-fy23/russias-coup-detat-nature-and-implications>.
- Barany, Zoltan (2005): 'Defence Reforms Russian Style: Obstacles, Options, and Opposition', *Contemporary Politics*, 11(1), pp. 33–51.
- Biddle, Stephen and Long, Stephen (2004): 'Democracy and military effectiveness: a deeper look', *Journal of Conflict Resolution* 48(4), pp. 525–546.
- Boltenkov, Dmitrii (2021): 'Voennyi ekspert zaiavil o bessmyslennosti sravneniia VC Rossii i Ukrainy', *Izvestiia*, 4th June.
- Blanc, Alexis A. et al (2023): *The Russian General Staff: Understanding the Military's Decision-Making Role in a "Besieged Fortress"*, CA: Rand Corporation.
- Bowen, Andrew S. (2023): 'Russia's war in Ukraine: military and intelligence aspects', Congressional Research Service Report R47068, <https://crsreports.congress.gov/product/pdf/R/R47068>.
- Brooks, Risa (2008): *Shaping strategy: The civil-military politics of strategic assessment*. Princeton University Press.
- Brooks, Risa (2019): 'Integrating the civil-military relations subfield', *Annual Review of Political Science* 22, pp. 379–398.
- Brooks, Risa and Stanley, Elizabeth A. eds, (2007): *Creating Military Power: The Sources of Military Effectiveness*, Stanford, CA: Stanford University Press.
- Bruneau, Thomas C., and Croissant, Aurel, eds. (2019): *Civil-military Relations: Control and Effectiveness Across Regimes*. Lynne Rienner Publishers.
- Bruusgaard, Kristin V (2014): 'Crimea and Russia's strategic overhaul', *Parameters*, 44(3), pp. 81–90.

- Brychkov, A.C., V.L Dorokhov and G.A. Nikonorov: 'O gibridnom kharaktere voin i vooruzhennykh konfliktakh buduzhchego', *Voennaia mysl'*, 2, 2019, pp. 15–28
- Cheban, Valerii (2003): 'Modnaia tema dlia politicheskoi demagogii: Grazhdanskii kontrol' nad voennymi strukturami dolgie gody ostaetsia chisto virtual'nymi', *Nezavisimoe voennoe obozrenie*, 7 February.
- Croissant, Aurel, and Kuehn, David, eds. (2017): *Reforming Civil-military Relations in New Democracies: Democratic Control and Military Effectiveness in Comparative Perspectives*, Cham: Springer.
- Dalsjö, R, Jonsson, M, Norberg, N (2022): 'A brutal examination: Russian military capability in case of the Ukraine war', *Survival* 64(3), pp. 7–28.
- Dylan, H (2022): 'The autocrat's intelligence paradox: Vladimir Putin's (mis)management of strategic assessment in the Ukraine war', *The British Journal of Politics and International Relations* 25(3), pp. 385–404.
- Economist Intelligence Unit: 'Attempted coup fails, leaving many questions unanswered', 28th June, <https://www.eiu.com/n/attempted-coup-ends-fast-leaving-many-questions-unanswered/>.
- Eschenauer-Engler, Tanja and Kamerling, Jil (2019): 'Measuring effectiveness and control' in Bruneau, Thomas C., and Croissant, Aurel, eds., *Civil-military Relations: Control and Effectiveness Across Regimes*. Lynne Rienner Publishers, pp. 35–52.
- Eckel, Mike (2022): 'Bad news politically, shrewd move militarily? What Russia's Kherson retreat means - and what it doesn't', Radio Liberty/Radio Free Europe, 10th November, <https://www.rferl.org/a/russia-ukraine-kherson-retreat-significance-political-military/32124622.html>.
- Feaver, Peter D. (1996): 'The civil-military problematique: Huntington, Janowitz, and the question of civilian control', *Armed Forces and Society*, 23(2), pp. 149–178.
- Freedman, Lawrence (2023), *Command: The Politics of Military Operations from Korea to Ukraine*, London: Penguin.
- Fridman, Ofer (2019): 'Russia: the armed forces as patriotic glue' in Bruneau, Thomas C., and Croissant, Aurel, eds., *Civil-military Relations: Control and Effectiveness Across Regimes*. Lynne Rienner Publishers, pp. 159–173.
- Galeotti, Mark, 2016: 'Putin's Hydra. Inside Russia's intelligence services'. European Council on Foreign Relations (ECFR). Policy brief 169. May.
- Gel'man, Vladimir (2016): 'The vicious circle of post-Soviet neopatrimonialism in Russia', *Post-Soviet Affairs* 32(5), pp. 455–473.
- Giles, Keir (2017): 'Assessing Russia's reorganized and rearmed military', Carnegie Endowment Task Force White Paper, 3rd May, <https://carnegieendowment.org/posts/2017/05/assessing-russias-reorganized-and-rearmed-military?lang=en>.
- Gomza, Ivan (2023): 'Roger that: Russia's coup-proofed army and its combat effectiveness, 2022-2023', *The Journal of Slavic Military Studies*, 36(4), pp. 435–475.
- Golts, Aleksandr (2018): *Military Reform and Militarism in Russia*, Washington DC: The Jamestown Foundation.

Gorenburg, Dmitry (2009): 'Russia's New Model Army: the ongoing radical reform of the Russian military', PONARS Policy Memo 78, September, https://www.ponarseurasia.org/wp-content/uploads/attachments/pepm_078-8.pdf.

Götz, Elias and Staun, Jørgen (2022), 'Why Russia attacked Ukraine: strategic culture and radicalized narratives', *Contemporary Security Policy*, 43(3), pp. 482-497.

Gudkov, Lev (2003): 'Armiia v postsovetskoi Rossii', *Indeks: Dos'e na tsenzuru*, No. 19, <http://www.index.org.ru/journal/19/gudkov19.html>.

Herspring, Dale (2008): 'Russia's military in the throes of change', Radio Free Europe/Radio Liberty Commentary, 18th December, <https://www.rferl.org/a/Russia-Military-In-The-Throes-Of-Change/1360375.html>.

Holland, Steve and Shalal, Andrea (2022): 'Putin misled by "yes men" in military afraid to tell him the truth, White House and EU officials say', Reuters, 31. March, <https://www.reuters.com/world/putin-advisers-too-afraid-tell-him-truth-ukraine-us-official-2022-03-30/>.

Huntington, Samuel P. (1957): *The Soldier and the State: The Theory and Politics of Civil-Military Relations*, Cambridge, MA and London: The Belknap Press of Harvard University Press.

Jastrzębska, Olga (2023): 'Prigozhin's rebellion and its consequence. Possible weakening of Putin's power', Vladimir Pulaski Foundation Commentary, 13th July, <https://pulaski.pl/en/prigozhins-rebellion-and-its-consequence-possible-weakening-of-putins-power-2/>.

Johnson, Dominic and Tierney, Dominic (2007): 'In the eye of the beholder' in Angstrom, Jan and Duyvesteyn, Isabelle (eds.), *Understanding Victory and Defeat in Contemporary War*, London: Routledge, pp. 46–76.

Khodarenok, Mikhail (2021): 'Ot sovetskoi moshchi k blesku NATO: kak izmenilas' ukrainskaia armiia', *Gazeta*, 27th July, <https://www.gazeta.ru/army/2021/07/27/13806854.shtml?updated>.

Khodarenok, Mikhail (2022): 'Prognozy krovozhadnykh politologov', *Nezavisimoe voennoe obozrenie*, 3rd February, https://nvo.ng.ru/realty/2022-02-03/3_1175_donbass.html.

Khramchikhin, Aleksandr (2019): 'Bezgranichnye vozmoshnosti voiny', *Voenno-promyshlennyi kur'er*, 42(805), 29th October, <https://vpk-news.ru/articles/53306>.

Khramchikhin, Aleksandr (2020): 'Chto budet, kogda zakonchatsia iztrebiteli piatogo pokoleniia?', *Voenno-promyshlennyi kur'er*, 1(814), 14th January, <https://vpk-news.ru/articles/54617>.

Kirshin, Iurii (2004): 'Zabytye sfery voennogo reformirovaniia', *Nezavisimoe voennoe obozrenie*, no. 15, 23rd April.

Komin, Mikhail (2023): 'Who was Prigozhin counting on to back his failed mutiny?', Carnegie Politika Commentary, 27th June, <https://carnegieendowment.org/russia-eurasia/politika/2023/06/who-was-prigozhin-counting-on-to-back-his-failed-mutiny?lang=en>.

- Korguniuk, Iurii (2001): 'Problemy vooruzhennykh sil v programmakh i prakticheskoi deiatel'nosti politicheskikh organizatsii Rossii', *Politiia*, 20(2), Summer 2001, pp. 171–196.
- Kuehn, David (2019): 'The theoretical landscape' in Bruneau, Thomas C., and Croissant, Aurel, eds., *Civil-military Relations: Control and Effectiveness Across Regimes*. Lynne Rienner Publishers, pp. 19–34.
- Luzhin, Pavel (2023): 'The political considerations behind Russia's military command chaos', *Jamestown Eurasia Daily Monitor* 20(16), 26th January, <https://jamestown.org/program/the-political-considerations-behind-russias-military-command-chaos/>.
- Mandel, Robert (2007): 'Reassessing victory in warfare', *Armed Forces & Society*, 33(4), pp. 461–495.
- Millett, Allan R. et al (1986): 'The effectiveness of military organizations', *International Security* 11(1), pp. 37–71.
- Minic, Dimitri (2023): 'What does the Russian army think about the war in Ukraine? Criticisms, recommendations, adaptations', French Institute of International Affairs (IFRI), Études de l'Ifri, Russie.Eurasie.Reports No 44, https://www.ifri.org/sites/default/files/atoms/files/rer44_minic_armee_russe_retex_us_sept2023.pdf.
- Monaghan, Andrew (2022): 'Victory, defeat and Russian ways in war', Kennan Cable No. 75, https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/KI_220322_Cable%2075_V1.pdf.
- Nielsen, Suzanne C. (2007): 'Civil-military relations theory and military effectiveness', *Handbook of Military Administration*, London: Routledge, pp. 263–280.
- Norberg, Johan (2014): 'The use of Russia's military in the Crimean crisis', Carnegie Endowment, 13th March, <https://carnegieendowment.org/research/2014/03/the-use-of-russias-military-in-the-crimean-crisis?lang=en>.
- Osflaten, Amund (2023): *The Russian Way of Regular Land Warfare: A Comparative Case Study of Four Major Russian Operations after the Cold War*. PhD thesis, King's College London, https://kclpure.kcl.ac.uk/ws/portalfiles/portal/254198508/2024_Osflaten_Amund_19068836_ethesis.pdf.
- Owens, Mackubin T (2017): 'Civil-military relations' in Denemark R et al (eds) *Oxford Reference International Studies Encyclopaedia*, <https://www.oxfordreference.com/view/10.1093/acref/9780191842665.001.0001/acref-9780191842665-e-0015>.
- O'Brien, Phillips Payson (2022): 'How the West got Russia's military so, so wrong', *The Atlantic*, 31st March, <https://www.theatlantic.com/ideas/archive/2022/03/russia-ukraine-invasion-military-predictions/629418/>.
- Peven', Leonid (2015): 'Narod i armia: zalog edinstvo', *Krasnaia Zvezda*, no. 52, 23rd March.
- Pilster, Ulrich and Böhmelt, Tobias (2011): 'Coups-proofing and military effectiveness in interstate wars, 1967-99', *Conflict Management and Peace Science* 28(4), pp. 331-350.

- Provoost, Marnix (2023): 'What is Russia's theory of victory in Ukraine?', Modern War Institute, 31st March. <https://mwi.westpoint.edu/what-is-russias-theory-of-victory-in-ukraine/>.
- Pukhov, Ruslan (2008): 'Serdyukov cleans up the Arbat', *Moscow Defense Brief*, 1(11), pp. 7–10.
- President of the Russian Federation (2024): 'Meeting with military district commanders', 15th May, <http://en.kremlin.ru/events/president/news/74030>.
- Renz, Bettina (2005): 'Russia's "force structures" and the study of civil-military relations', *Journal of Slavic Military Studies*, 18(4), pp. 559–585.
- Renz, Bettina (2006): 'Putin's militocracy? An alternative interpretation of siloviki in contemporary Russian politics', *Europe-Asia Studies*, 58(6), pp. 903–924.
- Renz, Bettina (2018): *Russia's Military Revival*, Cambridge: Polity.
- Renz, Bettina (2023): 'Western estimates of Russian military capabilities and the invasion of Ukraine', *Problems of Post-Communism*, pp. 1–13, <https://doi.org/10.1080/10758216.2023.2253359>.
- RIA Novosti (2022): 'Voennye eksperty nazvali akhillesovu piatu ukrainskoi armii', 25th January, <https://ria.ru/20220125/armiya-1769511000.html>.
- Rosen, S R (1995): 'Military effectiveness: why society matters', *International Security* 11(1), pp. 5–31.
- Serebriannikov, Vladimir (1995): 'Voennye v grazhdanskom obshchestve', *Mirovaia ekonomika i mezhdunarodnye otnosheniia*, No. 6, 1995, pp. 45–53.
- Shamiev, K (2023): 'Suspensions, detentions and mutinies: the growing Gulf in Russia's civil-military relations', Carnegie Endowment Politika, 26th July, <https://carnegieendowment.org/politika/90266>.
- Shamiev, Kirill (2024): 'Moscow's military (in)effectiveness: why civil-military relations have hampered Russia's performance on the battlefield in Ukraine', PONARS Policy Memo No. 883, 27th March, <https://www.ponarseurasia.org/moscows-military-ineffectiveness-why-civil-military-relations-have-hampered-russias-performance-on-the-battlefield-in-ukraine/>.
- Sharovskii, Aleksandr (2019): 'Problemy oborony Dal'nego Vostoka po-prezhnemu sushchestvuiut', *Nezavisimoe voennoe obozrenie*, no. 2, 18th January.
- Stewart, Brandon M. and Zhukov, Yuri M. (2009): 'Use of force and civil-military relations in Russia', *Small Wars and Insurgencies*, 20(2), pp. 319–343.
- Trenin, Dmitry (2001): 'Desiatiletie nevyuchennykh urokov: grazhdansko-voennye otnosheniia v 90-e gody i perspektivy novogo raunda voennykh reform', *Politiia*, 20(2), pp. 72–82.
- Troianovski, Anton (2023): 'After armed rebellion, Putin tries to reinforce his defenses', *The New York Times*, 4th July, <https://www.nytimes.com/2023/07/04/world/europe/russia-putin-prigozhin.html>.
- Vorob'ev, Eduard: 'Peremeny dolzhny stat' neobratimymi', *Indeks: Dos'e na tsensuru*, No. 19, 2003, <http://www.index.org.ru/journal/19/vorob19.html>.

Westerlund, Fredrik (2021): 'The role of the military in Putin's foreign policy: an overview of current research', FOI Report FOI-R--5070—SE, <https://foi.se/rest-api/report/FOI-R--5070--SE>.

Zolotarev, Pavel (2002): 'Put povysheniia statusa i ulucheniia imidzha voennykh v obshchestve', in Nikitin, Aleksandr I. (ed.): *Demokraticheskii kontrol' nad voennoi sferoi v Rossii i stranakh SNG*, Moscow: Izdatel'stvo 'Eslan'.

2

RUSSIAN STRATEGIC THINKING AND CULTURE BEFORE AND AFTER FEBRUARY 24, 2022: POLITICAL-STRATEGIC ASPECTS

Dimitri Minic

The presentation by Dimitri Minic in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://www.youtube.com/watch?v=iI-1U5kKwd8> starting from 57:00.

Introduction

Post-Soviet Russian military thinking was marked by the theorization of bypassing armed struggle, of which the “Special Military Operation (SVO)”, supposedly an illustration, was a fatal outcome.¹ The Russian army had been unprepared for the long, high-intensity war that ensued from the failed SVO, and Russian strategic thinking had spent the last 30 years cultivating and digesting the idea that the weight of interstate armed struggle had considerably diminished, if not become optional. At the same time, the Russian army underwent reforms compatible with this theoretical evolution, resulting in the creation of more professional, flexible and well-equipped forces. The perception of the West and the specificities of Russian strategic culture also played a central role in post-Soviet Russian strategic thinking and practice.

The war in Ukraine was a high point of this thinking, culture and practice. The SVO has been commented on at length by Russian military elites, who assess its political-strategic as well as military-operational dimensions². Here, we focus on the strategic and political dimensions of Russian military discourse, which still benefits from a relative freedom of expression that allows for (often indirect) criticism. Two main themes emerge from the Russian military review. The first concerns the nature and launch of the SVO. While the SVO is analyzed as a pre-emptive operation, its planning, preparation and the very timeliness of its launch have raised considerable criticism. The second concerns the reasons that Russian military elites believe legitimized the SVO. As an ontologically anti-Russian malevolent entity, the West is experiencing a decline that it is trying to prevent by any means possible, including seeking to destroy Russia. From this point of view, the SVO represents a double promise: accelerating the collapse of the West and laying the foundations for a new world order.

Several questions arise: what continuities and inflections can be identified in Russian strategic thinking after February 24? Did the SVO call into question or confirm ideas in the eyes of Russian military theorists? Did the SVO’s initial strategic failure and the ensuing adverse political consequences for Russia (sanctions, disconnection from the

¹ D. Minic: *Pensée et culture stratégiques russes: du contournement de la lutte armée à la guerre en Ukraine*, Paris, Maison des sciences de l’homme, 2023, 632 p.

² For the military-operational dimensions, see D. Minic: “What Does the Russian Army Think About its War in Ukraine? Criticisms, Recommendations, Adaptations”, *Russie.Eurasie.Reports*, No. 44, Ifri, September 2023, <https://www.ifri.org/>.

West) call into question certain beliefs held by military theorists? What limitations appeared in Russian military discourse after February 24?

This work is based primarily on the analysis of primary sources of Russian military literature, in particular the “scientific” military journals of the Ministry of Defense (MO) as the main (and historical) military-theoretical vector of the Russian MO and General Staff (GŠ), *Voennaâ Mysl'* (VM) – an open source where senior and general officers, active, reserve or retired, professors, researchers, directors and/or commanders (and even actors in the war in Ukraine) address their peers and the country’s highest military and political leaders. This article also benefits from the analysis of the primary sources present in my book³ (military dictionaries and encyclopedias, speeches by military and political officials, and strategic doctrine documents in particular), as well as from the approach chosen in the latter (articulation, in the analysis, of theoretical-military, strategic culture and biographical elements of Russian military elites). Lastly, it is in line with the chronological continuity of my book, which ended with an attempt to explain the SVO in terms of post-Soviet Russian strategic thought and culture, as studied between 1993 and 2021.

Russian strategic thinking and culture: 1993-early 2022

Since the fall of the USSR, military elites gradually adhered to two complementary ideas about the evolution of modern warfare: first, armed struggle (i.e., direct and open use of armed violence) recedes into the background and becomes of secondary importance in the nature and character of war; second, the weight and power of non-military (i.e., political, psychological-informational, cyber, diplomatic, economic, cultural, financial...) and indirect military (i.e., use of special forces, irregular forces, private military companies or intelligence subversive services, but also strategic deterrence, covert use of armed violence...) means and methods have grown considerably and are nowadays capable to achieve decisive political objectives.⁴ This has had serious consequences for Russia’s foreign policy and strategic practice.

The theorization of bypassing armed struggle

It was on the basis of these two ideas that what I have called the “theorization of bypassing armed struggle” emerged. “Bypassing armed struggle” is not an emic concept, in the sense that it does not emanate from the Russian military community. So why did I choose it?

The first reason has to do with the nature of post-Soviet Russian strategic thinking. For more than 10 years, work in this field has sought to bring out the emic categories emanating from Russian military theorists, in an attempt to find a concept (i.e., new type of warfare, new-generation warfare, etc.) that would faithfully describe what the military thinks and, if possible, find an explanation for Russia’s actions. This was a very important step in itself, as it enabled to move away from the over-systematic projection of Western categories (“hybrid warfare”, “Gerasimov doctrine”) onto a different kind of strategic thinking. However, an analysis of Russian military

³ For the military-operational dimensions, see D. Minic: “What Does the Russian Army Think About its War in Ukraine? Criticisms, Recommendations, Adaptations”, *Russie.Eurasie.Reports*, No. 44, Ifri, September 2023, <https://www.ifri.org/>.

⁴ Ibid.

intellectual production since 1991 shows that relying on one particular concept used by theorists to describe the evolution of Russian strategic thinking and the Russian conception of modern war has strong limitations.

The *first* one is that Russian strategic thinking is flexible, shifting and highly sensitive to external, especially Western, intellectual dynamics: many of the concepts that have emerged since 1991 have embodied the evolution of a war that is less and less focused on armed struggle. In my thesis, partly based on an analysis of the military literature covering a 25-year period, I demonstrated that the concepts and notions (which I call “concepts of bypassing armed struggle”) that have had a lasting impact on this thinking are: informational war (with its variants), indirect and asymmetrical strategy and action, special forces and operations, irregular armed formations and strategic deterrence. Others gradually took root from the mid-2000s onwards (soft power, color revolution, controlled chaos...). Some were relatively short-lived or little used (“new type of war”, “new-generation war”) and others very late (such as hybrid warfare, used from 2014). In one way or another, each of these concepts and notions was in turn erected as a holistic concept of modern war, but were above all more or less temporary vehicles of evolutionary post-Soviet Russian strategic thinking. It seems that no general concept has been agreed upon to define the new war in all its dimensions and nuances. This is why I speak of the “theorization” of bypassing and not the “theory” of bypassing: it’s an “evolving”, complex intellectual process, albeit with a backbone. This brings us to the 2nd limitation.

The *second* limitation is that this conceptual and theoretical proliferation stemmed from the observation of a wider phenomenon of which these categories are only a nuance – namely the idea of the decreasing role of armed struggle in the achievement of political objectives – as well as being the tip of the iceberg, insofar as the concepts of bypassing armed struggle and, more broadly the theorization of bypassing armed struggle, are also and above all the product of epistemological debates on the nature of war, references to Marxist-Leninist ideology and the memory of the Cold War, a radically hostile perception of the strategic environment and a beleaguered Russia, and, in particular, the truncated observation of Western strategies and concepts.

The second reason for using the notion “theorizing the bypassing of armed struggle” is the complexity and flexibility of the approach to modern warfare in post-Soviet Russian strategic thought. Bypassing has been conceived in two distinct ways that have fueled a constant dialogue, with, at its core, a revision (in fact, a broadening) of the interpretation of the concept of war.⁵ The first way relies on the idea that indirect confrontation, made up of non-military struggles (political, psycho-informational, cybernetic, diplomatic, economic, cultural, financial...) and indirect military means and methods (special forces, irregular forces, private military companies, subversive intelligence services, strategic deterrence, covert use of armed violence...) has become central, and that inter-state armed struggle, which takes a new, selective, limited and mainly remote form, *ends* the process of confrontation (which can last for months or even years) in a decisive manner. The SVO can be analyzed as an illustration of this way. The second way of the bypassing theorization – to be favored by Russian military theorists – is the avoidance of interstate armed struggle, which does not rule out a

⁵ Ibid. See also D. Minic: “How the Russian army changed its concept of war, 1993–2022”, *Journal of Strategic Studies*, May 2023.

limited indirect armed struggle waged by third parties. This approach is based on the idea that non-military means (let's add the use of migrants to the list above⁶) have become so powerful that they are now violent and, combined with indirect military methods and means, capable of achieving decisive political objectives. This applies to countries such as Ukraine, as well as to the West and Africa. Flexibility and adaptability are the hallmarks of the theorization of bypassing: if an "application" of the second way of bypassing fails to achieve the set objectives – and if the context and nature of the target allow it – a *direct* and *final* armed blow is not ruled out.

Bypassing and war in Ukraine

To measure both the results of thirty years of theorizing the bypassing of armed struggle, and the war patterns that the highest military elites had in mind until 2022, let's cite examples of revealing developments produced by important Russian military theorists. The continuity of these reflections is striking. For example, general Ivan Vorobyov explained in 1997:

...violent [i.e., armed] actions [...] are considered to be the final phase of military actions,⁷ when the political, diplomatic, and other bloodless crushing capabilities of the opposing state will be exhausted. [...] The bet is made on the first blow, powerful and sudden, which will be disarming and overwhelming.⁸

The prior creation of a "permanent front of struggle [at] the enemy, an atmosphere of political and economic chaos, uncontrollability, misfortune and despair", by stirring up internal armed conflicts "with the help of the internal opposition" and by applying a powerful "psychological-informational impact", will give rise to "collective cowardice", "distrust" and "anger". Under these conditions and with the final armed water hammer, the "collapse from within is inevitable".⁹

Another recent example was produced by the deputy head for scientific work of the Military Academy of the General Staff (VAGŠ), general Seržantov, and the head of the Center for Military-Strategic Studies (CVSI), general Smolovyj, in February 2021, who describe the eight phases of "higher-level war", of which traditional warfare is only one "stage", final and non-mandatory.¹⁰ This model, in a very slightly modified form, seems to have been introduced in the work commissioned by Gerasimov, the head of the GŠ, from the head of the VAGŠ, general Zarudnickij, "Military Conflicts of the Future" ("Voennye konflikty budușego", 2021), in collaboration with the CVSI,

⁶ See for example: A. N. Bel'skij, O. V. Klimenko: "The Islamic state is a Trojan Horse for Eurasia", *Military Thought*, vol. 25, n° 4, 2016, pp. 1–2; S. G. Ćekinov, S. A., Bogdanov: "Military strategy: looking ahead", *Military Thought*, vol. 25, n° 4, 2016, p. 24. See recently: A. A. Mihlin, V. V. Moločnyj, T. M. Kočets: "Morskaâ gibridnaâ vojna v strategiâh SŠA i NATO: sut', soderžanie i vozmožnye mery protivodejstviâ", *Voennaâ Mysl'*, n° 4, 2023, pp. 7–20.

⁷ In Russian military theory, "military actions (*voennye dejstviâ*)" are different from "combat actions (*boevye dejstviâ*)", even if the terminology is not necessarily respected: in peacetime, military actions are a set of measures carried out in the non-military (economic, diplomatic, ideological, informational) and military spheres; in wartime, they take place in non-military spheres, while combat actions concern armed struggle. See V. V. Babič, "O vooružennoj bor'be, boevyh dejstviâh, voennyh dejstviâh, ih meste v sisteme kategorij i ponâtij voennoj nauki", *Vestnik Akademii Voennyh Nauk*, vol. 29, n° 4, 2009, pp. 38–39.

⁸ I. N. Vorobyov, "Kakie vojny grozât nam v budušem veke?", *Voennaâ Mysl'*, n° 2, 1997, paragr. 22, 25. <http://militaryarticle.ru/>.

⁹ *Id.*

¹⁰ A. V. Seržantov, A. V. Smolovyj, A. V. Dolgopolov: "Transformaciâ soderžaniâ vojny: ot prošlogo k nastoâșemu — tehnologii "gibridnyh" vojn", *Voennaâ Mysl'*, n°2, 2021, pp. 26–27.

and favorably reviewed by the “military leadership bodies”.¹¹ Here’s the first version of the model:

The first phase is the preparation of favorable conditions for the beginning of aggression. Economic, psychological, ideological and diplomatic methods are used, with the help of which the ground is prepared for intervention. An opposition is formed, exerting pressure on the authorities, criticizing the state’s methods of governance, convincing the country’s population of the illegitimacy of the rulers, their corruption and their inefficient methods of managing the economy. *The second phase* is the misleading and misinformation of the political leaders and population of the state under aggression, through the use of informational methods of confrontation. *The third phase* is the intimidation and corruption of high-ranking officials in the administration and the army, who largely determine state policy, but also of the oligarchic elite whose business depends on the aggressor-state’s disposition towards them. *The fourth phase* is the destabilization of the social situation in the country, the implementation of subversive (sabotage) activity. To carry out these tasks, formations of armed structures drawn from a radicalized part of the population are used. The seizure of state and private establishments, physical reprisals on undesirable politicians and businessmen are implemented. These initial phases rely on the use of non-military to achieve a coup d’état disguised as a popular revolt, and to dismantle the political regime. The techniques of so-called “color revolutions” make it possible to achieve political objectives without recourse to military force, and are the first stage of a “hybrid” war. If the objective of the non-military phase is not achieved, the “color revolution” (“révolution de couleur”) will become a war with the use of the means of armed struggle. *The fifth phase* corresponds to the establishment of a blockade [...] limiting the receipt of external support, [corresponds] to an appeal to the leaders of the aggressor state by the created opposition with a request for assistance in stabilizing the situation, [corresponds] to the introduction of a contingent of peacekeeping forces under the protection of the aggressor state, the extensive use of private military companies, in close interaction with armed opposition units. *The sixth phase* is the beginning of military actions, by means of selective strikes against key (critical) targets, which leads to the definitive disorganization of state and military control and the destabilization of the social situation. *The seventh phase* is a full-scale invasion with the use of armed forces (if necessary). *The eighth phase* is the systematic elimination of the remaining points of resistance and the establishment of a new government loyal to the aggressor state.¹² The “special military operation”, in which non-military, unarmed struggles (internal subversion, strategic deterrence, psycho-informational and cyber actions, etc.) were supposed to prepare the ground for a limited (quasi-demonstrative), decisive and sudden armed struggle to topple Ukraine like a ripe fruit, stems less from the strict application of a model than from a tropism for bypassing armed struggle, which didn’t

¹¹ A. V. Smolovjy: “Voennye konflikty budušego: sovremennyy vzglád”, *Vestnik akademii voennyh nauk*, n°3, 2022, pp. 80–81.

¹² *Op. cit.*, Seržantov, Smolovjy and Dolgopolov, 2021, pp. 26–27. The version used in the book is identical, with a few modifications: the fifth phase adds “special operations forces” to private military companies; the commentary between phase 4 and phase 5 no longer appears; a commentary between phase 5 and phase 6 is added: “non-military measures”, combined with “special operations forces and internal opposition” make it possible to “create an atmosphere of ‘controlled chaos’ necessary for the aggressor state to carry out its plans”; it is specified in the seventh phase that the invasion may also be “limited”; finally, in the seventh phase, the mention of the non-mandatory nature of the invasion is removed but reappears in another form, insofar as it is deemed that the stages “subsequent” to the initial phase “may not exist at all”.

produced a clear or unanimous model that would be institutionalized, but rather permeated Russian strategic thinking, discourse and doctrines. The bypassing goes beyond technical and rational military-theoretical analysis and is rooted in the depths of Russia's ancient and renewed strategic culture.

Indeed, if theorization of bypassing armed struggle relied on the pragmatic analysis of the weakness of Russia's military and economic capacities, of new forms and ways of war in the age of globalization and in territories protected by nuclear means or major powers, it was also founded on mindsets, beliefs, assumptions and analysis deeply disconnected from reality, on truncated perception of the Cold War, on misleading observation of the Western strategic doctrines and actions, on methodologically and scientifically poor studies grounded in false and falsified documents and speeches, on conspiracy theories and even on pseudoscience (like psychotronic), which led the Russian military and political elites to overestimate both the ability of indirect means to achieve political goals and their own capacity to use these means rationally. Russia's experience in Ukraine since 2014 and especially since February 24 has amply demonstrated it.

The question now is how Russian military theorists themselves analyzed the special military operation. What lessons do they draw from it?

Nature and triggering of the SVO

SVO is a failed preventive operation that was not intended to give rise to a long, high-intensity war. The ambitious goals of "demilitarization" and "denazification" set out by Vladimir Putin on February 24 could only be achieved from above, via regime change, and not from below, through the conquest of a territory as large and populous as Ukraine. The reasons for Russia's initial failure are manifold and heterogeneous, but one in particular stands out: it's the failure to foresee and plan the form that this confrontation with Ukraine would take, partly due to the fact that Moscow, for thirty years, has been progressively auto-intoxicated with bypassing of armed struggle. Instead of invalidating the ideas that Ukraine was ripe for a final blow, and that this final blow would be decisive thanks to non-military and indirect military preparation of the terrain, forecasting and intelligence confirmed the theoretical and doctrinal presuppositions of the General Staff and the Ministry of Defense, as well as Putin's political desire to settle his "Ukrainian problem". The military elites who spoke out after February 24 largely understood and addressed these issues.

A preventive operation

The special military operation is considered pre-emptive by Russia's military elites (even if, in reality, it is preventive). The idea that Russia must take pre-emptive action (*upreždašnje dejstviâ*) to achieve the state's political objectives gradually emerged in Russian military theory, notably through the concept of strategic deterrence.¹³ This offensive sense of the concept¹⁴ covered both the active use of non-military means and the indirect use of military force, as well as the direct but limited use of military force. Before the outbreak of the SVO, the situation in Ukraine, perceived as a conflict

¹³ *Op. cit.*, D. Minic, *Pensée et culture stratégiques russes: du contournement de la lutte armée à la guerre en Ukraine*.

¹⁴ See recently: A. K. Mar'in: "Osobennosti strategičeskogo sderživaniâ v sovremennyh usloviâh", *Voennaâ Mysl'*, n° 12, 2023, p. 26.

fuelled by the West and aimed at Russia, was deemed untenable: Washington had an interest in “maintaining a slow conflict in the Donbass” and retaining “control over the puppet leadership of Ukraine”.¹⁵ At the end of 2021, the former head of the GRU claimed that an offensive strategy “will have [...] a sobering effect on the hotheads of American [...] strategists”.¹⁶ The leading military theorist of Russian hybrid warfare, Bartoš, meanwhile, felt that “delicate responses” to Washington’s “presumptuousness” were perceived by the latter as “consent”.¹⁷ Since the start of the SVO, this offensive posture has only become more pronounced,¹⁸ in line with the strategic theoretical and doctrinal developments of 2000-2010,¹⁹ as well as with the lineaments of the political and strategic culture of Russia’s political-military elites. “The pre-emptive ‘special military operation’” would thus have made it possible to “thwart” Kiev’s bellicose plans.²⁰ Putin spoke of a “pre-emptive response” to the aggression.²¹

However, two nuances are in order. The first is that this proactive, offensive approach to Russian strategy, although it was gradually accepted that a calibrated, succinct use of armed force could contribute to this, was not limited to the military dimension, and was even less consistent with the conduct of a long, high-intensity armed struggle.²² Secondly, the preventive nature of the “special military operation” did not necessarily convince military elites, partly due to a lack of reliable intelligence.²³ The assessment of the failed pre-emptive SVO was therefore accompanied by two issues: the non-military side of deterrence and the importance of intelligence.

Non-military deterrence and bypassing

The deputy head of the GŠ’s National Defense Management Center (NCUO), Vice admiral Kalganov, thus mentions that the “central element of strategic deterrence” at the “early stage [...], before conflict”, is not “intimidation through the threat of destruction”, but first and foremost a “global impact” on the “cognitive space” and the “leadership behavior of the potential enemy” in the face of “red lines”.²⁴ “Deploying and moving troops in threatening directions toward the borders of the Russian Federation” is not enough; it is also necessary to “apply effective non-military measures,”

¹⁵ V. V. Selivanov, Ū. D. Il’in: “Konceptiã voenno-tehničeskogo asimmetričnogo otveta po sderživaniũ veroãtnogo protivnika ot razvãzyvaniã voennyh konfliktov”, *Voennaã Mysl’*, n° 2, 2022, pp. 35–36.

¹⁶ F. I. Ladygin: “Vnešnie vyzovy nacional’noj bezopasnosti Rossijskoj Federacii. Predlagaemye mery po ih nejtralizacii”, 10 septembre 2021, <http://kvrf.milportal.ru/>

¹⁷ A. A. Bartoš: “Vzaimodejstvie v gibridnoj vojne”, *Voennaã Mysl’*, n° 4, 2022, p. 21.

¹⁸ See also: V. V. Andreev, N. S. Krivencov *et al.*: “Osobennosti primeneniã gruppировок aviacii v voennyh konfliktah budušego”, *Voennaã Mysl’*, n° 6, 2022, p. 43; H. I. Sajfetdinov: “Gibridnye vojny, provodimye SŠA i stranami NATO, ih sušnost’ i napravlenost’”, *Voennaã Mysl’*, n° 5, 2022, p. 17; A. M. Il’nickij: “Strategiã mental’noj bezopasnosti Rossii”, *Voennaã Mysl’*, n° 4, 2022, p. 30; V. G. Cil’ko, A. A. Ivanov: “Tendencii razvitiã obševojkovogo operativnogo iskusstva”, *Voennaã Mysl’*, n° 11, 2022, p. 49; I. A. Kopylov, V. V. Tolstyh: “Ocenka vliãniã političeskogo faktora na upravlenie nacional’noj oboronoy Rossijskoj Federacii”, *Voennaã Mysl’*, n° 9, 2022, p. 14.

¹⁹ *Op. cit.*, D. Minic: *Pensée et culture stratégiques russes: du contournement de la lutte armée à la guerre en Ukraine*, pp. 127–128.

²⁰ L. I. Ol’štynskij: “Narastanie voennoj ugrozy i ukreplenie oboronosposobnosti gosudarstva. Opyt istorii Rossii”, *Voennaã Mysl’*, n° 4, 2022, p. 78.

²¹ Putin, May 9, 2022, <http://kremlin.ru/>.

²² *Op. cit.*, D. Minic, p. 350–351.

²³ D. Minic: “La guerre en Ukraine dans la pensée militaire russe: leçons politico-stratégiques”, *Politique étrangère*, vol. 88, n° 1, 2023, pp. 167–170.

²⁴ V. A. Kalganov, G. B. Ryžov et I. V. Solov’ev: “Strategičeskoe sderživanie kak faktor obespečeniã nacional’noj bezopasnosti Rossijskoj Federacii”, *Voennaã Mysl’*, n° 8, 2022, pp. 9, 12.

as stipulated in the 2014 Military Doctrine, argue some theorists, who deem non-military measures “high priority”.²⁵ It is stressed that “measures taken to deter aggression by demonstrating the capabilities of armed force should also be supported by coordinated actions and operations” in the fields of mental and economic confrontation, with “appropriate political-diplomatic coverage”.²⁶

The theorization of bypassing is at the heart of these reflections, which often indirectly question the flaws of SVO. Bypassing continues to come to the fore.²⁷ Non-military means “in some cases significantly exceed the force of arms in achieving political and strategic objectives”, claim the theorists, who skillfully draw on GŠ head Valeri Gerasimov to support this idea.²⁸ But it’s also the sequencing of the use of military force – a crucial element in the theorization of bypassing – that was discussed after the invasion. The deputy head of the VAGŠ and the head of the CVSI pointed out that the order of targets had changed in military conflicts (with the enemy’s armed forces in last place), that the aggressor must “use military force against a weakened enemy”, that the aim was no longer to “destroy as much of the enemy’s military force as possible” but to “create the conditions for its use to be ineffective”.²⁹ This allows “political objectives to be achieved without major military battles” and represents the “only way to achieve your objectives without major losses”, they add, at a time when the Russian army is mired in a war of attrition in Ukraine.³⁰ A major trend in the evolution of 21st-century conflicts is the “revision of the nature of the term ‘victory’”, asserts the head of the VAGŠ, Zarudnickij: under “current geopolitical conditions”, the opponent’s “complete defeat” and the “destruction of its vital and production infrastructure” are “not always necessary”; “otherwise, the victory will have to invest substantial resources in restoring it, which, naturally, is not desirable for him”.³¹

The head of the CVSI, Smolovyj, said no different at the Academy of Military Sciences’ roundtable on war in mid-2022: the “informational factor” makes it possible to achieve political goals “without the use” of “military force”, so that in the “understanding of war”, this factor can “prevail”; “occupying” the enemy’s territory and “seizing” its resources is “secondary” to establishing “overall strategic control” over the “consciousness” of the target country’s population and obtaining “full power over

²⁵ L. A. Prudnikov, A. V. Kuz’menko: “Primenenie nevoennyh mer v interesah obespečeniâ voennoj bezopasnosti Rossii”, *Voennaâ Mysl’*, n° 1, 2023, pp. 7–11.

²⁶ A. S. Korževskij, I. V. Solov’ev: “Mental’noe protivoborstvo i problemy formirovaniâ celostnoj sistemy nastupatel’nyh i oboronitel’nyh dejstvij v nem”, *Voennaâ Mysl’*, n° 11, 2022, p. 41.

²⁷ See for example: A. A. Bartoš: “Zakony i principy gibridnoj vojny”, *Voennaâ Mysl’*, n°10, 2022, pp. 6–14; A. V. Seržantov, D. A. Pavlov: “Gibridnyj harakter opasnostej i ugroz, ih vliânije na sistemu obespečeniâ voennoj bezopasnosti Rossijskoj Federacii”, *Voennaâ Mysl’*, n°5, 2022, p. 7; op. cit., Korževskij, Solov’ev: “Mental’noe protivoborstvo i problemy formirovaniâ celostnoj sistemy nastupatel’nyh i oboronitel’nyh dejstvij v nem”, p. 33.

²⁸ Op. cit., Prudnikov, Kuz’menko: “Primenenie nevoennyh mer v interesah obespečeniâ voennoj bezopasnosti Rossii”, pp. 7–11. See also Korževskij et Solov’ev (pp. 32–33), who preface their article with a quote of Gerasimov: “in modern war, the victor is not the one who dominates, but the one who changes the enemy’s mind”.

²⁹ A. V. Seržantov, A. V. Smolovyj et I. A. Terent’ev: “Transformaciâ sodержaniâ vojny: kontury voennyh konfliktov buduščego”, *Voennaâ Mysl’*, n° 6, 2022, pp. 21–30. See also S. N. Petrunâ: “O razvitii teoretičeskikh osnov ocenki strategičeskoj obstanovki v interesah obespečeniâ voennoj bezopasnosti Rossii”, *Voennaâ Mysl’*, n°4, 2023, pp. 35–36.

³⁰ Ibid., Seržantov, Smolovyj, Terent’ev, pp. 21–30.

³¹ V. B. Zarudnickij: “Sovremennye voennye konflikty v kontekste formirovaniâ novej geopolitičeskoj kartiny mira”, *Voennaâ Mysl’*, n°11, 2023, p. 9.

the future of the conquered state”.³² The war “pattern” mentioned above is still considered relevant at the end of 2022.³³

The Russian state tried to implement the ideas of bypassing before and within the framework of SVO. Two problems arose, however. Firstly, Moscow greatly overestimated the effectiveness of bypassing, that is the ability of non-military and indirect military means and methods to achieve decisive objectives. This point, however essential, is not debated by the military-political elite. Secondly, Russia’s politico-military leaders have overestimated their own ability to implement bypassing, which requires, among other things, reliable forecasting and intelligence. This aspect, too, has been at least partly discussed.

Forecasting and intelligence

Very revealingly, general Zarudniškij explained that Russian military science had to “form correct forecasts” for solving tasks, “including those of a preventive nature”.³⁴ “Anticipatory thinking” enables to choose the “most effective and timely forms and methods of striking the enemy”, including “preventively”, adds Colonel Bartoš.³⁵ Ensuring this “anticipatory thinking” means “carefully” studying the strategic culture of the enemy state, as well as the “specificities” of the “mentality” of its population. “Preempting” the enemy’s actions is only possible with a “permanent” forecast of the evolution of the situation, which makes it possible to obtain “reliable information from intelligence services”, an “indispensable” condition for “justifying the advisability of carrying out preventive strategic strikes against the enemy”.

Military-political forecasting is often based on the “intuition and experience of the decision-maker”, on the “justification of presuppositions”, on “hope” and “faith”, and is therefore subjective, whereas it should promote “scientific forecasting of the evolution of the situation”, “permanent information watch and expertise”, claims General Korjevski, Head of the Military Institute (National Defense Management) of the VAGŠ.³⁶ The assessment of forecasting specialists, whose “subjective opinion” often prevails, leads to “miscalculations” and “errors in assessing the situation”, and “negatively affects the decisions taken”, adds Colonel Gnilomjodov, lead advisor to Gerasimov.³⁷ An “objective assessment” would give a “correct” idea of the “balance of power and the real potential of deterrence”. We need to be able to “reveal the causes” of the escalation of a situation into a military threat “as early as possible”, and to “identify” the “military potential” of malicious actors, warn officers almost a year after the costly SVO was launched: “any delay” in this respect is “unacceptable” as it generates a “waste of resources that will have to be deployed to neutralize emerging threats to military security”.³⁸

³² Op. cit., Smolovij: “Voennye konflikty budušego: sovremennij vzgläd”, p. 82.

³³ *Ibid.*, pp. 83–84.

³⁴ V. B. Zarudnickij: “Voennaâ nauka: novye gorizonty poznaniâ”, *Voennaâ Mysl*, n°7, 2022, pp. 9–10.

³⁵ Op. cit., Bartoš: “Zakony i principy gibridnoj vojny”, pp. 9–13. Idem for the following quotations.

³⁶ A. S. Korževskij, V. L. Mahnin: “Metodologičeskie podhody k prognozirovaniû v sfere voennoj bezopasnosti gosudarstva”, *Voennaâ Mysl*, n°5, 2022, pp. 22–25.

³⁷ O. K. Gnilomjodov: “Osobennosti monitoringa i ocenki voennopolitičeskoj obstanovki v ramkah funkcionirovaniâ sistem podderžki prinâtiâ rešenij”, *Voennaâ Mysl*, n° 4, 2023, pp. 74–75. Idem for the next quote.

³⁸ Op. cit., Prudnikov, Kuz'menko: “Primenenie nevoennyh mer v interesah obespečeniâ voennoj bezopasnosti Rossii”, pp. 15, 17.

These elites, though capable of genuine reflexivity, fail to realize that their way of thinking (denial of chance and individual autonomy, determinism, the feeling that everything is interconnected and often hidden...) has greatly hampered their understanding of international realities and played a central role in the failure of the SVO. Nor do they understand that this way of thinking prevents them from questioning (and even cultivates) the core beliefs that blind them. If Russia's political-military elites have shown serious failings in their ability to foresee and understand certain strategic realities, it is first and foremost because they are marked by beliefs that distance them from objective reality. At the heart of these elites' cognitive frameworks is the West, from which, through which and against which they continue to define the world and Russia.

The reasons for the SVO: the historic fight to the death with the West

The special "pre-emptive" military operation, although launched against Ukraine, was also and above all directed against the West, with which Russia's military-political elites believe they are in a life-and-death struggle. Historically shared amongst Russia's political-military elites, this idea has had major consequences not only for Russian foreign policy in the broad sense, but also for its strategic thinking, doctrine and practice: (allegedly) the victim of an indirect war brilliantly waged by the West, a supposed master of the art, Russia had to respond with the same means, and what is more, by drawing truncated inspiration from alleged Western concepts and indirect strategies. The theorization of bypassing and its deleterious applications, such as the SVO, were partly the fruit of this relationship of rejection (but also fascination) with the West. In the eyes of Russia's military elites, Ukraine, whose they deny autonomy of thought and action, occupies a secondary place in the ongoing war.³⁹ The initial failure of the SVO and its consequences did not prompt Russia's military elites to revise their approach to the West. Quite the contrary, in fact.

An ontologically anti-Russian West

Radically hostile perception of the West is deeply entrenched among military and politico-military elites. Colonel Tšekinov and general Bogdanov, both leading figures of post-Soviet Russian military theory and former heads of the CVSI (respectively in 1990-1995 and 2009-2017) asserted in 2017: the "West will only be able to reassure itself when [Russia] and its people will be reduced to a state worthy of mockery and contempt".⁴⁰ The West, which has "preciously nurtured" a historic "hatred" against Moscow,⁴¹ would like to see the Russians "walking with outstretched hands, selling their natural resources [and] their intelligence".⁴² The "manic ambition of the United States" is considered the most dangerous factor in international relations.⁴³ "The more concessions we have made to them, the more impudent they have become",

³⁹ *Op. cit.*, D. Minic: "La guerre en Ukraine dans la pensée militaire russe: leçons politico-stratégiques", pp. 164–165.

⁴⁰ S. G. Čekinov, S. A. Bogdanov: "The Essence and Content of the Evolving Notion of War in the 21st Century", *Military Thought*, vol. 26, n°1, 2017, p. 83.

⁴¹ A. A. Korabelnikov: "Social'no-političeskij konflikt: istoki i puti ego predotvrašeniâ", *Vestnik Akademii Voennyh Nauk*, vol. 28, n°3, 2009, p. 198.

⁴² V. V. Kirillov: "Rossiâ i NATO geostrategičeskie realii", *Voennaâ mysl'*, n°9, 2007, paragr. 17.

⁴³ *Op. cit.*, Čekinov, Bogdanov: "Military Strategy: Looking Ahead", pp. 24–25.

concluded the late General Gareev in 2015.⁴⁴ In the eyes of Russia's military elites, the idea of a struggle to the death between the West and Russia, that essential matrix of post-Soviet Russian strategic thinking, has been reinforced by the West's hostility to Moscow's expansionist designs in Ukraine.

Over the years, this historical death struggle allegedly waged by the West has been analyzed in genocidal terms, and its civilizational character has gained weight in assessments – without, however, replacing the entrenched idea of Western greed for natural resources.⁴⁵ The aim is not to seize Russian resources and territory, Šojgu's advisor Il'nickij believes in 2022; the West simply wants the “eradication of the Russians as a people and a civilization”.⁴⁶ The West will try to “finish what it started” and not make the same mistake as in 1991; “the Russian people cannot back down [...]. We just have to win”, he asserted in 2023.⁴⁷ It's Russia's “existence” as a “sovereign state” that's at stake, and even that of “Russian civilization”.⁴⁸

At one time, the idea of a rapprochement, even a very close one, with the West was relayed among military elites. In 2005, Tšekinov's predecessor at the head of the CVSI, general Ostankov, opposed the “fanciful” idea of Russia becoming “a bastion of all anti-American forces” and considered that “the long-term interest of the Russian Federation [was] to maximize convergence with the European Union, to enter a common economic and political space”.⁴⁹ Also in 2016, general Klimenko, one of the inspirers of Military Doctrine 2000, who justified its anti-Western orientation at the time, urged that “suspicion of the United States” should not “turn into an obsession”.⁵⁰ Seven years later, in 2023, the previously rare nuances are no longer relevant: the United States and its allies “will never accept the existence on the planet of a state and a society” whose “values” and “mentality” contradict “radically” their own.⁵¹ Basically, “no one should have any illusions that it would be possible to reach an agreement with the West, let alone be friends.”⁵²

For Russia's military elites, this struggle to the death is driven by the West's desire to maintain its claim to world domination. The SVO is also seen as a means of completing a dying hegemony and accelerating the creation of a new world order, seen as inescapable.

⁴⁴ M. A. Gareev: “Opyt Velikoj Otečestvennoj vojny i rabota Akademii voennyh nauk po dal'nejšemu razvitiu voennoj nauki”, *Vestnik Akademii Voennyh Nauk*, vol. 51, n°2, 2015, p. 22.

⁴⁵ Op. cit., Bartoš: “Zakony i principy gibridnoj vojny”, pp. 8–9. Bartoš mixes both explanations.

⁴⁶ Op. cit., Il'nickij: “Strategiâ mental'noj bezopasnosti Rossii”, pp. 26–27.

⁴⁷ A. M. Il'nickij: “Strategiâ gegemona — strategiâ vojny”, *Voennaâ Mysl'*, n°6, 2023, p. 24.

⁴⁸ M. A. Ždanov, M. P. Sidorov, A. V. Lukašin: “Rol' nacional'nogo samosoznaniâ v dostiženii prevoshodstva nad Zapadom v usloviâh kognitivnoj vojny”, *Voennaâ Mysl'*, n°6, 2023, p. 37.

⁴⁹ V. I. Ostankov: “Geopolitičeskie problemy i vozmožnosti ih rešenâ v kontekste obespečeniâ bezopasnosti Rossii”, *Voennaâ Mysl'*, n°1, 2005, paragr. 41–42.

⁵⁰ A. F. Klimenko: “Collapse of Enduring Freedom: Security in the SCO Area”, *Military Thought*, vol. 25, n°1, 2016, p. 8.

⁵¹ Op. cit., Kopylov, Tolstyh: “Ocenka vliâniâ političeskogo faktora na upravlenie nacional'noj oboronoj Rossijskoj Federacii”, p. 14.

⁵² Op. cit., Ždanov, Sidorov, Lukašin: “Rol' nacional'nogo samosoznaniâ v dostiženii prevoshodstva nad Zapadom v usloviâh kognitivnoj vojny”, p. 39.

The collapse of the West and the advent of a new world

For Russia's military elite, the West, led by Washington, is pursuing the same relentless goal: "complete world domination".⁵³ In their minds, the United States and the West in general are trying to maintain the unipolar world order at all costs, which they rule "in a totalitarian way"⁵⁴, with omnipotence and omniscience. Globalization is a "war of a new kind [...] initiated by the West", Čekinov and Bogdanov asserted in 2017.⁵⁵ In this way, the SVO aims to reduce American influence in Europe and hasten the advent of a multipolar order, "safe"⁵⁶, representing the "diversity of nations" willed by "God"⁵⁷, and above all inescapable, but delayed by the West, the demiurgic genius that has succeeded in mastering the evolution of the world⁵⁸. "Modern reality is not the result of the natural development of historical events", claims colonel and NCUO expert Ždanov, who adds that London and Washington, in the "context of the transformation of the world order", are trying to "remain the world hegemon indefinitely" and "suck all the resources they need from their vassals".⁵⁹ In recent years, the United States has been "increasingly active" in opposing the formation of a multipolar system,⁶⁰ the prospect of which arouses "the greatest irritation and discontent".⁶¹ They are equipping Ukraine with "modern weapons" in order to "continue the bloodshed", precisely because they do not want to give up their hegemony, "maintained for centuries".⁶²

Russia's military elites are convinced: The West's days are numbered. This is evidenced by the "shameful flight" of the Americans from Afghanistan,⁶³ these "vandals"⁶⁴ representing a West built on the "plundering of the whole world"⁶⁵. Aware of its "declining strength" and its "long, costly and inglorious failures" in Iraq and Afghanistan, Washington has decided to "moderate [its] appetite" by focusing on proxy wars.⁶⁶ The United States, in the context of the "dismantling of Anglo-Saxon

⁵³ Op. cit., Seržantov, Smolovyj, Terent'ev: "Transformaciâ soderžaniâ vojny: kontury voennyh konfliktov budušego", p. 21.

⁵⁴ V. Ů. Brovko, I. A. Čiharev: "Pravdivaâ sila: dokazatel'stvo pravdy v mirovoj politike", *Voennaâ Mysl'*, n°10, 2022, p. 20.

⁵⁵ Op. cit., Čekinov, S. A. Bogdanov: "The Essence and Content of the Evolving Notion of War in the 21st Century", pp. 81–82.

⁵⁶ Op. cit., Bartoš: "Vzaimodejstvie v gibridnoj vojne", p. 22; op. cit., F. I. Ladygin: "Vnešnie vyzovy nacional'noj bezopasnosti Rossijskoj Federacii".

⁵⁷ Op. cit., Il'nickij: "Strategiâ mental'noj bezopasnosti Rossii", p. 32.

⁵⁸ Op. cit., Čekinov, Bogdanov: "The Essence and Content of the Evolving Notion of War in the 21st Century", pp. 81, 82.

⁵⁹ Op. cit., Ždanov, Sidorov, Lukašin: "Rol' nacional'nogo samosoznaniâ v dostiženii prevoshodstva nad Zapadom v usloviâh kognitivnoj vojny", p. 38.

⁶⁰ Op. cit., Prudnikov, Kuz'menko: "Primenenie nevoennyh mer v interesah obespečeniâ voennoj bezopasnosti Rossii », p. 7.

⁶¹ Op. cit., Kopylov, Tolstyh: "Ocenka vliâniâ političeskogo faktora na upravlenie nacional'noj oboronoj Rossijskoj Federacii", pp. 12–13.

⁶² V. I. Orlânskij, D. Ů. Grečin: "O povyšeniî naučnogo urovnâ diskussij v interesah razvitiâ voennogo iskusstva", *Voennaâ Mysl'*, n°10, 2022, p. 147.

⁶³ Op. cit., Brovko, Čiharev: "Pravdivaâ sila: dokazatel'stvo pravdy v mirovoj politike", p. 17.

⁶⁴ M. O. Maričev, I. G. Lobanov, E. A. Tarasov: "Bor'ba za mental'nost' — trend sovremennoj vojny", *Voennaâ Mysl'*, n°8, 2021, p. 53

⁶⁵ Op. cit., Il'nickij: "Strategiâ mental'noj bezopasnosti Rossii", p. 26.

⁶⁶ A. A. Bartoš: "Tehnologičeskij suverenitet Rossii kak važnyj faktor pobedy v mirovoj gibridnoj vojne", *Voennaâ Mysl'*, n°8, 2023, p. 18; A. A. Bartoš: "Proksi-vojna kak opredelâušij faktor voennyh konfliktov XXI veka", *Voennaâ Mysl'*, n°5, 2023, p. 69.

hegemony”, is “losing its moral and political leadership”.⁶⁷ In the “existential confrontation underway”, the West’s main weakness is identified: it is “its boastful sense of superiority over the rest of the world, [...] which it does not hesitate to demonstrate”.⁶⁸ But the West’s dominance is now only formal, Il’nickij asserted before February 24, 2022, with the WASPs experiencing a “catastrophic decline in their passionarity”, combined with a deep economic crisis and civilizational collapse; Russia, he added, is militarily superior to the West.⁶⁹

It was within these cognitive frameworks, which remained largely unchanged after February 24, that SVO emerged.

The United States was waging a “proxy war”⁷⁰ against Russia in Ukraine, seeking to push the two states into a “bloody battle”⁷¹, Russian military elites explained before the invasion. The (classic) idea that the United States needed a war (in this case, “by proxy”) to pull the West out of its economic and civilizational crisis was shared before the invasion. It was a way for the West to avoid the “collapse of the unipolar world”, explained Captain Ol’shtynskij after the invasion.⁷² Despite this shared belief, as we have seen, the need for Moscow to take a proactive stance against the West and Ukraine was increasingly justified. The SVO was a “logical response” to the West’s initiatives in the former USSR and against Russia, making the latter the “vanguard” of the fight against the “colonial” unipolar world.⁷³ This operation is “not only” directed “against Nazi ideology”, it is “also” a response to US attempts to maintain the “existing Western-led world order”.⁷⁴ It is in fact the “most powerful catalyst” for the “accelerated [forced] transformation of the world order”,⁷⁵ the means to “end the West’s proxy war” in Ukraine.⁷⁶ Basically, Moscow has been forced to use force: the war in Ukraine was “provoked and manipulated by Washington between the United States and Russia via Ukraine”.⁷⁷

Conclusion

The “special military operation” is a pre-emptive (in fact, preventive) operation in line with post-Soviet Russian strategic thinking, and in particular with the concept of strategic deterrence, which gradually favoured pre-emptive actions. However, this offensive understanding of strategic deterrence – a concept that illustrates the theorization of the bypassing of armed struggle – was not aimed at starting a war of the kind seen

⁶⁷ Ibid., Bartoš: “Proksi-vojna kak opredelâušij faktor voennyh konfliktov XXI veka”, p. 72.

⁶⁸ Op. cit., Il’nickij: “Strategiâ gegemona — strategiâ vojny”, p. 29.

⁶⁹ Op. cit., Il’nickij: “Strategiâ mental’noj bezopasnosti Rossii”, pp. 25–26.

⁷⁰ V. V. Kruglov, V. G. Voskresenskij, V. Â. Mursametov: “Tendencii razvitiâ vooružennoj bor’by v XXI veke i ih vliânâ na voennoe iskusstvo veduših zarubežnyh stran”, *Voennaâ Mysl’*, n° 4, 2023, p. 128.

⁷¹ L. P. Ševcov: “Rossiâ v kol’ce ‘seryh zon’”, *Voennaâ Mysl’*, n°8, 2021, pp. 155–156. See also op. cit., Bartoš: “Vzaimodejstvie v gibridnoj vojne”, p. 20.

⁷² Op. cit., Ol’shtynskij: “Narastanie voennoj ugrozy i ukreplenie oboronosposobnosti gosudarstva. Opyt istorii Rossii”, p. 78.

⁷³ R. O. Nogin: “O roli i meste Raketnyh vojsk strategičeskogo naznačeniâ v perspektivnoj sisteme kompleksnogo strategičeskogo âdernogo sderživaniâ vozmožnoj agressii protiv Rossijskoj Federacii”, *Voennaâ Mysl’*, n°7, 2022, pp. 41–42.

⁷⁴ Op. cit., Kopylov, Tolstyh: “Ocenka vliânâ političeskogo faktora na upravlenie nacional’noj oboronoi Rossijskoj Federacii”, p. 14.

⁷⁵ Op. cit., Bartoš: “Zakony i principy gibridnoj vojny”, p. 11.

⁷⁶ Op. cit., Bartoš: “Proksi-vojna kak opredelâušij faktor voennyh konfliktov XXI veka”, précité, pp. 61–62.

⁷⁷ Bartoš: “Proksi-vojna kak opredelâušij faktor voennyh konfliktov XXI veka”, précité, p. 66.

in Ukraine, but at effective non-military and indirect military actions, and, if necessary, succinct and limited direct military actions. This is why Russian military elites have stressed the importance of the non-military dimension of strategic deterrence and recalled the foundations of the theorization of bypassing, without, however, acknowledging that SVO is the fruit of this theorization. Moreover, the initial failure of the SVO cruelly demonstrated the shortcomings of the Russian army, which suffered heavily from the forecasting, intelligence and planning failures of the Russian military-political leadership; this was emphasized by the military elites.

One of the main sources of these failures are the traditional beliefs of the Russian elites, which tend to distance them from objective reality, and in which the omnipotent, omniscient and ontologically anti-Russian West, waging a death struggle against Russia, occupies a central place. At the same time, these elites have convinced themselves that the arrogant West and the unipolar order at its head are on the brink of collapse. To avoid it, Washington, London and their allies would thus intensify their strategy of weakening Russia, as in Ukraine, where they supposedly wage a proxy war to push Moscow against Kiev. The SVO was seen as a means of completing this dying hegemony, thwarting (alleged) Western plans and precipitating the advent of a new multipolar world order perceived as inescapable. Since February 24, the military elites have aggravated the terms of this existential struggle, while implicitly acknowledging, as they did at the time of the invasion of Georgia in 2008, that Moscow had fallen into the trap set by the West.⁷⁸ This constitutes a form of criticism, which at the time also led to promote the theorization of bypassing.

If post-February 24 Russian strategic thinking remains rich and displays real continuities, it remains moving, capable of reflexivity and (often indirectly) criticism. However, this thinking is silent or almost silent on essential points that the SVO experience should invite Russia's military elites to evaluate, from the assessment of the theorization of bypassing to the disastrous and cyclical results of anti-Western tropism, not to mention the effects this war will have on the strategy, doctrine, organization and tasks of the Russian army in the medium and long term.

⁷⁸ See op. cit. D. Minic: *Pensée et culture stratégiques russes*, pp. 268–274 and D. Minic, “La guerre en Ukraine dans la pensée militaire russe: leçons politico-stratégiques”, pp. 161–162, 167–171. See very recently: A. N. Kostenko, V. A. Vahrušev: “Geopolitika Rossijskoj Federacii v sovremennom mire”, *Voennaâ Mysl'*, n°2, 2024, p. 20.

3

CULTURAL CHARACTERISTICS OF RUSSIAN MILITARY LEADERSHIP: IT'S INFLUENCE ON MILITARY OPERATIONS IN UKRAINE

Juan Carlos Antunez Moreno

The presentation by Juan Carlos Antunez Moreno in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://youtu.be/P8VA1bT8ADs> starting from 1:26:20.

Introduction

Since the Russian invasion of Ukraine began on February 24, 2022, various deficiencies have been evident in the Russian Armed Forces that have significantly affected military operations in that country (Atlantic Council military fellows, 2022).

Before the invasion of Ukraine began, everything seemed to favour Russia when it came to defeating the Ukrainian troops, occupying Kyiv, and establishing a pro-Russian government. The Russian troops were much more numerous than the Ukrainian ones and their military technology much more advanced. Russia's GDP is almost ten times that of its neighbor and its population almost triples that of Ukraine. Hardly anyone believed that Ukraine could stop or at least slow down a conventional Russian offensive (Kagan and Clark, 2022).

Today it seems clear that the Kremlin and the Russian armed forces greatly overestimated their own capabilities and totally underestimated Ukraine's military abilities and the resistance capabilities of its population (Konaev and Beliakova, 2022).

For decades, analysts and policy makers have overestimated the capabilities of the Russian armed forces. In part, this error has been due to a lack of credible information. Although the Russian army (and the former Soviet one) have been involved in different conflicts, in few of them have they faced a well-armed adversary willing to fight, whether in Afghanistan, Georgia or Syria. In Russia, the assessment of military capabilities has been hampered or even impeded by propaganda and repression. On the other hand, in the West this analysis has been based almost entirely on quantitative data and information on weapons systems (tanks, planes and missiles) and the raw number of soldiers, and not on qualitative characteristics that frequently determine success or failure in the battlefield (Barany, 2023).

As stated by the United Kingdom Ministry of Defence, “a combination of poor low-level tactics, limited air cover, a lack of flexibility and a command approach which is prepared to reinforce failure and repeat mistakes” (Axe, 2022) has led to a high casualty rate. From the Kremlin down to the front-line Russian invasion of Ukraine has shown poor leadership at every level. Some of these deficiencies are related to cultural and historical aspects of Russian leadership.

The Russian armed forces have turned out to be deficient in many qualitative aspects. They lack highly trained officers and non-commissioned officers who have proven to

be essential in the best armies in the world. Depending largely on the conscription (which is distributed unequally in the different sectors, classes and regions of the country), they suffer from low morale and low commitment of the troops. Many of the brightest and most educated young Russians have avoided serving their country or even abandoned it. Another multiplying factor of these shortcomings is pervasive corruption, which hinders or prevents the innovation, adaptability and versatility necessary on the modern battlefield (Barany, 2023).

Based on Hofstede's model, this article begins by attempting to analyse the cultural characteristics of Russian society that influence the Russian political and military leadership style. The study examines the leadership patterns of President Vladimir Putin and his influence on the Russian political-military leadership. This study also tries to analyse how these cultural characteristics of leadership have affected the actions of the Russian generals and have hindered Russian military operations in Ukraine.

Theoretical framework: Cultural characteristics of Russian society according to professor Geert Hofstede's model

The modern culture of Russian society is determined by three sets of factors: first, traditional Russian characteristics developed over centuries of history; second, the influence of totalitarianism during much of the 20th century; and third, the rapid and radical changes that occurred during the 1990s and early 2000s (Grachev 2006). These factors have heavily affected Russian leadership and management style.

Professor Geert Hofstede carried out one of the most extensive studies on how the cultural characteristics of a society influence its social relations, including the activities of leadership and management.

The webpage Hofstede Inside (<https://www.hofstede-insights.com/>) provides a tool that not only allows to find the cultural characteristics of the society of a given country, but also provides the possibility of comparing these characteristics in different countries.

According to Hofstede Inside, *“culture is the collective mental programming of the human mind distinguishing one group of people from another.”* These programming “influences the patterns of thinking which are reflected in the meaning people attach to various aspects of life and which become crystallised in the institutions of a society.” Culture does not imply that everyone in a given society is programmed in the same way; differences among the values of individuals in one country tend to be bigger than the value differences between countries. Nevertheless, *“we can still use such country scores based on the law of the big numbers, and on the fact, most of us are strongly influenced by social control.”*¹

Let us now look at a comparison of the values of Hofstede's six dimensions in Russian and American societies.

¹ It is important to highlight that statements about countries are generalisations and should be interpreted relative to other countries. Only with comparison a country score is meaningful. <https://www.hofstede-insights.com/>

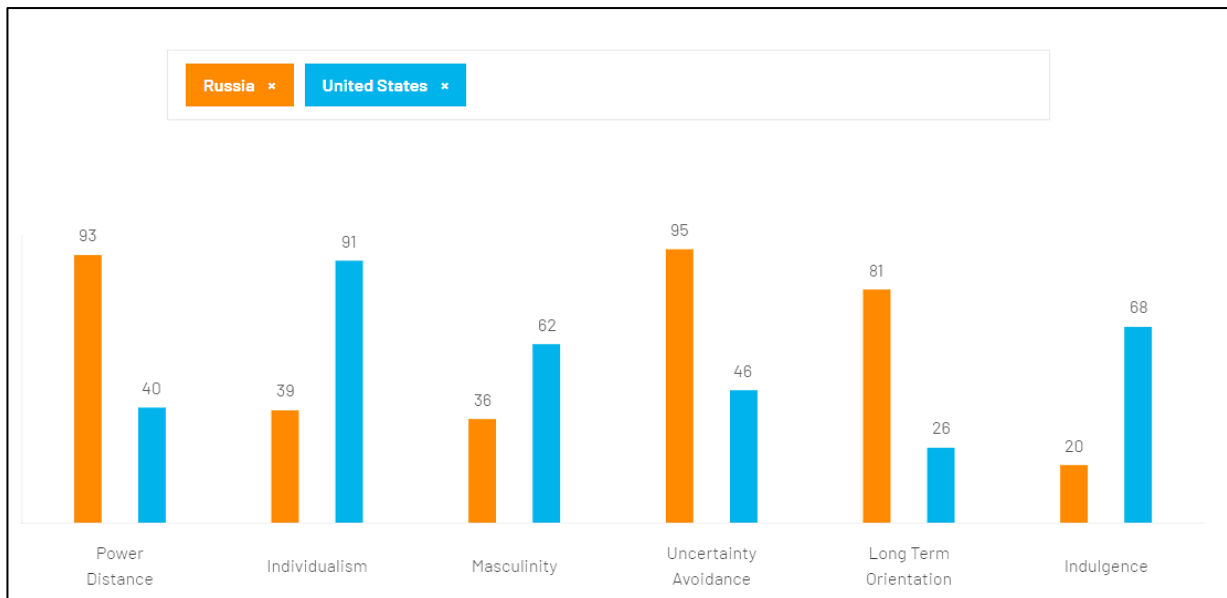


Table 1. Russia / United States comparison according to Hofstede's Model.²

It is easy to see at a glance the great differences that exist in the values of the Hofstede dimensions in both societies. Let us enumerate and describe them briefly now, paying special attention to those factors which influence management and leadership style:

a) Power distance: Russia (scoring 93) is a nation where power holders are very distant in society. This is underlined by the fact that the largest country in the world is extremely centralized. Economy is a good example of this: 2/3 of all foreign investments go into Moscow where also 80% of all financial potential is concentrated. The huge discrepancy between the less and the more powerful people leads to a great importance of status symbols. Behaviour has to reflect and represent the status roles in all areas of business interactions: be it visits, negotiations or cooperation; the approach should be top-down and provide clear mandates for any task. Power distance in the United States is very different (scoring 40). Within American organizations, hierarchy is established for convenience, superiors are accessible and managers rely on individual employees and teams for their expertise. Both managers and employees expect to be consulted and information is shared frequently. This factor will have a capital importance for military leadership and management style in both countries.

b) Individualism: In Russian society (scoring 39), family, friends and not seldom the neighbourhood are extremely important to get along with everyday life's challenges. Russian society presents a high degree of interdependence among its members. Relationships are crucial in obtaining information, getting introduced or successful negotiations. They need to be personal, authentic and trustful before one can focus on tasks and build on a careful to the recipient, rather implicit communication style. The United is considered one of the most individualistic countries in the world (scoring 91). Subordinates are valued primarily on the basis of individual success. They are expected to be self-reliant and display initiative. Hiring, promotion and decisions are based on merit or evidence of what one has done or can do.

² <https://www.hofstede-insights.com/country-comparison-tool?countries=russia%2Cunited+states>

c) Masculinity: Russia scores relatively low in this dimension (36). Russians at work-place as well as when meeting a stranger rather understate their personal achievements, contributions or capacities. They talk modestly about themselves and scientists, researchers or doctors are most often expected to live on a very modest standard of living. Dominant behaviour might be accepted when it comes from the boss, but is not appreciated among peers. In the United States (scoring 62) behaviour in school, work, and play are based on the shared values that people should “strive to be the best they can be” and that “the winner takes all”. As a result, Americans will tend to display and talk freely about their “successes” and achievements in life. Being successful per se is not the great motivator in American society, but being able to show one’s success. Many American assessment systems are based on precise target setting, by which American employees can show how well a job they did. There exists a “can-do” mentality, which creates a lot of dynamism in the society, as it is believed that there is always the possibility to do things in a better way. Typically, Americans “live to work” so that they can obtain monetary rewards and therefore attain higher status based on how good one can be. Thus, it is important to evaluate how your company should incentivize employees. Moreover, in the United States there is an admiration for strength and toughness to improve results and achieve the goals.

d) Uncertainty avoidance: (Scoring 95) Russians feel very much threatened by ambiguous situations, as well as they have established one of the most complex bureaucracies in the world. Presentations are either not prepared, e.g. when negotiations are being started and the focus is on the relationship building, or extremely detailed and well prepared. In addition, detailed planning and briefing is very common. Russians prefer to have context and background information. In the United States society (scoring 46), there is a fair degree of acceptance for new ideas, innovative products and a willingness to try something new or different, whether it pertains to technology, business practices or food. Americans tend to be more tolerant of ideas or opinions from anyone and allow the freedom of expression. At the same time, Americans do not require a lot of rules and are less emotionally expressive than higher-scoring cultures.

e) Long term orientation: The fifth dimension associates the connection of the past with the current and future actions/challenges. (With a very high score of 81) Russia is definitely a country with a pragmatic mind-set. In societies with a pragmatic orientation, people believe that truth depends very much on situation, context and time. They show an ability to adapt traditions easily to changed conditions, a strong propensity to save and invest thriftiness and perseverance in achieving results. A lower degree of this index (short-term) indicates that traditions are honoured and kept, while steadfastness is valued. The United States scores normative on the fifth dimension with a low score (26). American businesses measure their performance on a short-term basis, with profit and loss statements being issued on a quarterly basis. This also drives individuals to strive for quick results within the work place.

f) Indulgence: The restrained nature of Russian culture is easily visible through its very low score on this dimension (20) societies with a low score in this dimension have a tendency to cynicism and pessimism. In addition, in contrast to indulgent societies, restrained societies do not put much emphasis on leisure time and control the gratification of their desires. People with this orientation have the perception that their actions are restrained by social norms and feel that indulging themselves is somewhat wrong. The United States is an indulgent society (68) with a score of 68. In an

indulgent society, employees are likely to value both personal and professional success equally. Americans always want to reward themselves for the hard work they do which reflects the popular phrase “work hard, play hard”.

The Russian political-military leadership: lessons from Ukraine

When it comes to matching or competing with the West, Russia has always used a type of highly centralized state to develop its national capabilities. The worst thing about this type of approach is that in most cases this dynamic has ended with the conflation of the state itself with the figure of an almost all-powerful leader, who has imposed a totally personalist leader (Remnick, 2022).

President Vladimir Putin is a political leader who has undeniably had a great impact on his country and the rest of the world. To this end, it has exercised a type of autocratic, transactional, and closed leadership. He has created a cult of personality, crushing the opposition and freedom of the press, approving laws against sedition and defamation against the state, sacralising and idealizing the past and the Russian traditional and religious values, and largely employing propaganda, espionage, and the threat or use of military power (Chowdhury, 2019).

Since his return to the Russian presidency in 2012, President Putin has embraced the old Soviet concept that Russia is surrounded and threatened by enemies and that there are agents inside the country who collaborate with those adversaries. The increase in Russian nationalist sentiment and general antipathy towards the West has been developing since the mid-2000s, experiencing an exponential increase since 2014 with the annexation of Crimea and the start of the armed conflict in the Donbas region. This fact has produced a gigantic increase in the Russian defence budget and a series of structural reforms in the armed forces (Gresh, 2021).

President Putin also exercises leadership of an ideological type that promises his followers to return to a golden age of the past, where all needs were supposedly covered by a strong and centralized state and where Russia's prestige as a world power was indisputable. To achieve this goal, President Putin tries to show in his person all the values that he considers Russia represents: power, history, and imperialism (Hunter and Scott, 2022).

Russia today is still in the process of leaving the ideological vacuum that resulted from the Soviet Union's collapse. What is emerging in its stead is a selective puzzle of the past that mixes Orthodox imagery with Soviet triumphalism, combined with an increasingly inward-looking nationalism. The Russian society is embracing an increasingly conservative and nationalistic ideology. The new ideology is based on a deliberate recycling of archaic forms of mass consciousness. Ideology in Russia is a mass product that is easy to absorb; it is legitimized by constant references to the past, glorious traditions, and occasionally fictional historical events (Antunez, 2017).

President Putin is a strict and totally task-focused person and is obsessively influenced by his ideology and by his vision of Russia and the world. These characteristics greatly influence his leadership style. President Putin earned the respect of his supporters by keeping his promises and staying true to his ideas. He is perceived as a leader who supports and helps his allies and friends and when he decides, he stays true to that decision whatever the obstacles that come his way.

Influenced by the collapse of the Soviet Union, president Putin has tried to restore the importance of the role of the state since coming to power, based on a tradition that identifies that state as the highest aspiration of society and the only possibility of its own survival in adversity situations.

The system developed and imposed by President Vladimir Putin is a closed and personalist regime where personal relations stand out, even above the traditional, complex, and enormous Russian bureaucracy. This fact can also be transferred, with certain nuances, to the military leadership. The Russian Defense Minister has almost absolute power over the armed forces, subject only to the will and decisions of a single person: The President of Russia. The Russian command and control system depends almost completely on a highly hierarchical vertical structure, in which superior officers have a very high degree of authority over their subordinates (Shamiev, 2021).

President Putin is a strict and totally task-focused person and is obsessively influenced by his ideology and by his vision of Russia and the world. These characteristics greatly influence his leadership style. President Putin earned the respect of his supporters by keeping his promises and staying true to his ideas. He is perceived as a leader who supports and helps his allies and friends and when he makes a decision, he stays true to it, whatever the obstacles that come his way. The closest members of his team are loyal to him because he is a strong leader and makes them feel strong too. But those team members also know perfectly well that they can be reprimanded and punished if they lack loyalty to the leader or simply express different opinions about important issues (Whitmore, 2016).

The Russian military leadership has had to contend with a number of obstacles in civil-military relations: the military's general rejection of reforms; the various military clans of the different branches and services that fight to maintain and increase the rights and privileges of each organization; corruption; the weakness or the total lack of existence of feedback mechanisms from the lower echelons; the special political status of the huge industrial sector related to defence and the consequent politicization of acquisitions and renovations of military material; and the lack of motivation of a large part of Russian society to join the armed forces, after the collapse of the Soviet Union and the traumatic military campaigns in Afghanistan and Chechnya (Shamiev 2011).

Leaders who are perceived as strong and omniscient have characterized the historical development of leadership in Russia. For an important part of the Russian people, these leaders are the only people who could provide the rules and regulations and set the direction to achieve the greatest goals (McCarthy, D. et al., 2008). The persistence of this type of controlling and transactional leadership with deep historical roots has provoked a resistance to change that continues to hamper reforms in many Russian institutions, including the military.

Russian military culture has deep historical roots and is profoundly conservative. Despite this, it is also fluid and adapts and responds to the new challenges of each era. This culture is transformed through the successive reforms in the armed forces, influenced by political-military interactions, as well as the experiences and lessons identified and learned in previous armed conflicts (Baev 2019).

During the time of President Putin, the military leadership has become gradually more subordinate to the Kremlin, presenting in turn an increasingly pragmatic approach,

and bending to the President's decisions. It is impossible today to imagine any criticism or even a comment by a high-ranking officer of the armed forces that has not been previously approved by the Russian head of government. This total subordination of the military to the political establishment makes the process of monitoring and evaluating the armed forces very difficult (Shamiev 2021).

This style is reflective of the Soviet Era. Strict rules are accompanied by fear and rewards and are used to control discipline. This continues to be a common leadership style in non-entrepreneurial Russian organizations (McCarthy, Puffer and Darda, 2010)

President Putin has used other means to increase political control over the Armed forces. One of these tools is the reinstatement of political officers in the military ranks, reminiscent of the Soviet period (Kennan, 2021). This structure of political officers is embedded in all units and at all levels, from the company level to the military district command, to ensure that all members of the armed forces identify with and share the ideology of the regime (Golts, 2018).

In the process of centralization and control of the armed forces, President Putin has resorted to another important tool: religion. When President Vladimir Putin came to power, he realized the potential of the Russian Orthodox Church (ROC), which shared his views of Russia's role in the world and began to work toward strengthening its role in Russia, home of the world's largest Orthodox community (officially numbered at some 100 million believers). The patriarch of Moscow, Archbishop Kirill, and Russian President Vladimir Putin, have cemented an alliance for the pursuit of common values at home and abroad. These shared values can be characterized as openly traditionalist, conservative, anti-Western and anti-globalist (Antunez, 2017).

President Vladimir Putin and the ROC share a sacralised vision of Russian national identity and exceptionalism. According to their vision, Russia is neither Western nor Asian, but rather a unique society representing a unique set of values which are believed to be divinely inspired (Antunez, 2017). The Russian armed forces have not remained aloof from this symbiosis between state and church, and the importance of religion and religious leaders in its structure has increased enormously in recent years. A strong proof of this situation is the recent construction of an impressive cathedral of the Russian armed forces (Peck, 2018).

The existence of a structure of political, ideological, and religious indoctrination in the armed forces, parallel to the military chain of command, is a typical element of authoritarian regimes and makes leadership autonomy and decision-making decentralization more difficult.

The analysis of the relations that President Putin maintains with the Minister of Defense and his General Staff is especially relevant. The "Commander-in-Chief", President Putin, makes important decisions within the Ministry of Defense. Defence Minister, Sergey Shoigu, is a kind of "project manager" who facilitates the execution of these decisions of the leader. Chief of Staff, Valery Gerasimov, is another project manager who executes the tasks delegated by the Minister. Both military leaders have expressed their admiration for the "fundamental decisions" of the Commander in Chief and their fidelity to him for the trust he has placed in them (Diaz Robredo, 2022).

As in other areas of Russian politics, all information about critical defence issues is shared between President Putin and a narrow circle of close associates. All important decisions are made within that narrow group. There are hardly any significant checks and balances to the Presidential power of Vladimir Putin and his closest collaborators (Hill, 2016).

Decisions made before and during the invasion of Ukraine have revealed some behaviours that suggest the effects of groupthink bias. One of these effects is the "illusion of invulnerability" that leads the group to take risks with more confidence when it comes to achieving an objective than if they did it individually. If the supreme leader and each one of the members of the military leadership decide that the plan is correct, nothing can stop the team, they will have luck in their favour and the plan will be successful (Diaz Robredo, 2022).

Another consequence of group thinking is the tendency to a unanimous vision of the problem to be faced: the belief of unanimity. The cohesion between the members of the group, the admiration and commitment to the leader and the search for common goals cause a tendency to avoid disagreements. In this way, individual critical thinking is eliminated and replaced by the shared belief that everyone thinks in a similar way (Diaz Robredo, 2022).

Despite its sophisticated weaponry and multitude of a priori advantages, Russia has faced many strategic, operational, and tactical failures in Ukraine, due to faulty planning assumptions, totally unrealistic time frames, and unattainable goals. All this motivated by a poor leadership style (Massicot, 2022).

Regardless of the reforms of the last decade and the growing importance of unconventional methods in Russian military doctrine, there are some aspects that have not changed in the Russian armed forces, including the style of leadership (Tavenier, 2021). The local and global context has changed but not the methods and the Russian military leadership continues in its tradition of an authoritarian and centralized style.

In this context, little varied or diversified hypotheses are provided when evaluating and making decisions. Personal doubts, discrepancies or divergent views are considered a lack of loyalty to the group, an obstacle to the achievement of objectives and a threat to internal cohesion (Diaz Robredo, 2022).

Another consequence of the centralized leadership style where decision-making occurs within a small group of highly cohesive people is the "stereotyped view". This bias causes the adversary or the circumstances to be considered less decisive than they really are for the achievement of the mission. In the case of the invasion of Ukraine, the stereotyped vision has caused errors when estimating international reactions, the determination and courage of the armed forces and the Ukrainian people, or the charisma of President Zelenski (Diaz Robredo, 2022).

Today, the leadership style exercised by Russian generals, mirrors that of their supreme commander, President Putin, and is entirely task-motivated and goal-focused (Northouse, 2007, p. 114). This type of leadership is authoritarian and makes its decisions without paying attention to the opinions of its subordinates (Maniei, 2016).

Military leadership is vested with authority emanating from the president and employs it in a merciless manner by confronting any perceived enemies of the system (Szakonyi, 2017) and rewarding or punishing his subordinates (Northouse, 2007, p. 115).

The Russian military command provides its subordinates with highly structured and detailed tasks that must be executed to the letter, leaving little room for interpretation or personal initiative (Northouse, 2007, p. 115).

Some Western sources have even suggested that President Putin and the Commander of the Russian Armed Forces, General Valery Gerasimov, are personally involved in tactical decisions in the Ukraine war, something that should be carried out by colonels or brigadiers (Sabbagh, 2022).

As General David Petraeus points out, since the beginning of the invasion, the Russian forces have shown a series of weaknesses. Among these weaknesses, inadequate planning and totally inaccurate intelligence estimates stand out. For the purpose of this document, it is necessary to highlight the Russian inability to execute the most basic tasks. This has prevented them from carrying out joint operations between the different branches and services (Bergen, 2022). Russian armoured formations have no coordination with air assets and have run forward of artillery support while sticking to the roads. This has led to horrendous casualties (Balestrieri, 2022). A fully centralized command and control system has prevented the dispersal of Russian units that have become too easy a target for Ukrainian troops (Bergen, 2022).

Especially surprising is the high number of generals and commanders killed by Ukrainian forces on the battlefield. Some sources even point out that the Russian forces deployed in Russia could have even lose a fifth of their generals and senior commanders (Detsch, 2022)³. In addition, generals do not usually die alone. They are usually surrounded in their command posts by colonels and other senior officers who are killed or wounded alongside them. These casualties reduce Russian capacity to plan and execute military operations and severely diminish the morale of the troops.

The deficiencies in the chain of command and the low level of training and experience of the Russian troops and the difficulty of achieving their initial objectives have forced generals and commanding officers to move to the front line to personally lead their subordinated units, placing them in a high-risk situation (Shoaib, 2022).

A fundamental reason for these losses can also be attributed to a rigid military command structure in the Russian armed forces, inherited from Soviet times, and which has survived despite recent reforms. In the Russian armed forces, generals have full authority to make decisions at both the strategic and tactical levels. The leadership of the small units is deficient, due to the lack of experience, knowledge, authority, and autonomy, forcing the commanders to lead from the front. This vicious cycle places Russian generals and commanders at greater risk than their Western counterparts (Bayford, 2022).

Moreover, according to Admiral James Foggo, the Russian chain of command is a very threatening environment. Russian generals are always facing the sword of Damocles: "either they achieve the results expected by the higher command or they can be dismissed with a bang, or even worse." (Detsch, 2022).

³ Up to 2022, April 23, the tally of Russian generals killed in Ukraine was at 10, according to the Ukrainian intelligence Service. See: [Two more Russian generals killed in Ukraine \(nv.ua\)](#).

Senior leadership under the Putin regime follows the same principle as in the Soviet model. They are frequently promoted into positions of power not on their leadership attributes, but on their loyalty to the regime (Balestrieri, 2022).

Many of the members of the Russian high command have come to their position understanding that it is far more important to show unwavering loyalty to the regime than to express any doubts or differing opinions (Massicot, 2022).

The lack of a strong, consolidated, and professional corps of non-commissioned officers in the Russian armed forces, one of the backbones of Western armies, further complicates this situation (Bergen, 2022).

The Russian command structure is rigid and inflexible and suspicious of the initiative of the subordinates. Junior officers and NCOs have traditionally been unable to exercise any kind of authority, independence, and initiative. This fact forces military commanders to make decisions and get involved in tasks that in Western armies are carried out at a lower level (Bayford, 2022).

Russian leaders have also shown a lack of concern for the lives and well-being of its personnel. The Russian command makes decisions without thinking about the number of casualties and the human expenditure necessary to achieve its poorly designed objectives (Massicot, 2022).

These weaknesses of the Russian armed forces related to the style of leadership and the setbacks suffered on the battlefield have seriously affected the morale and the discipline of the troops, further complicating the achievement of their objectives (Beardsworth, 2022).

The lack of a non-commissioned officer corps has also forced Russian commanders to become involved at the front in matters of morale and discipline, such as the looting of shops and houses by poorly trained and led conscript soldiers. Many of these actions could be considered war crimes in the future, seriously affecting the legitimacy and international support for the Russian invasion (Detsch, 2022).

All those deficiencies mentioned in this chapter are more relevant and dangerous in complex warfare environment and conditions. This is a self-defeating mind-set that lowers troops' morale and degrades combat effectiveness and will to fight (Massicot, 2022).

Conclusions

Examining the cultural dimensions of Hofstede's model in the Russian society, it is possible to identify some patterns of Russian political and military leadership style that may have affected military performance in Ukraine.

Power Distance Index (PDI). Russia is a country with a model of centralized power in which those who hold it are far from the rest of society. The reflection of that status is reflected in all behaviors and social activities. Leadership and management take a top-down approach and subordinates are provided with clear and detailed instructions for each task. This style of leadership is evident in the Russian armed forces in which decision-making power is almost exclusively in the hands of Russian generals and senior commanders. Junior officers and non-commissioned officers have almost no level of autonomy and decision-making capacity, limiting themselves to carrying

out the detailed instructions of their superiors. This type of leadership is especially dangerous in uncertain situations in which the initial plans cannot be executed as expected and a high degree of flexibility is needed to redirect the situation.

Another consequence of the high degree of centralization of command and control of the Russian armed forces is the high degree of involvement of generals and senior commanders in tasks that in Western armies would be carried out by junior officers and non-commissioned officers, which places them in a situation of high-risk during battle. This risk is even higher in an urban warfare environment.

In addition, centralization and the consequent competition between the different branches and services are a huge obstacle when it comes to planning and executing joint operations.

Individualism Versus Collectivism (IVC). Russian society presents a high degree of interdependence among its members. Family, friends, neighbours and co-workers are important when facing the challenges of daily life. Relationships are important in any facet of life and are critical when it comes to obtaining information, establishing and consolidating contacts, or carrying out successful negotiations. These relationships must be personal, authentic, and reliable and they are an essential requirement before facing any task. Although this high degree of cohesion may initially seem positive, especially within the armed forces, it can also turn out to be extremely negative and even dangerous. When all the important decisions are made by a small group of people who share the same values, ideas and the same vision of the world, there is a risk of falling into group thinking.

This situation is especially dangerous when any type of different opinion is eliminated, which can even be identified as a sign of dissidence or disloyalty, causing an overvaluation of our possibilities and an undervaluation of those of the adversary.

Masculinity Versus Femininity (MAS). Dominant and authoritarian behaviour is accepted among the Russians when it is exercised by the leader or the elite of the system. The armed forces are no exception. This cultural characteristic reinforces the previous two, consolidating a highly hierarchical and centralized leadership and decision-making system that represents a major obstacle when facing the challenges of modern military operations.

Uncertainty Avoidance. The Russians feel insecure and threatened in situations of ambiguity and great importance is attached to extremely detailed planning, as well as the need for deep context and background information. The battlefield today is a volatile, uncertain, complex and ambiguous (VUCA) environment, as evidenced by the situation in Ukraine, where the initial plans do not work as expected and it is extremely difficult to have a clear and accurate vision of what is happening on the ground. Russian leadership style, command and control structures, and tactics and procedures in this kind of environment have proven highly inadequate and ineffective.

Long Term Orientation Versus Short Term Normative Orientation (LTO). Russia is a country with a pragmatic mentality in which traditions and "historical truth" are maintained but adapted to the situation, the context, and the moment. The current Russian political and military leadership has tried to adapt cultural aspects of the Russian past, both from the tsarist and Soviet times, into the armed forces. This

process has produced the reintroduction and consolidation of a type of highly authoritarian, ideological, and even messianic leadership that totally restricts initiative and autonomy and where military operations are subordinated to superior objectives that have proven to be practically unattainable and that have cost a high degree of material and human losses.

Indulgence. Russian society is highly restricted by social norms and citizens have a high level of suffering and resistance. Despite treasuring other positive aspects when facing a war, in conjunction with the factors mentioned above, this characteristic also contains negative aspects. The acceptance of rigid and restrictive social norms and suffering reinforces the authoritarian and centralized Russian leadership style, which, aware of this fact, will continue in its efforts to achieve its objectives even if the situation turns out to be totally adverse. The decision of the Russian political and military leadership to invade Ukraine despite the possibility of severe international sanctions, the more than likely suffering of the Russian people and the high possibility of military losses can be seen as proof of this.

The conclusions of this document should be complemented in the future with more in-depth research and analysis, including other theoretical frameworks in the cultural sphere and expanding it to other social and cognitive fields. Such a study would make it possible to assess the ability of the Russian political and military leadership to cope with the circumstances and demands of modern armed conflicts and evaluate the true capabilities of the Russian armed forces on the battlefield.

Literature

Antunez, J.C. (2017, November 11): *The Role of Religion and Values in Russian Policies: The Case of Hybrid Warfare*. Global Strategy. Retrieved from [The Role of Religion and Values in Russian Policies: The Case of Hybrid Warfare | Global Strategy – Universidad de Granada \(global-strategy.org\)](https://www.global-strategy.org/articles/the-role-of-religion-and-values-in-russian-policies-the-case-of-hybrid-warfare/12717).

Atlantic Council military fellows (2022, March 2): *Russia Crisis Military Assessment: Why did Russia's invasion stumble?* Atlantic Council. Retrieved from [Russia Crisis Military Assessment: Why did Russia's invasion stumble? - Atlantic Council](https://www.atlanticcouncil.org/articles/russia-crisis-military-assessment-why-did-russia-s-invasion-stumble/).

Axe, D. (2022, Mat 23): *Up to 15,000 Russians Have Died in Ukraine: U.K. Defense Ministry*. Forbes Staff. Retrieved from [Up To 15,000 Russians Have Died In Ukraine: U.K. Defense Ministry \(forbes.com\)](https://www.forbes.com/sites/davidaxe/2022/05/23/up-to-15000-russians-have-died-in-ukraine-uk-defense-ministry/).

Baev, P. K. (2019, April): *The Interplay of Bureaucratic, Warfighting, and Arms-Parading Traits in Russian Military-Strategic Culture*. George C. Marshall European Center for Security Studies. Retrieved from [The Interplay of Bureaucratic, Warfighting, and Arms-Parading Traits in Russian Military-Strategic Culture | George C. Marshall European Center For Security Studies \(marshallcenter.org\)](https://www.marshallcenter.org/articles/the-interplay-of-bureaucratic-warfighting-and-arms-parading-traits-in-russian-military-strategic-culture/).

Balestrieri, S. (2022, April 24): *Putin Has A Problem: Ukraine Just Killed Two Russian Generals In Kherson*. 19FortyFive. Retrieved from [Putin Has a Problem: Ukraine Just Killed Two Russian Generals in Kherson - 19FortyFive](https://www.19fortyfive.com/2022/04/24/putin-has-a-problem-ukraine-just-killed-two-russian-generals-in-kherson/).

Barany, Z. (September 8, 2023): *What the West Still Gets Wrong About Russia's Military*. Foreign Affairs. Retrieved from <https://www.foreignaffairs.com/russian-federation/what-west-still-gets-wrong-about-russias-military>.

- Beardsworth, J. (2022, April 18): *Losses, Morale and Counterattacks Stymie Russia's Donbas Offensive*. The Moscow Times. Retrieved from [Losses, Morale and Counterattacks Stymie Russia's Donbas Offensive - The Moscow Times](#).
- Bergen, P. (2022, March 20): *Russian forces "clearly have very poor standards," Gen. Petraeus says*. CNN. Retrieved from [Opinion: Russian forces 'clearly have very poor standards,' Gen. Petraeus says - CNN](#).
- Brislin, R. (2008): *Working with Different Cultures*. Contributions in Psychology, Number 51.
- Chowdhury, U. K. (2019, April 16): *Contrasting leadership styles: Putin, Modi, Haseena, Jacinda*. The Policy Times. Retrieved from [Contrasting leadership styles: Putin, Modi, Haseena, Jacinda - The Policy Times](#).
- Detsch, J. (2022, March 21): *"Winging it": Russia Is Getting Its Generals Killed on the Front Lines*. Foreign Policy. Retrieved from [Ukraine Is Killing Russian Generals at a Historic Rate \(foreignpolicy.com\)](#).
- Diaz Robredo, L. A. (2022, March 16): *Invasión de Ucrania: ¿Un nuevo ejemplo de error por pensamiento grupal?* Global Strategy. Retrieved from [Invasión de Ucrania: ¿Un nuevo ejemplo de error por pensamiento grupal? | Global Strategy – Universidad de Granada \(global-strategy.org\)](#).
- Golts, A. (2018, September 20): *Putin's Ideology Being Established in the Armed Forces*. Eurasia Daily Monitor. Volume: 15. Issue: 132. The Jamestown Foundation. Retrieved from [Putin's Ideology Being Established in the Armed Forces - Jamestown](#).
- Grachev, M. V. and Bobina, M. A. (2006): *Russian Organizational Leadership: Lessons from the Globe Study*. International Journal of Leadership Studies. Retrieved from [Microsoft Word - Grachev Bobina.doc \(regent.edu\)](#).
- Gresh, J. (2021, April). *Kennan Cable No. 67: Professionalism and Politics in the Russian Military*. Wilson Center. Retrieved from [Kennan Cable No. 67: Professionalism and Politics in the Russian Military | Wilson Center](#).
- Hill, F. (2016, February 10): *Understanding and deterring Russia: U.S. policies and strategies*. Brookings. Retrieved from [Understanding and deterring Russia: U.S. policies and strategies \(brookings.edu\)](#).
- Hofstede, G. (2001): *Culture's Consequences*, 2nd ed.
- Hofstede Insights. Retrieved from [National Culture \(hofstede-insights.com\)](#).
- Hunter, S. and Scott Ligon, G. (2022, March 8): *Putin, Zelenskyy and Biden all have unique leadership styles*. The Conversation. Retrieved from [Putin, Zelenskyy and Biden all have unique leadership styles \(theconversation.com\)](#).
- Kagan, F. and Clark, M. (2022, April 2022): *How Not to Invade a Nation*. Foreign Affairs. Retrieved from [How Not to Invade a Nation \(foreignaffairs.com\)](#).
- Konaev, M. and Beliakova, P. (2022, May 9): *Can Ukraine's Military Keep Winning?* Foreign Affairs. Retrieved from [Can Ukraine's Military Keep Winning? | Foreign Affairs](#).
- Maniei, A. (2016, March 10): *Leadership analysis of Vladimir Putin*. Amsterdam University of Applied Sciences. Retrieved from [\(99+\) Leadership analysis of Vladimir Putin | Ashkan Maniei - Academia.edu](#).

- Massicot, D. (2022, May 18): *The Russian Military's People Problem*. Foreign Affairs. Retrieved from [The Russian Military's People Problem: Why it Matters to the War in Ukraine \(foreignaffairs.com\)](#).
- McCarthy, D. et al. (2008): *Overcoming Resistance to Change in Russian Organizations: The Legacy of Transactional Leadership*. Organizational Dynamics, Vol. 37, No. 3, pp. 221–235. Retrieved from [Overcoming Resistance to Change in Russi.pdf](#).
- McCarthy, D., Puffer, S. and Darda, S. (2010, August): *Convergence in Entrepreneurial Leadership: Evidence from Russia*. California Management Review. Retrieved from [Convergence in Entrepreneurial Leadership Style: Evidence from Russia | Request PDF \(researchgate.net\)](#).
- Meyer, E. (2015): *The Culture Map*. Public Affairs.
- Naumov, A. and Puffer, S. (2000): *Measuring Russian Culture using Hofstede's Dimensions*. Applied Psychology: an International Review, 49 (4), 709-718. Retrieved from <https://www.academia.edu/6866843/Measuring-Russian-Culture-using-Hofstedes-Dimensions>.
- Northouse, P. G. (2007): *Contingency Theory in Leadership: Theory and Practice (pp. 113-126)*. 4th Edition. Los Angeles: Sage Publications. ISBN 10-141294161X.
- Peck, M. (2018, November 11): *Russia's Next Weapon: A Church*. The National Interest. Retrieved from [Russia's Next Weapon: A Church | The National Interest](#).
- Remnick, D. (2022, March 11): *The Weakness of the Despot*. The New Yorker. Retrieved from [A Scholar of Stalin Discusses Putin, Russia, Ukraine, and the West | The New Yorker](#).
- Sabbagh, D. (2022, May 16): *Putin involved in war "at level of colonel or brigadier", say western sources*. The Guardian. Retrieved from [Putin involved in war 'at level of colonel or brigadier', say western sources | Vladimir Putin | The Guardian](#).
- Shamiev, K. (2021, July): *Understanding Senior Leadership Dynamics within The Russian Military*. Center for Strategic & International Studies. Retrieved from [Understanding Senior Leadership Dynamics within the Russian Military | Center for Strategic and International Studies \(csis.org\)](#).
- Shoaib, A. (2022, April 16): *How the Russian officer elite is being decimated in Ukraine – 23 generals and commanders who were killed in action*. Business Insider. Retrieved from [Ukraine: the Russian Generals and Commanders Killed in Action \(businessinsider.com\)](#).
- Smit, C. (2017): *How to Overcome Cultural Differences in Business*. Culture Matters.
- Szakonski, D. (2017, December 01): *Why Russian oligarchs remain loyal to Putin (Op-ed)*. The Moscow Times. Retrieved from [Why Russian Oligarchs Remain Loyal to Putin \(Op-ed\) - The Moscow Times](#).
- Tavenier, R. (2021, December 10): *Contemporary war: a Russian perspective*. Militaire Spectator. Retrieved from [Contemporary war: a Russian perspective | Militaire Spectator](#).
- Whitmore, B. (2016, August 15): *Russia's Solitary Man*. Radio Free Europe Radio Liberty. Retrieved from [Russia's Solitary Man \(rferl.org\)](#).

RUSSIAN MARITIME THEORIES ON PAPER AND IN PRACTICE

Essi Tarvainen

The presentation by Essi Tarvainen in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://youtu.be/P8VA1bT8ADs> starting from 3:12.

Introduction

This article is a shortened version of the first part of my dissertation. I have examined Russian naval history in the Baltic Sea from the reign of Peter the First in the early 18th century to the collapse of the Soviet Union in 1991. In this research, I have found patterns showing how the Russian navy has worked over the centuries but also successes and complications including important and interesting people who have influenced and developed Russian naval thinking. We might also ask ourselves the following question: Are the old maritime theories relevant in the age of missiles and surveillance technology?

The answer is yes, at least partly. The conditions might change, and technological development is inevitable. The sea, however, stays the same and so do the individuals operating in that domain. On the other hand, Russia leans very much on historical rhetoric.¹ As president Putin stated in his speech in Saint Petersburg on the anniversary of Peter the First 9.6.2022: "*Peter the Great waged the Great Northern War for 21 years. It would seem that he was at war with Sweden, he took something from them. He did not take anything from them, he returned (what was Russia's)*,"² Thus, looking back at history is a vital component in Russian naval warfighting.

At this point, I will also add that last year's paper written by Dr Stephen Blank has contributed to the advancement of my research. Dr. Blank pointed out that the Russian navy had four goals in the war against Ukraine. Firstly, the Russian Navy's mission was to establish a blockade in the Black Sea, secondly, supporting the army and the possible amphibious landing and thirdly, launching missiles at key targets. The fourth implicit goal was to deter NATO from participating or entering the Black Sea. According to Dr. Blank, Russia's failures were several. Firstly, Russia had thus far (meaning a year ago) not established a central joint command. Secondly, Russians had poor seamanship including maintenance and logistics. This had led to the sinking of several Russian naval ships including the cruiser Moskva and recently missile corvette Ivanovets.³

¹ Gudrun Persson: "Russia and Baltic Sea Security" Available at: <https://doi.org/10.2307/j.ctvvn3m.7> Ann-Sofie Dahl (ed.) *Strategic challenges in the Baltic Sea region: Russia, Deterrence and Reassurance*, 2018, p. 24.

² Vladimir Putin's speech in St. Petersburg, Available: <https://www.reuters.com/world/europe/hailing-peter-great-putin-draws-parallel-with-mission-return-russian-lands-2022-06-09/>, June 9th 2022.

³ Stephen Blank: "The Black Sea and beyond; an initial assessment of Russian naval strategy and operations in the war against Ukraine." Available:

In my research, I have looked at the main battles in the Baltic Sea and the development of the Russian Navy from Peter the First's time 1696 to the collapse of the Soviet Union. My paper endeavour to answer the following questions:

1. How has Russian naval thought developed?
2. Who are some key people in this process?
3. What facts have caused successful periods of winning battles and vice versa: Can we see any patterns that lead to failure in naval operations?

The Russian navy established a de facto naval blockade in the Black Sea in early February 2022 before the official outbreak of the war in Ukraine. Blockade is also a key feature in some of the classical western naval theories, such as Sir Julian Corbett's whose thoughts revolve around the concept of "command of the sea." Corbett defined command of the sea as "*control of the maritime communications*" in his book *Some principles of maritime strategy*, published in 1911. This goal can then be achieved by using different methods such as securing, disputing, and exercising command.⁴

As we have seen during the past two years, on the strategical level, the Russian navy has executed methods of exercising command. Answering the question why, we can perhaps find at least one answer from Corbett's: "*The base idea of the attack and defense of trade may be summed up in the old adage: Where the carcass is, there will the eagles be gathered together.*" With this, Sir Julian meant that the most fertile areas always attracted the strongest attack.⁵ With this introduction of Corbett's naval theory, which the Russian navy seem to have applied at the strategical level, I will now focus on the key people and their ideas that have had a significant role in the development of Russian naval thinking. The history of Russian naval warfighting can be categorized in many ways. I have chosen to analyze it in two phases: First, the period of sailing ships and second the period of mechanical propulsion.

Peter the First

The individual responsible for the establishment and subsequent triumph of the Russian navy over Sweden in the Battle of Hango was Peter the First (1672-1725). There are many writings about him from childhood to his leadership and I will not go any deeper into that. However, I will point out the most important heritage to the Russian navy that can be seen even today.

First, Peter the First conducted the first combined operations between the army and the newly established navy to gain a foothold in the Sea of Azov and later in the Baltic Sea. Therefore, the Russian tradition of subordinating the navy to the army has a long tradition although Peter the First did not see it that way. Instead, he used the expression: "*any ruler that has but ground troops has one hand, but the one that has a navy has both.*"⁶

https://www.doria.fi/bitstream/handle/10024/187854/Russia%20Seminar%20publication_2023_web_v2%281%29.pdf?sequence=3&isAllowed=y National Defence University, Department of Warfare, Russia Seminar 2023, pp. 85-108.

⁴ J.J. Widén: *Theorist of Maritime Strategy Sir Julian Corbett and his Contribution to Military and Naval Thought*, Routledge, London & New York 2016, pp. 116, 120.

⁵ Ibid, p. 119.

⁶ See for example Michael Kofman: "Evolution of Russian naval strategy", Edited by Andrew Monaghan and Richard Connolly: *The sea in Russian strategy*, Manchester University Press 2023, p. 94.

In addition, he also adapted the thought of seizing a limited littoral area that has ever since been an important feature in the Russian warfighting.

Second, Peter the First introduced Russia to the practices of industrial espionage and intelligence gathering. His travels to Europe, primarily the Netherlands and United Kingdom were not only out of curiosity. It also involved the recruitment and relocation of experts and professionals to Russia. This knowledge would later be used to establishing Russian naval shipbuilding and docks. The European models like the Mediterranean galleons were hardly ever utilized as such. Instead, the Russians preferred to design their own ship types such as skampavejas, which is up to 32-39 m long galleys with only 1,5 draughts carrying 150 to 200 men. The type was suitable for naval fighting in the archipelago. This idea of designing and building own prototypes is familiar to many navies and Russia is not an exception. One reason for this was the shortage of material, mainly oak, and the other reason is purely the will to create own types of ships.⁷

Third, Peter the First established the first naval academies and by doing so deepened the Russian culture of seamanship.⁸

Fourth, the Russian culture of connecting the whole society behind military objectives was one of Peter's achievements that still lives on in Russia. Taxation, usage of the peasants for military support projects, for example to improve logistics, was a new normal. During his reign, taxation was tripled.⁹

These principles, established by Peter the First, appear to endure within Russian naval and military thinking even today. For example, Russian navy operates to support the higher political goal in cooperation with the army. Russia's industrial espionage has evolved in recent years, particularly in cyberspace.¹⁰ Russia is also currently preparing the society to wartime economy and adjusting as well as industry as citizens to support it.¹¹

Fjodor Ushakov

Moving on to the 18th and beginning of the 19th century, the Russian navy had been successful especially in the Black Sea. Admiral Fyodor Ushakov (1745–1817) led over 40 battles allegedly without losing one or even a single vessel. What constituted this success? Ultimately, his tactics were to be named the Ushakov's Doctrine, the first

⁷ Aarni Lehti: "Synpunkter på kustoperationerna mellan Lappvik och Rilax", Edited by Nils Erik Villstrand & Kasper Westerlund, *Stor seger – litet nederlag?* Meddelanden från Sjöhistoriska institutet vid Åbo Akademi nr 34, Fram, Vasa 2015 p.39. See also: Pavel Krotov: "Slaget vid Hangö udd 1714: forskningens huvudsakliga resultat och framtidsutsikter", Edited by Nils Erik Villstrand & Kasper Westerlund, *Stor seger – litet nederlag?* Meddelanden från Sjöhistoriska institutet vid Åbo Akademi nr 34, Fram, Vasa 2015 p.53.

⁸ Donald W. Mitchell: *A History of Russian and Soviet Sea Power*, André Deutsch Limited, UK, 1974 pp. 28–30.

⁹ William C. Jr Fuller: *Strategy and Power in Russia 1600–1914*, The Free Press, New York USA, 1992, pp. 56–61.

¹⁰ Massimo Pellegrino: *The threat of state-sponsored industrial espionage* Available: https://www.iss.europa.eu/sites/default/files/EUISSFiles/Alert_26_Industrial_espionage.pdf, European Union Institute for Security Studies, June 2015.

¹¹ Kyrlyo Ovsyaniy and Schemes: *Satellite Images Suggest Russia Is Ramping Up Production Capacity for Its War Against Ukraine*, Available: <https://www.rferl.org/a/russia-ramping-up-war-production/32658857.html>.

unofficial doctrine in Russian naval history. He can be seen as a strategist who developed new tactics after being given challenging tasks.¹²

Ushakov's principles were simple:

- Good care of material is essential
- An excellent strategy is to concentrate all of one's strength on a portion of the enemy's forces
- Breaking the enemy's formation with unexpected action
- Diligent support to the injured Russian vessels
- Exploitation of enemy weaknesses and
- Delegating responsibility to the commanding officers - but only after Ushakov had educated them personally.¹³

In this sense, it is logical that one of the highest possible naval honors offered by the state of Russia is the Order of Ushakov. Ironically, after Catherine the Second's death, Aleksander the First had little interest in Ushakov, who eventually retired to a monastery. In 2001, Ushakov was canonized by the Russian Orthodox church. Officially, the reason for canonizing was not Ushakov's military career, but his devoted work amongst his fellow sailors and their families.¹⁴ A few months ago, on October 20th, 2023, Russia's foreign minister Sergey Lavrov gave the opening words in the exhibition "Invincible Admiral – Invincible Russia: Holy Righteous Warrior Fyodor Ushakov" stating "*This illustrious military leader went down in history as an outstanding naval commander and an extraordinary example of selfless service to the Fatherland.*"¹⁵

Ushakov is thus being used as a heroic example of a non-selfish leader whose canonizing is used as a method of soft power projection as mentioned by Aristide M. LaVey two years ago in this seminar.

After Fyodor Ushakov, technological development quickly transformed the navies from sailing vessels to warships with mechanical propulsion. With this, the tactics and maritime thinking also had to be changed to meet the new norms. In the late 19th century, not only Carl von Clausewitz wrote the principles on war fighting but also maritime theories were put down on paper. The works of for example admirals Alfred

¹² Доценко В. Д.; Доценко А. А.; Миронов В. Ф.: «Стратегия в период парусных флотов.» *Военно-Морская стратегия России*. Terra Fantastika, СПб, Эксмо, Москва 2005, p. 33. See also: Donald W. Mitchell: *A History of Russian and Soviet Sea Power*, André Deutsch Limited, UK, 1974 pp. 76–80.

¹³ В. Д. Овчинников: ФЛОТОВОДЧЕСКОЕ НАСЛЕДИЕ АДМИРАЛА Ф. Ф. УШАКОВА, *Военно-исторический журнал*, 2009, No 2, s. 22-25, Available: <https://dlib-eastview-com.mp-envoy.csc.fi/browse/doc/19716510t>. See also: Donald W. Mitchell: *A History of Russian and Soviet Sea Power*, André Deutsch Limited, UK, 1974 pp. 76–80.

¹⁴ Aristide M. LaVey: "Admiral Ushakov, the study of Russian power projection" Available: https://www.doria.fi/bitstream/handle/10024/185874/Russia%20Seminar%20publication%202022_web.pdf?sequence=1&isAllowed=y, National Defence University, Department of Warfare, Russia Seminar 2022, p. 73.

¹⁵ Sergey Lavrov speech, available: https://mid.ru/en/foreign_policy/news/1910569/?TSPD_101_R0=08765fb817ab2000f1de83a0d2a7f52d6b1ca768e95ccf2f4ce0561a26f13f152feff881c253739708e643d1b0143000abd5e935f45d7a143fa5c9b056ed-abd3347aa281828b4d253c50dddac525da83d0c5089389aba555292171212f91917c, October 20th 2023.

T. Mahan and Philip Colomb were translated to Russian directly after they had been published.¹⁶ Both theorists however focused mainly on the strategical level.

Stepan Makarov

In Russia, Admiral Stepan Makarov (1849-1904) primarily focused on tactical level naval operations. As Captain (N) Robert B. Bathurst writes in the introduction of Makarov's work translated into English:

“At the beginning of the century, there was an enormous amount of new technology to be absorbed into naval tactics...” “Lord Nelson’s great battles still dominated naval minds. The preconceptions about naval maneuvers reflected the dominance of the sail. But with more powerful weapons, greater ranges, and the capability of maneuvering independent of the wind, the study of past naval battles was insufficient preparation for the present. Radio communication and the new capabilities for maneuver would radically transform naval battles. All of this required an innovative and imaginative thinker, free from prejudice and compartmentalized thinking. That was the role Admiral Makarov fulfilled in the Imperial Russian Navy.”¹⁷

Not only a naval officer, Makarov was also an oceanographer, a naval engineer and an academic. At the age of 29, he innovatively devised both torpedo boats and their corresponding tactics.¹⁸ He sailed around the world onboard the vessel *Vitiaz*, designed the world's first icebreaker *Jermak* as well as Russia's first minelayers. He invented the capped armor-piercing shell, introduced the smokeless powder, and improved the survivability of warships.¹⁹

As an addition to his technical, geographical, and naval skills, Makarov wrote a series of articles published in *Morskoi Sbornik* and later entitled collectively *Discussions of Questions in Naval tactics*. In this series of articles, Makarov emphasizes the significance of psychological and pedagogical skills of both the crews and officers.²⁰

The reception from Makarov's own colleagues was not entirely warm-hearted. Amongst the critics were a Mahanian theorist, Nikolai Klado, as well as the future commander of the Second Pacific Squadron, Zinovy Rozhdestvensky. Though Makarov responded to these challenges, the official approval from the authorities was missing and the book remained unpublished in Russia until 1904.²¹ It can be assumed that his fellow colleagues were already inspired by Alfred Mahan, as would later become evident in the discussions at the beginning of the 20th century. It is possible to

¹⁶ Доценко В. Д.; Доценко А. А.; Миронов В. Ф.: Морская стратегия в период паровых броненосных флотов. *Teoksessa Военно-Морская стратегия России*. Terra Fantastika, СПб, Эксмо, Москва 2005, pp. 77–79.

¹⁷ Robert B. Bathurst: “The lessons of a Russian Naval Genius”, Introduction to Stepan Makarov, *Discussion of Questions in Naval Tactics*, Classics of Sea Power -series, U.S. Naval Institute, Annapolis, Maryland USA, 1990, pp. xxv.

¹⁸ *Ibid*, pp. xix.

¹⁹ Президентская вивлиотека имени б.Н. Ельцина: *родился выдающийся русский адмирал Степан Осипович Макаров*. Available: <https://www.prlib.ru/history/618926> See also: Mitchell, Donald W.: *A History of Russian and Soviet Sea Power*, André Deutsch Limited, UK, 1974 s. 201–202. See also: David R. Jones: “Admiral S.O. Makarov and Naval Theory”, available: <https://www.jstor.org/stable/44642488>, *Naval War College Review*, winter 1994, Vol.47, No.1 pp. 68–86.

²⁰ Г. Васянович: «Психолого-педагогические идеи адмирала С. О. Макарова», *Morskoi Sbornik* Available: <https://dlib-eastview-com.mp-envoy.csc.fi/browse/doc/35529084>, No.7, July 31, 2013, pp. 65–72.

²¹ David R. Jones: “Admiral S.O. Makarov and Naval Theory”, available: <https://www.jstor.org/stable/44642488>, *Naval War College Review*, winter 1994, Vol.47, No.1 pp. 68–86.

think that the Mahanian idea of a large ocean going fleet and decisive battle seemed appealing for the tsarist naval officers in the footsteps of both Peter the First and admiral Ushakov.

What were the main thesis' in Makarov's work? He realised imperial policy as the highest leading element. After that came the naval strategy. He saw that rather than being guided by past battles and practice, a modern naval tactician should primarily examine the technology and weapons at hand. Only then should one choose the means to employ them. Naval warships or platforms were to fulfill the imperial Russia's policy objectives.²² Makarov also commented on the question about the tactical differences between the army and the navy by saying:

“Does there exist only one general tactical system, or is it necessary to distinguish military from naval tactics? Our companions in arms on shore reduced their profession to a science sooner than ourselves. This came about from the same reason there were more people with scientific training in their circle than in that of seamen -practical people- since the war on land was conducted on a larger scale than at sea, and finally, because the method of conducting war on land was more subject to generalization than when waged upon such a capricious element as water.”²³

Makarov added that the objectives are the same for the fleets as for the armies and that is to defeat the enemy. The methods of accomplishing the result are totally different.²⁴ Yet he added, that keeping a portion of an army in reserve is fundamental in military operations, however, there are no such reserves maintained in naval battles.

Due to the emphasis on technology and weapons, Makarov also understood the meaning of training the personnel behind these systems and platforms. He focused on the morale of the crews, taking examples from the latest battles led by Napoleon, Nelson, and Suvorov. Makarov recognized the importance of incorporating a military psychology course into the curriculum of higher military schools. These basic principles are introduced in his series of writings and include examples such as: 1) It is vital to research the effect of war on both individuals and the whole military organization.²⁵ 2) The moral element is significant in naval war where, due to speed, interval of time is counted by seconds 3) The state of spirit of the crew depends upon the mutual relations of all those entrusted with performance of military duties.²⁶

To reach these psychological and moral goals, Makarov was eager to develop naval pedagogics in a constructive manner where individuals and their characters were the main focus. In his own words: “... *But men differ so in character and understanding that precisely the same methods will not serve for any two individuals. One must be encouraged, another restrained, and care must be taken not to discourage either one of them.*”²⁷ Giving this description, which embodies his humanistic approach, it is not surprising that his death in Port Arthur deeply affected the morale of Russian sailors during the Russo-Japanese

²² Ibid, See also: Stepan Makarov: *Discussion of Questions in Naval Tactics*, Classics of Sea Power -series, U.S. Naval Institute, Annapolis, Maryland USA, 1990, p. 37.

²³ Ibid, pp. 30–31.

²⁴ Ibid p. 32.

²⁵ Г. Васянович: «Психолого-педагогические идеи адмирала С. О. Макарова», *Morskoi Sbornik* Available: <https://dlib-eastview-com.mp-envoy.csc.fi/browse/doc/35529084>, No.7, July 31, 2013, pp. 65–72.

²⁶ Stepan Makarov: *Discussion of Questions in Naval Tactics*, Classics of Sea Power -series, U.S. Naval Institute, Annapolis, Maryland USA, 1990, p. 47.

²⁷ Ibid. p. 48.

War in 1904. It has been said that the loss of a beloved admiral led to paralyzing the Russian fleet and was a part of the multiple reasons why Russia lost the war. He was missed because he had shown himself everywhere, visited ships, talked to the men, and gave orders for action to reverse the months of indolence.²⁸

Makarov viewed military and naval education as a national endeavor that commenced at the individual level, extended through school education, reading literature, and culminated in the training of proficient naval officers and crew members. As he explains: “Every man receives his first training from his mother, and that which is instilled in his early years remains with him through life.” He then continues to clarify how a nation and its parents accustomed to peace, begins to lose the military valor. That is when this duty becomes the duty of the government.²⁹

Looking at the recent development in the state of Russia, we might see reflections from Makarovian thinking. First, the role of weapons technology and the usage of platforms to fulfill nation’s policy is very much alive. For example, Kalibr strikes from Buyan M-class corvettes or the coastal mission complexes of the Bal and Bastion family represent such thinking.³⁰ Second, the thought of seeing military education as a nation’s role can be seen in the rising of the youth military organizations and nationwide propaganda. Families continue to provide foundational education, while schools and professional educators are tasked with imparting knowledge in alignment with the principle set by the state. This can be found in the Russian state patriotic programs and with the fact that the recruitment takes place in primary schools.³¹

However, I am not sure this current situation is what Makarov would have wanted to see. His focus in naval pedagogics was not in state-supported patriotism, it was in the quality of education and in the development individual boldness, readiness, and perception, which he explains thoroughly.³² Third, Makarov recognized the educational significance of long-distance voyages for the crews. This tradition lives on in the Russian Navy as well as in other navies. Finally, Makarov’s pioneering and innovative work with weapons and vessel designing has likely inspired many Russian naval officers and engineers.

Makarov’s focus on morale and psychological training seems to have been forgotten, both during the Soviet Union’s Red Banner Navy and in the current Russian navy. My opinion is, that this is a result of a long authoritarian regime. During Stalin’s era and for subsequent decades, political officers suppressed academic and open discussions on various platforms. Those who dared to think, act, or criticize faced purges that cost them their lives. This is, however, problematic in the navy where the

²⁸ Robert B. Bathurst: “The lessons of a Russian Naval Genius”, Introduction to Stepan Makarov, *Discussion of Questions in Naval Tactics*, Classics of Sea Power -series, U.S. Naval Institute, Annapolis, Maryland USA, 1990, pp. xxxii-xxxiii.

²⁹ Ibid, pp. 99–100.

³⁰ Liv Karin Parnemo: “Russia’s Naval Development – Grand Ambitions and Tactical Pragmatism”, Available: <https://doi.org/10.1080/13518046.2019.1552678>, *Journal of Slavic Military Studies* 2019, Vol. 32, No. 1, 41-69. See also: Geoffrey Till, “Russia: a sea power of a sort?” Edited by Andrew Monaghan and Richard Connolly: *The sea in Russian strategy*, Manchester University Press 2023, p. 71.

³¹ Alava, J.: 2021. Russia’s Young Army: Raising New Generations into Militarized Patriots. In: Pynnöniemi, K (ed.), *Nexus of Patriotism and Militarism in Russia*. Helsinki: Helsinki University Press, DOI: <https://doi.org/10.33134/HUP-9-9>.

³² Stepan Makarov: *Discussion of Questions in Naval Tactics*, Classics of Sea Power -series, U.S. Naval Institute, Annapolis, Maryland USA, 1990, chapter 3.

platform optimally operates as a large prosperous family where each member needs to know that in the most dangerous situations, the individual next to you regardless of rank will help you.³³ News and articles have revealed the low morale of the Russian troops as well as bullying and bribery. Eight years ago, the leadership of the Baltic Fleet underwent significant changes, largely prompted by these reasons.³⁴

Recent research shows however, that the understanding of the concept of morale is different in Russia than it is in the west. The three key factors in Russian morale are *spirituality* (rus. *Dukhovnost*), *communality* and *coercion*. The first one, spirituality, has however a strong spiritual tendency and seems to be more of an illusion that can lead to misunderstanding of one's own strengths and weaknesses. Coercion on the other hand is common amongst most militaries. In the Russian case, the ineffective use of coercion, routines and discipline can explain the low morality and performance of the Russian troops, including the navy.³⁵

Conclusions

While there are numerous key figures in Russian naval history, not all of them were authors of naval tactics or victors in every battle. The most victorious naval battles seem to have been under the command of such individuals who have, first, shown courage, trust and commitment and thus psychologically influenced their fellow comrades. Second, they have understood the need to develop new tactics adaptable for changed military development. Third, those who have had the trust of and in the nation's governance. For example, Ushakov and the famous army commander Aleksander Suvorov were both trusted by empress Catherine the Second and Makarov by Nikolai the Second. On the other hand, Peter the First for obvious reasons did not seek for such approval and yet he widely used military advisors and assemblies before the final decision making. And fourth, trust of the empire led to mission command tactics.

Controversially, moody, and self-assertive leaders using authoritarian power often seem to have derailed both ship production and naval leadership. Both should be planned and executed with a long-term planning horizon. The works of admiral Makarov were used only partially, and we can only speculate the reasons for that. Was it because Makarov had deeply analyzed what made admiral Nelson so victorious and suggested the same kind of approach to naval pedagogics? From my perspective, it appears that both the imperial Russian leadership and the Soviet governance were unwilling to acknowledge and adopt developments that had occurred in Western countries. Had admiral Makarov drawn examples only from Russian naval history and its naval leaders, the response might have been differed. However, as an academic, Makarov adhered to presenting facts objectively.

³³ Г. Васьянович: «Психолого-педагогические идеи адмирала С. О. Макарова», *Morskoi Sbornik* Available: <https://dlib-eastview-com.mp-envoy.csc.fi/browse/doc/35529084>, No.7, July 31, 2013, pp. 65–72.

³⁴ Norman Friedmann: "World Naval Developments – What was behind Putin's Stalin-style purge?", available: <https://www.usni.org/magazines/proceedings/2016/september/world-naval-developments-what-was-behind-putins-stalin-style> September 2016, Vol. 142/9/1,363.

³⁵ Pär Gustafsson Kurki: "The Russian Understanding of Soldier Morale: Essentials of key ideas from 1990s to 2022" Available: <https://www.foi.se/report-summary?reportNo=FOI-R--5481--SE>, October 2023, FOI.

Finally, I would like to go back to analyzing why currently Russian naval forces have not fully performed as one might have expected in the Black Sea. Looking back at historical battles, leadership and governance, Russia has succeeded better when mission command leadership has been applied in their navy and thus fostered commanders who have understood the meaning of morale and naval pedagogics combined with tactics. The strategic goal has consistently been to defend Mother Russia, initially in collaboration with the army and later with the addition of the air force.

Weapons have developed; however, while the crews still operate their platforms. If a pervasive atmosphere of mistrust, fear or corruption prevails onboard, the performance is likely to be compromised in the most precarious situations. As in the 1930's Russia according to Geoffrey Till: *"It was easy for naval officers to conclude that the reward for innovative thinking was a bullet in the back of a head."*³⁶ While bullets may no longer be a threat, the sinking of the cruiser Moskva and missile corvette Ivanovits and the subsequent veil of secrecy must have conveyed to fellow commanders and comrades that their positions in the hierarchy are not secure. Russian navy seems to have forgotten the lessons their most intellectual naval thinkers have taught and leans on harsh military and naval education instead of trust and independency. Both failures significantly diminish the capacity of naval assets.

I'll end my presentation with a letter written by admiral Ushakov to his fellow admiral Putoshkin in 1799:

*"... I trust your rationality and consideration. Use your efforts to fulfill the goals set by His highness, count Aleksander Suworov. And when you arrive here, through Livorna or using any other route that you find the most suitable, please send your report to His Highness as well as the letter I have attached."*³⁷

("Все оное полагаю я на ваше благоразумие и обстоятельства. Употребите старание ваше выполнить желания его сиятельства графа Александра Васильевича Суворова-Рымникского и в приходе туда, через Ливорну или откуда будет удобнее, отправьте к его сиятельству ваше донесение, также и прилагаемое от меня письмо.")

³⁶ Geoffrey Till: "Russia: a sea power of a sort?" Edited by Andrew Monaghan and Richard Connolly: *The sea in Russian strategy*, Manchester University Press 2023, p. 61.

³⁷ В. Корвяко: Военное Искусство Адмирала Ф. Ф. Ушакова, Морской Сборник, 5/2011, pp. 17–18, <https://dlib-eastview-com.mp-envoy.csc.fi/browse/doc/25172103>.

THE RUSSIAN WAY OF WARFARE IN THE AERIAL DOMAIN

Viktoriya Fedorchak

The presentation by Viktoriya Fedorchak in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://youtu.be/P8VA1bT8ADs> starting from 3:41:20.

Introduction

The paper aims to address the Russian way of warfare, focusing on its approach to the employment of mass in air warfare. In this regard, attention is paid to Russia's employment of mass in terms of the structure of its air force, its capabilities and its employment of air power in mass attacks during Russian wars.

The modern concept of mass is explained by referencing the existing academic and military debates on the subject, including some recent works by Heather Venable,¹ David Deptula and Heather Penney,² and Viktoriya Fedorchak.³ In this regard, the focus is on the shift from balancing numerical superiority and cutting-edge technologies to establishing a critical mass – meaning sufficient numbers to achieve the posed objectives. The recent use of air power by Russia in Ukraine is assessed in terms of its strengths and limitations, and the paper addresses the effectiveness of the Ukrainian countermeasures in degrading the Russian numerical superiority. The discussion section provides key takeaways for strengthening national defences against numerically superior opponents. Unlike previous works on the subject, attention is also paid to the historical traces of the Russian way of employing air power. Hence, the features of the Russian way of warfare are traced in the post-Cold War development and employment of air power and the conceptualisation of air power.

Mass, artificial mass and critical mass

After the end of the Cold War, armed forces across the world had to be reformed and to adjust to the new reality of the hopes for peaceful trends in international relations and the consequent opportunities for cutting military budgets. The phenomenon of the peace dividend had varied effects on the national armed forces of Western countries.⁴ One of the consequences of the military reforms was the establishment of a

¹ David Alman and Heather Venable: 'Bending The Principle Of Mass: Why That Approach No Longer Works For Airpower,' War on the Rocks (accessed 3 March 2023). Available online: <https://warontherocks.com/2020/09/bending-the-principle-of-mass-why-that-approach-no-longer-works-for-airpower/>

² David Deptula and Heather Penney: Building An Agile Force: The Imperative for Speed and Adaptation in the U.S. Aerospace Industrial Base (Arlington: The Mitchell Institute for Aerospace Studies, 2021). https://mitchellaerospacepower.org/wpcontent/uploads/2021/05/a2dd91_776e3514d41f4e0aa1c0954050eaa194.pdf

³ Viktoriya Fedorchak: 'The Mass Approach in the Air War Over Ukraine: Towards Identifying a Critical Mass,' *Handlingar Och Tidskrift*, no. 1 (2023):110–126.

⁴ Viktoriya Fedorchak: *The Russia-Ukraine War: Towards Resilient Fighting Power* (London: Routledge, 2024), p. 210.

certain dichotomy when structuring and reforming national military forces: the mass (numerical) and the cutting-edge (smaller in number but more qualitative) approaches. The mass approach to structuring armed forces was a continuation of the massive armed forces of the Cold War and the tradition that numbers were equivalent to greater capabilities and stronger effects. By contrast, sophistication and the multi-faceted effects of cutting-edge technologies meant reductions in the number of actual pieces of equipment and personnel, and the consequent shrinking of military services across the Allied nations.⁵

A country's choice to follow one way or the other was often dependent on considerations of costs, the level of sophistication that already existed in the available equipment, access to cutting-edge Western technologies, and the condition of the available equipment and quality of the trained personnel. Accordingly, Western countries followed the cutting-edge approach to structuring their armed forces. By contrast, Russia and China followed the numerical or mass approach. In this regard, it should be emphasised that the adoption of the numerical approach did not merely mean preserving the numbers in the existing Cold War arsenals. The reforms of both the Chinese and the Russian military capabilities followed a rather holistic approach to mass and numbers. Neither country could fully keep up with the Western cutting-edge technologies (due to limitations in accessing certain technologies) at the same pace and with the corresponding numbers. Also, both countries had to revamp the old Cold War capabilities of their military arsenals in order to free up space and funds for the more advanced areas of their capabilities. Since they could not have full technological superiority over the Western countries, the solution was to combine greater numbers of the functional capabilities of the previous generation with the gradual increase and development of more advanced technologies to match the Western competition.⁶

From the conceptual perspective, this dichotomy in the structuring of the military can be summarised in the discussion of what mass actually represents and how it can be achieved. The traditional understanding of mass as a numerical advantage gradually shifted to what became known as artificial mass – meaning the advantages provided by cutting-edge technologies to give more effective situational awareness, command and control (C2) and lethality in different operating environments.⁷ In this regard, greater focus was placed on the multi-functionality of various platforms, and a greater extent of integration of systems to achieve massed effects. This entailed higher costs for cutting-edge technologies, and had an impact on the timeframe for their development, production and procurement.⁸

While the supremacy of artificial mass proved to be significant in various post-Cold War conflicts of varied complexity, tempo and length, the revival of peer and near-peer conflicts illustrated further the need to reconsider the approach to cutting-edge technologies, numerical superiority and timeliness in available capabilities. In their 2021 report, Deptula and Penney outlined the need for balancing artificial and traditional numbers in the US national offset strategies to gain an advantage in peer and

⁵ Viktoriya Fedorchak: *Understanding Contemporary Air Power* (London: Routledge, 2020), pp. 147-165.

⁶ *Ibid.*

⁷ Alman and Venable: 'Bending the Principle of Mass.'

⁸ N. Augustine: 'Augustine's Laws and Major System Development Programs', *Defence Acquisition Research Journal*, 22, no. 1 (2015), 2.

near-peer conflicts.⁹ The numbers and diversity of capabilities have to be strengthened in order to effectively cover the required range and geography of the battlespace, to undermine the enemy's targeting and operational performance and to *'withstand[...] attrition in contested environments to remain operationally resilient and effective.'*¹⁰

The war in Ukraine has illustrated the need for a balanced approach to structuring and sustaining capabilities so that they are flexible enough to adjust to the constantly changing fighting environment. The term 'critical mass' refers to the balanced approach to structuring one's military and can be defined as *'the ability to rapidly produce and/ or have sufficient numbers of military capabilities to deploy, modify, sustain and integrate into the force structure of a given operating environment according to the operational requirements'*.¹¹ Accordingly, a simplified understanding of the entire critical mass approach might mean balancing more complex and cutting-edge technologies against less sophisticated but more numerous ones which can provide the needed edge and concentration of effects at a given time.¹² On the other hand, if approached as a full cycle from development to employment, critical mass would focus on the set of decisions and actions required to provide sufficient capabilities at the required tempo of the fighting environment. Hence, questions of production capacity become paramount in building up and sustaining critical mass in inter-state warfare.

Russian numerical approach

The legacy of the Soviet Union's numerical approach on Russia's reforms of its armed forces was affected by various considerations. First of all, the mass of equipment remaining from the Cold War had to be readjusted for the new realities, which meant reducing numbers because of the lack of funding, of production capacity and of the means to sustain older platforms in full functionality during the 1990s. However, with the start of Putin's rule, there was a shift towards reforms of the military. New trends for reconceptualising and modernising platforms and strengthening the cutting-edge nature of equipment were emphasised to match the Western developments. While various claims were made about Russian stealth aircraft and the hypersonic status of some ballistic missiles, many Western experts doubted these. The more hyped platforms did not come to fruition in Russia, but its aerial fleet still added more advanced aircraft (MiG-35 fighters, Tu-22M3M bombers, and Su34 fighter bombers) with wider functionality and application across various aerial tasks. In 2021, the Russian Aerospace Forces (VKS) had the third largest combat air fleet in the world after the USA and China, with 1,531 combat aircraft, but for tanker aircraft it was in fourth place, with only 19 such aircraft.¹³ Traditionally, Russian air-to-air refuelling capabilities were reserved for their strategic bomber fleet.

Not having the full spectrum of aerial assets to compete with the Western cutting-edge technologies, Russians focused on long-range, surface-to-air missile systems (S-400), the establishment of Anti-Access/Area Denial (A2/AD) environments, and ballistic and cruise missile systems like the Iskander and Kalibr (long-range precision-

⁹ Deptula and Penney: 'Building An Agile Force'.

¹⁰ Ibid., p. 19.

¹¹ Fedorchak: 'The Russia-Ukraine War', p. 18.

¹² Fedorchak: 'The Mass Approach', pp. 110–126.

¹³ Flight International, 'World Air Forces 2021', <https://www.flightglobal.com/download?ac=75345>.

strike). While the fighter and bomber fleet were most certainly stronger in numbers, the traditional secondary/supportive role platforms (AWACS (Airborne Warning and Control System), strategic transport and air-to-air refuelling) were underrepresented in the Russian fleet, and they also did not have full multi-functionality drones.

A few distinctive features characterised the employment of Russian aerial assets in the post-Cold War conflicts. First, they used aviation forces as an extension of the army or as artillery from the air, which meant that the air force was not fully independent and was not trained to plan effective activities on the operational and strategic levels, while on the tactical level the focus was more on air interdiction and close air support. Second, despite various claims about successful and effective cross-service integration or joint operations, Russia showed significant shortfalls in that area.¹⁴ During the Chechen Wars, the air and land components were characterised by poor communication and a very rudimentary cooperation setup. While the Russian use of aerial assets in Syria demonstrated significant air–land integration, and Russia could be considered to have learned the lesson and to some extent adopted it in the Russian air war in Ukraine, their air–land integration in Syria was on the much smaller scale of integrating aerial assets with the Special Operations Forces (SOF) groups; the need for multi-faceted integration with the army and diverse units was much greater in Ukraine in 2022.¹⁵

Another distinctive feature of the Russian employment of air power is that they focus less on precision-guided munitions (PGMs), giving preference to dumb bombs used en masse against various targets. This feature is the result of certain considerations. The remains of the Soviet arsenals provided sufficient numerical advantages to carry out indiscriminate mass attacks, allowing Russia to reach various targets. The downside of this approach was the limited effectiveness of these attacks against distinctive and more niche targets. On the other hand, this lack of discrimination between civilian and military targets corresponded to another feature of the Russian strategic culture – the limited respect for human lives on both their own and their adversary’s side.¹⁶ Russia also continued to use indiscriminate bombing against civilian populations as a means of undermining their opponent’s will to fight and in an attempt to put pressure on the political leadership of the countries they targeted.¹⁷ In this regard, mass bombing campaigns became something of a signature feature of Russian air power – Grozny, Aleppo, Mariupol and numerous Ukrainian cities confirm this enduring trend in the use of Russian aerial assets.

Following on from the previous feature, Russian military campaigns and, by extension, their air components went through certain phases of intimidation and intensification of firepower and consequent mass strikes. In this regard, shifts in targeting from military and strategic objects to infrastructure and then to larger civilian targets can be traced in their campaigns from Chechnya to Ukraine. Accordingly, there is

¹⁴ Justin Bronk: ‘Is the Russian Air Force Actually Incapable of Complex Air Operations?’, Defence Systems, 2022-03-04, <https://rusi.org/explore-our-research/publications/rusi-defence-systems/russian-air-force-actually-incapable-complex-air-operations>.

¹⁵ Fedorchak: *The Russia-Ukraine War*, pp. 100–120.

¹⁶ Anton Lavrov: ‘The Russian Air Campaign in Syria: A Preliminary Analysis’, CNA, 2018. Available online: <https://www.cna.org/reports/2018/06/russian-air-campaign-in-syria>.

¹⁷ Slavoj Žižek: ‘Death or Glory in Russia’, Project Syndicate, 1 February 2023. Available online: <https://www.project-syndicate.org/commentary/russian-orthodox-christianity-and-the-roots-of-ideological-madness-by-slavoj-zizek-2023-02>.

often a punitive element in Russian military campaigns, and this is often directed at the civilian population and highly populated areas. In the case of Ukraine in the last two years, the change in targets from military to infrastructure to civilian can be directly traced to the lack of significant military achievements by the Russian long-range ballistic missile campaigns during the period from spring to autumn 2022.¹⁸ The intensification of the Russian bombardment could often be linked to their failures on the ground. After any significant regaining of territory by Ukraine, Russia would often retaliate by targeting Ukrainian civilians. The best example was the appointment of General Sergey Surovikin to command Russian operations in Ukraine after the successes of the Ukrainian counter-offensives in Kharkiv and Kherson in summer and autumn 2022.¹⁹

Russian mass approach in Ukraine and its limitations

From the first days of the full-scale invasion, Russia used its aviation forces in support of the destruction of various military targets, employing its numerical advantage through the number of sorties per day. According to different calculations, they flew between 140 and 200 sorties daily. The initial push, with numerous assets, was undermined because the Ukrainian Air Force survived the first contact with enemy and dispersed into other areas of the country. While some air defences were jammed during the first few days, Ukrainian pilots bought time in the air battles over Kyiv. Despite having significant numbers of aircraft, Russian attacks across the last two years of the full-scale invasion illustrate the limited use of many aircraft in a single mission.²⁰ There are several reasons for this observation. First, Ukrainian skies were far more dangerous to Russian aircraft, due to the combination of the effects and firepower of both aircraft and the ground-based air defences, especially when the numbers of these increased as a result of the assistance of the allied nations. Second, while the materiel segment of the Russian air power remained numerically higher, the losses of personnel and pilots had a knock-on effect on Russia's effective use of air power in Ukraine. Third, despite having the numerical advantage in the structure of their air force, the hybrid nature of the construction of mass illustrated significant shortfalls. In this regard, having more of the older Soviet fleet with a smaller number of more modern aircraft in the high-intensity inter-state war led to higher demand for the cutting-edge segment of the fleet, with a greater preference for using Su-30s and Su-34s. Their better precision and multi-role nature allowed them to achieve more within the same sortie and to switch between different roles, which corresponds to the usual expectations of multi-role platforms. However, this reliance on the more advanced and less numerous aircraft also meant greater pressure on these machines and their pilots, resulting in both of them wearing out much faster.²¹

Another distinctive but predictable limitation of the Russian mass approach in Ukraine was the scarcity of pilots. Teaching and training new pilots takes time, and

¹⁸ Fedorchak: 'The Mass Approach'.

¹⁹ Andrew Roth: 'Russia appoints notorious general to lead Ukraine offensive,' *The Guardian*, 8 October 2022, available online: <https://www.theguardian.com/world/2022/oct/08/russia-appoints-notorious-general-sergei-surovikin-ukraine>.

²⁰ Justin Bronk, Nick Reynolds and Jack Watling: *The Russian Air War and Ukrainian Requirements for Air Defence* (London: RUSI, 2022), p. 8.

²¹ Justin Bronk, Nick Reynolds and Jack Watling: *The Russian Air War and Ukrainian Requirements for Air Defence* (London: RUSI, 2022), p. 8.

experienced pilots remain scarce in modern warfare. The situation significantly deteriorated in the decade of reforms prior to the full-scale invasion. The primary issue with reforms, which is often seen, is that if a certain service is not prioritised or does not have a significant degree of relevance, its various structures and activities can be reduced to a bare minimum. In the case of the military education of the Russian air force, the new wave of reforms introduced in 2008 gradually resulted in the closing down of various regional subsidiaries (in Yeysk, Saint Petersburg and Chelyabinsk) of the Zhukovsky-Gagarin Academy in Moscow, and its merger with the Military Aviation Engineering University in Voronezh. These reforms in essence meant that a significant number of experts and teaching personnel were laid off, with no systematic or quality-oriented reorganisation of the preparation programme for Russian aviation experts. In the light of these reforms, the reduced number of flight training hours of the Russian pilots does not come as a surprise.²²

The long-range mass attack campaign against the entire territory of Ukraine started at the very beginning of the full-scale invasion and continues until the current time. While the overwhelming mass attacks were aimed at showing the strength of the Russian military and hitting more targets, the transformation of the campaign over the last two years illustrated significant shortfalls in the approach itself and limitations in the Russian stockpiles and ability to sustain these efforts within this mass campaign. The initial stage of this campaign was characterised by consistent attacks using primarily ballistic and cruise missiles against most of the territory of Ukraine. The primary problem at this stage was that more cutting-edge and expensive technologies were used in an indiscriminate manner without achieving significant military effects. The second stage can be attributed to the successes of the Ukrainian armed forces in counteroffensives in Kherson and Kharkiv: with the appointment of General Sergei Surovikin as the individual responsible for the Russian campaign in Ukraine, a new stage of punitive attacks on civilian targets and infrastructure across the entire country began in October 2022. From the perspective of the numerical advantage, the shift from one stage of targeting to another illustrated the inherent issue with a numerical advantage – the challenge of sustaining it in the long term. In order to reduce costs and diversify its assets in the mass attacks, Russia introduced Iranian Shahed drones in combination with ballistic and cruise missiles in their attacks. While the punitive measures were aimed both at undermining the morale of the Ukrainian people and overwhelming the air defences with a multitude of targets, the increased presence of Western advanced air defences and the solutions that were found to destroy Shahed drones allowed the effects of the mass attacks to be reduced.

In this context, the Russian ballistic missile long-range mass attacks during the second year shifted to more sporadic and less intense attacks during the summer and autumn of 2023, with more intense attacks introduced to focus on distinct cities in attempts to identify and overwhelm air defences. Hence, the previous claims that Kyiv had become a safe haven were quickly refuted by the more intense attacks on the city. Accordingly, the following aspects of air defences remain valid: *'It's not just that you*

²² Rafael Franco: 'Russian Air Force's Performance in Ukraine: Air Operations: The Fall of a Myth,' *JAPCC Journal*, 35 (2023), p. 50.

*must have the right system, you have to have enough ammunition to maintain defence. It is not inexhaustible – the question is, is there enough, will there be more supplies?*²³

In order to sustain its mass attack campaign, Russia's numerous stockpiles proved to be insufficient, especially since the end of the war did not seem to be on the horizon. Accordingly, Russia switched on its mass military production industry in order to sustain its demand for the use of conventional mass in its attacks. In this regard, the focus was placed both on the cutting-edge segment of ballistic missiles and on the modernisation of the cheaper segment of the air attacks – Iranian Shahed drones, with the aim of installing *'new navigation systems, materials and more stealthy designs for the propeller to improve its survivability'*.²⁴

Adaptations during the second year of the full-scale invasion

During the two years of full-scale invasion there were various changes in Russian tactics and in their employment of their numerical approach to air power. As was illustrated on various occasions, stockpiles with significant quantities of ammunition are still exhaustible. Ballistic missile long-range mass attack campaigns, indiscriminate bombing, and poor battle damage assessment (BDA) significantly undermine the effectiveness of firepower in achieving military effects. Despite having a significant numerical advantage over the Ukrainian military capabilities, Russia began to focus more on gathering its strength and assets for more intensive but less prolonged attacks.

The cost of war and the mass approach has begun to be felt in the Russian military, with higher demand for ammunition for the existing platforms and a greater presence of cheaper equipment. Hence, the Russian military industry began to work at its full capacity in order to satisfy the demand for more, faster and cheaper weapons. Accordingly, learning from the way Ukraine took advantage of asymmetry by producing and utilising different types of drones, Russia began to focus on the diversification and mass production of drones. Its defence budget for 2024 increased to 6% of GDP.²⁵ On the other hand, Ukraine and its Western partners have also been strengthening the numerical and unmanned segments in the fighting, with the aim of providing Ukraine with approximately one million drones in total, as was announced in the last few days.²⁶

In this context, in the discussion of more complex platforms and weapons, and cheaper weapons like drones, the core utility does not come from the substitution of more advanced technologies by cheaper and less sophisticated tools and weapons, but more from getting the necessary weapons within the shortest time, since the demands of high-intensity warfare do not conform to the rules of peacetime and contractual

²³ Henrik Samuelsson: 'Starkt luftvärn ger Kiev-borna trygghet' Göteborgs Posten, 25 November 2023, available online: <https://www.gp.se/nyheter/varlden/starkt-luftvarn-ger-kiev-borna-trygghet.e7ac6d0b-97be-5bf9-9493-230da269154a>.

²⁴ Sam Cranny-Evans: 'Russia's defence industry gears up for a long war' European Defence Review, 9 January 2024, available online <https://www.edrmagazine.eu/russias-defence-industry-gears-up-for-a-long-war>.

²⁵ Russia Plans Huge Defense Spending Hike in 2024 as War Drags, *Bloomberg news*, 22 September 2023, <https://www.bloomberg.com/news/articles/2023-09-22/russia-plans-huge-defense-spending-hike-in-2024-as-war-drags-on>.

²⁶ Ukraine Business News, 'One million drones and increased supply of shells: the results of the 19th Ramstein.' 16 February 2024, available online: <https://ubn.news/one-million-drones-and-increased-supply-of-shells-the-results-of-the-19th-ramstein/>.

arrangements. On the other hand, in times of peace, it is a matter of having a balanced approach to structuring and equipping one's armed forces, ideally having greater focus on self-sufficiency in producing the required weapons.²⁷

From the perspective of the physical component of air power, Russia began to use its fixed-wing aircraft more carefully and sparingly. Even on their air-bases, various types of deception and camouflaging were observed. The issue of personnel remains a significant problem – pilot training requires time, and even after graduation pilots are far from being prepared for the contested environment of the Ukrainian airspace. Similarly, pilots who have been redirected from civil aviation and retrained for military purposes are far from having the operational experience of fighter pilots.

Conclusion

Overall, it can be concluded that the Russian way of fighting in the aerial domain remains very much the same, with the Soviet numerical approach being preserved and combined with some modernisation of materiel during the wave of reforming the Russian armed forces. Land-centric thinking and conceptualisation of air power as a firepower extension of the army – long-range artillery and rocket assets, remained prevalent in Russian thinking and employment of air power. The war in Ukraine illustrated Paradoxically poor air–land integration of the actual military services, which greatly contrasted with the integration of SOF with air capabilities in Syria. Another enduring trend remained greater focus on fire superiority instead of gaining air superiority. Not being able to catch up with peers in air-to-air combat, Russians focused on long-range, surface-to-air missile systems (S-400), A2/AD environments, and ballistic and cruise missile systems (Iskander and Kalibr) (long-range precision-strike). The reforms of the last two decades in Russia illustrated some focus on equipment to improve its cutting-edge nature, but economising on the basics (logistics, manpower, skills and training). While numerical superiority might provide instant results, the primary question remains what happens in the long term?

The experience in Ukraine illustrated various problems with the numerical approach and the requirement to build critical mass based on cheaper equipment like drones of different kinds. Various Ukrainian developments and innovations in integrating drones into fighting were learned and mimicked by Russia in recent months.

²⁷ Fedorchak: 'The Mass Approach', pp. 119–120.

UNDERSTANDING RUSSIA'S WAR AGAINST UKRAINE: POLITICAL, ESCHATOLOGICAL AND CATAclySMIC DIMENSIONS¹

Katri Pynnöniemi and Kati Parppei

The presentation by Katri Pynnöniemi and Kati Parppei in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=5NofPSfLSSU> starting from 2:31.

Abstract

The research communities play a key role in assessing and interpreting significance of major military events. In the contemporary Russian context, scholars are primarily engaged in consolidating Kremlin's maximalist war rhetoric instead of offering alternative analyses of Russia's war against Ukraine. The texts published in the Russian military and military-historical periodicals call for systematic destruction of Ukrainian political institutions and society, deny Ukraine's sovereignty by calling the area "former Ukraine", and blame the "collective West" for waging a global hybrid war against Russia. We argue that it is important to take these narratives seriously and to investigate what kind of war Russian scholars and officials are thinking about? Where do they draw the lines, or do they rather advocate for a war without any limits?

In our research, we will apply Rapoport's typology of war (as a political game, eschatological mission, and a cataclysmic catastrophe) in reconstructing narratives about this war in Russian military and military-historical periodicals. We argue in this article that the initial three-dimensional framework of analysis can be further divided into two explanatory models: military-political and eschatological-cataclysmic. The military-political explanations emphasize existing and potentially escalatory military threats towards Russia, whereas eschatological-cataclysmic model sees Russia as a victim and portrays the conflict in existential terms. These two models are not mutually exclusive, but they offer two different meta-narratives of war and its meaning for Russia. The military-political model can be used to justify the end of the war on Russian terms (an elimination of Ukraine's capability and will to continue resistance), whereas the eschatological-cataclysmic model offers basis for its continuation (Russian state-civilization as victim of infinite Western aggression). Both models must be considered when we think how this war might end.

¹ Full text of the article: Pynnöniemi, K., & Parppei, K. (2024). Understanding Russia's war against Ukraine: Political, eschatological and cataclysmic dimensions. *Journal of Strategic Studies*, 1–28.
<https://doi.org/10.1080/01402390.2024.2379395>.

RUSSIA'S IMPERIAL POLICY: THEORY AND REALITY

Nina Andriianova

The presentation by Nina Andriianova in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=5NofPSfLSSU> starting from 32:20.

Abstract

At the beginning of the XXI century having strengthened Putin's authoritarian regime and enhanced the country's military potential, Russia began to claim the status of a world power, one of the main centers of global influence on the development of international relations and the formation of the foundations of the modern world order. The Russian leadership justifies its claims to great-power hegemony by the existence of the "Russian empire", which includes communities outside Russia's borders.

The article examines the theoretical-applied basis and dimensions of realization of the imperial policy of the Russian Federation, the origin of modern Russian aggression and militarism, the influence of ethnic and cultural concepts, the military factor on the formation of foreign policy of the Russian Federation, their reflection in the main strategic regulatory documents of the Russian Federation adopted in recent years, as well as public statements of the Russian leadership.

Introduction

The imperial ideas of restoring Russian greatness, the concept of spreading the "Russian world" along with other postulates are rooted in the political ideology and social practice of the Russian ruling regime.

The hybrid Russian-Ukrainian war, Russia's occupation of Ukrainian territories and full-scale aggression against Ukraine are the consequences of Russia's imperial policy to preserve (expand) its sphere of influence and seek to dictate its vision of the world order. The imperial policy involves building up offensive military capabilities and active use of military instruments in foreign policy.

The contemporary French philosopher Alain de Benoist gave an appropriate definition of empire that can be compared to Russia today: an empire is not a territory, but first and foremost an idea and a principle. Accordingly, the political order created by an empire is determined not so much by material factors or control over geographical space as by the idea of empire¹.

¹ Теміров Ю: Неоімперіалізм: загрози́вість поро́жнечі. 3.07.2020. <https://institut-edd.org/blog/posts/neoimperializm-zagrozlivist-porozneci>.

Signs of imperial policy:

- the idea of the greatness of the nation;
- the practice of building up and using force as a tool to spread its influence;
- the idea of domination over other political actors. And Russia's current policy is corresponding to these signs.

In the Ukrainian legislation, we have a definition of Russian imperial policy in relation to Ukraine, it is a system of measures taken by governing bodies, armed groups, political parties, non-governmental organizations, institutions, enterprises, groups or individual citizens (subjects) of the Russian Kingdom (Moscow Kingdom), the Russian Empire, the Russian Republic, the Russian State, the Russian Socialist Federative Soviet Republic, the Russian Soviet Federative Socialist Republic, the Union of Soviet Socialist Republics, the Russian Federation aimed at subjugation, exploitation, assimilation².

Russia's policy is based on the policy of "rebirth" of Russia, first as a "hegemonic country" in the post-Soviet space, then as a "world leader", a carrier of "sovereign democracy", a "country-civilization" that actively opposes the West, and has been gradually formed and implemented in geopolitical practice. Russian philosophical and political thought since the mid-19th century, from Nikolai Danilevsky to the present day, has emphasized the imperial status of the Russian state as the only possible form of its existence³.

The model of the imperial policy of RF of spreading its influence can be represented by: theoretical-applied bases and dimensions of realization of imperial policy.

Theoretical-Applied basis

1. Ethnic and Cultural concepts. The basis of the imperial policy of the Russian Federation is based on the reflections of such minds as Danilevsky, Leontyev, Berdyaev, Ilyin, Gumilev and others. They are representatives of the Ethnic and Cultural concepts, ideological trends of Slavophilia – which focused more on the orientation towards Western Europe, according to this trend, Russia is the natural leader of all Slavic peoples. Pan-Slavism – based on the idea that Slavs need political unification based on ethnic, cultural and linguistic commonality. But the ideas of Euro-Asianism and the "Russian world" became the most influential and widespread.

The leading idea of Eurasianism is the proclamation of Russia as a special world, which is called "Eurasia" (which includes Central and Eastern Europe, as well as the Balkans, the Caucasus, Turkey, and the Danube countries). This is the concept of an

² Про засудження та заборону пропаганди російської імперської політики в Україні і деколонізацію топонімії. Закон України N 3005-IX. 21.03.2023, <https://ips.ligazakon.net/document/ТМ072224>.

³ Левченко І.: Імперіалізм та обґрунтування війни: для чого Росії конфлікти на пострадянському просторі, 03.02.2021.

<https://cacds.org.ua/%d1%96%d0%bc%d0%bf%d0%b5%d1%80%d1%96%d0%b0%d0%bb%d1%96%d0%b7%d0%bc-%d1%82%d0%b0-%d0%be%d0%b1%d2%91%d1%80%d1%83%d0%bd%d1%82%d1%83%d0%b2%d0%b0%d0%bd%d0%bd%d1%8f-%d0%b2%d1%96%d0%b9%d0%bd%d0%b8-%d0%b4/>

Orthodox-Slavic super-ethnicity, in which Russia is credited with the ability to unite the population of Eurasia and is assigned the role of the core of Eurasian integration⁴.

The ideologeme of the “Russian world” is also added to this as a justification of the imperial space and the exclusivity of the “Russian civilization”, which, first of all, acts as an antithesis to Western, European civilization. Hence, the traditional psychology of the “surrounded fortress” in the Russian imperial consciousness, which always requires the authorities to build “active defense” around the empire in all directions⁵.

It should be noted that it was Vladimir Putin who introduced the “Russian world” ideology into the socio-political discourse in 2006-2007 during his speeches to compatriots living abroad. The Russian president emphasized their cultural, linguistic, and civilizational unity with Russia. Over the next five years, the use of the “Russian world” concept by political elites somewhat decreased; it became the prerogative of the Russian Orthodox Church, but it can also be interpreted as cultural or rather religious propaganda for the further introduction of the “Russian world” as an ideology of the Russian Federation. In 2010, the metamorphosis of the “Russian world” from a doctrine to a political course that could be used to win political struggles within the Russian Federation began⁶.

2. Religion. Russian Orthodoxy is defined by the Russian Federation as the basis for building the state apparatus and relations in society, a determining factor in foreign policy and education of the population at all levels.

Russian Orthodoxy is one of the pillars of imperial policy. RF uses narrative that The Russian Federation, Ukraine, Belarus, and more recently Moldova are creating a modern Eastern Orthodox civilization on the historical space of Holy Rus. The state borders between these countries are a convention: the most important thing is to protect and strengthen the spiritual unity between the “brotherly peoples”.

Russian Orthodoxy and the Russian state as its keeper were proclaimed direct followers of Rome and Constantinople as centers of the Christian faith and great Christian states in the concept “Moscow – the Third Rome” (1523–1524). In manifestations of Russian imperial policy, the Russian government goes hand in hand with representatives of the church. Calling Putin a divinely elected ruler^{7,8}, they justify Russia’s slavish expansionist actions and spread the same ideology of the “Russian world”.

3. Language. Strengthening the position and expanding the area of the Russian language is priority for RF. The Russian language and Russian-speaking citizens are the basis of the imperial policy, and they need to be “protected” wherever they are. The Russian language is a unifying factor in the international community of citizens of different countries associated with Russia. Russia professes the myth that the

⁴ Laruelle M.: Eurasia, Eurasianism, Eurasian Union: Terminological Gaps and Overlaps. Ponars Eurasia Policy. No. 366. July, 2015, <http://www.ponarseurasia.org/>.

⁵ Україна та проект “русского мира”: аналітична доповідь// С. І. Здіорук, В. М. Яблонський, В. В. Токман [та ін.]; за ред. В. М. Яблонського та С. І. Здіорука. Київ: НІСД, 2014, https://shron1.chtyvo.org.ua/Zdioruk_Serhii/Ukraina_ta_proekt_russkoho_myra.pdf.

⁶ Гольцов А. Г.: Імперська геостратегія Російської Федерації у світі: основні напрями та засоби реалізації. 2015, https://elibrary.kubg.edu.ua/id/eprint/12814/1/A_Goltsov_MAUP_2015_1_IS.pdf

⁷ Патриарх Кирилл возвелчил Путина почти до уровня бога: что сказал глава РПЦ. 25.10.2022. "Диалог.UA", https://www.dialog.ua/russia/261271_1666725732.

⁸ Сурков: Путин был послан России Богом, <https://www.forbes.ru/news/70487-surkov-putin-poslan-rossii-bogom>.

Ukrainian and Belarusian languages are came from the Russian language (Russian, Belarusian and Ukrainian languages were formed simultaneously – it happened around the XIV century – as a result of the breakup of the Old Russian language), which is not true: the Kyivan princes spoke Ukrainian in Kievan Rus, as evidenced by this are ancient literature, finds, writings on the walls of ancient churches. For example, work “The Story of Bygone Years” (XI-XII centuries) written by Nestor the Chronicler in Ukrainian and the Reims Gospel dated to the same period, as evidenced by inscriptions on the walls of St. Sophia Cathedral in Kyiv.

4. History. The imperial policy of the Russian Federation is mainly based on the identification of itself as an empire in the period of the self-proclaimed Russian Empire by Peter the Great, and the soviet period when modern Russia was part of the USSR, and after its collapse, self-proclaimed itself its rightful successor. Russia is also trying to appropriate the history and name of Kievan Rus’ of the 9th to 13th centuries. Modern Russia comes from Muscovy, as a small settlement with a Finnish name, mentioned in literary sources only from the middle of the twelfth century. Ukraine, on the other hand, is descended from Kievan Rus, and there is geographical, ethnic, and cultural evidence for this.

Russia is actively rewriting history, reflecting it in literature, culture, and education, distorting facts in its favor, sometimes inventing complete nonsense.

Modern imperial policy is developed and implemented by the Russian state authorities. The state involves business structures, mass media, non-governmental organizations, and religious communities in its implementation. Under the current conditions of the organization of society in Russia, all of them are elements of the national imperial system and must actively cooperate in promoting Russia’s imperial interests at home and abroad.

Dimensions of realization of imperial policy

Political

The model of the political system of the modern Russian Federation is characterized by the absence of real competition and the actual absence of real opposition to the authorities and political pluralism. Also, imitative forms of political institutions under the control of the authorities are developing. Today Russia is an authoritarian state. Where power is concentrated in the hands of Vladimir Putin.

Vladimir Putin is a great supporter of such Russian conservative-imperial thinkers as Danilevsky, Leontyev, Berdyaev, Solovyov and Ilyin, including the ideologue of Euro-Asianism Lev Gumilev.

The ideas of restoring the empire are firmly entrenched in the mind of the Russian President, they were developed in the annual addresses of the President of the Russian Federation to the Federal Assembly, public speeches and his articles, interviews, for example:

In 2005, during his annual address to the Federal Assembly, Vladimir Putin called the collapse of the Soviet Union in 1991 the greatest geopolitical catastrophe of the 20th century, which left millions of Russians outside the new Russia⁹.

In 2007, during his Munich speech, Putin announced the need to “restore Russia as a pole of global power” (the famous Munich speech of 2007)¹⁰.

Vladimir Putin’s well-known article “On the Historical Unity of Russians and Ukrainians” contains a statement that Russia and Ukraine are a common, united people, and that there are no Ukrainians as such¹¹.

Also recently, on February 8, 2024, Putin gave a two-hour interview to American journalist Tucker Carlson, which he forbade to be edited or cut. In it, the Russian president spoke about NATO expansion, Nord Stream, and the invasion of Ukraine¹².

Strategic documents

Russia systematically violates the norms of international law, but in its legislation it consistently advocates strengthening the legal foundations of international relations and fulfills its international legal obligations in good faith. The foundations of Russia’s imperial policy are conceptually established in a number of basic documents: the National security strategy (2021), the Military doctrine (2015), and the Foreign policy concept (2023).

National security strategy of Russia¹³ is the main document for planning the development of the national security system, which officially defines strategic priorities, goals and means in the field of internal and external security. This document contains all the theoretical and applied basis mentioned above: the need for a multipolar world; Russia is surrounded by unfriendly countries, especially the United States and its allies; Russia aims to rely on the concept of “Eurasianism” and rely on its own strength, because it no longer counts on “partnership with the West”; strengthening “brotherly ties” between the countries of the community of independent states and post soviet countries.

In addition, the National security strategy emphasizes information security and the protection of traditional spiritual and moral values.

In this document underlined, nuclear weapons are the highest priority for Russian defense and security, an absolute guarantee of its sovereignty, territorial integrity and global status. Increasing the role of the military factor in world politics against the backdrop of escalating confrontation along the perimeter of the Russian borders.

⁹ Putin: Soviet collapse a 'genuine tragedy'. April 25, 2005, <https://www.nbcnews.com/id/wbna7632057>.

¹⁰ Выступление и дискуссия на Мюнхенской конференции по вопросам политики безопасности. 10.02.2007, <http://kremlin.ru/events/president/transcripts/24034>.

¹¹ Путин В: Об историческом единстве русских и украинцев. 12.07.2021, <http://kremlin.ru/events/president/news/66181>.

¹² Carlson T.: The Vladimir Putin Interview, 2024, <https://twitter.com/TuckerCarlson/status/1755734526678925682>.

¹³ О Стратегии национальной безопасности Российской Федерации. Указ Президента РФ N 400 от 02.07.2021, https://www.consultant.ru/document/cons_doc_LAW_389271/.

Special attention is paid to Ukraine, which Russia considers one of the key elements of the US/NATO anti-Russian policy.

The military doctrine¹⁴ specifies the guidelines of the Russian national security strategy in the military sphere, fully correlates with the strategy in fundamental issues, and characterizes the main directions of the state's military policy at this historical stage.

The military doctrine of the Russian Federation is a system of views, formed under the influence of the above-mentioned ideas and ideologies, on the use of the military organization of the state to achieve political goals, including the nature of military tasks and methods of their solution and the main directions of military construction.

This document also postulates the growth of conflict in the world and, as a result, the role and importance of the military factor in the national grand strategy. At the same time, a special place in the list of military threats to the Russian Federation is occupied by the actions of the United States and NATO. The presence of military conflicts in neighboring states is also mentioned as a danger.

The document recognizes non-military instruments of influence as becoming increasingly important in modern military conflicts, but military means of influence do not lose their importance in the grand strategy of the Russian Federation.

Of interest for our study is the wording of the new version of the Russian foreign policy concept¹⁵. It presents Russia almost as a separate cultural and civilizational formation, as a "Eurasian" and "Euro-Pacific" state that forms a separate cultural and civilizational community of the "Russian world". Document emphasizes the need to further unite ethnic Russians abroad around a common language and culture.

Unlike the 2016 version, the current concept summarizes the vision of the state and prospects of relations with European countries. Thus, it states that most European states pursue an "aggressive" policy toward Russia aimed at undermining Russia's security and sovereignty, gaining unilateral economic advantages, internal political destabilization, eroding "traditional Russian" spiritual and ethical values, and creating obstacles to Russia's cooperation with allies and partners. The document enshrines a policy of confrontation with the West, which is officially associated with the strategic dominance of the United States.

Foreign policy

The formation of a multipolar world is central narrative in Russian foreign policy. Russia wants to take a leading position in the world. It is already a member of the Group of Twenty (G20), a permanent member of the UN Security Council, has a large territory and is rich in natural resources, which makes it an influential player in the international arena. However, the current status does not satisfy the ambitions of the current Russian leadership, which directly links Russia's strategic interests to the expansion of its geopolitical influence. In its Foreign policy concept, in an effort to take its rightful place in the network, Russia mentions that it is the rightful successor

¹⁴ Военная доктрина Российской Федерации. Указ Президента РФ N Пр-2976 от 25.12.14, <https://docs.cntd.ru/document/420246589>.

¹⁵ Концепция внешней политики Российской Федерации. Указ Президента РФ N 229 от 31.03.2023, <http://www.kremlin.ru/acts/bank/49090/page/1>.

of the USSR, one of the 2 largest nuclear states, and reminds of its key contribution to the victory in World War II¹⁶.

To build a multipolar world, Russia participates in and creates international associations, as opposed to the EU and NATO, where it confidently takes the position of a leader dictating its will: The EAEU (Eurasian Economic Union), CSTO (Collective Security Treaty Organization), the Union State of Russia and Belarus, and some other interstate associations, but these entities have not been as successful because they were founded not to solve common problems but rather to seek regional leadership of the Russian Federation and unite the states of the former USSR¹⁷.

Development of its own concept of the Great Eurasian Partnership. The implementation of this geo-economic (and at the same time geopolitical) project should secure Russia's interests and strengthen its position on the continent, and is connected with the further development of the Eurasian Economic Union (EAEU) in the post-Soviet space. The "Greater Eurasia" project envisages the economic unification of such leading Asian countries as Russia, China, India, Pakistan, Iran, and many others. The Shanghai Cooperation Organization (SCO) may become the main basis for the formation of "Greater Eurasia".

Focus on cooperation with China. Russia is looking for strong allies such as China or India. China has provided Russia with vital economic and diplomatic support in its full-scale invasion of Ukraine and economic and military-strategic cooperation is deepening.

Dominance in the post-Soviet space. the closest circle of Russia's allies, which are also subject to the greatest pressure, are the member states of the Eurasian Economic Union (EAEU) and the Collective Security Treaty Organization (CSTO). In addition to economic interests, Russia uses these integration projects in the post-Soviet space to counteract the prospect of neighboring countries joining European and Euro-Atlantic structures.

In addition, Russia maintains political and economic control over self-proclaimed unrecognized republics such as Abasia and South Ossetia, in fact, they serve as Russia's geopolitical footholds in the South Caucasus. The Transnistrian Moldovan Republic, also remains a geopolitical foothold of Russia (with a military contingent) near the strategically important Balkan Peninsula.

Information

The Russian Federation has full control over its information space, including television, radio, the press, the Internet and social networks. However, Russia has made significant progress in the information sphere outside its territory. Thanks to information-psychological-propaganda means, ideas useful to the Russian leadership are spreading both among its own population and among peoples in countries of special strategic interest. They are characterized by the creation of internal social conflicts through propaganda, false news, fakes, disinformation, and narratives.

¹⁶ Концепция внешней политики Российской Федерации. Указ Президента РФ N 229 от 31.03.2023, <http://www.kremlin.ru/acts/bank/49090/page/1>.

¹⁷ Нова редакція концепції зовнішньої політики Росії: аналіз змісту. Національний інститут стратегічних досліджень, <https://www.niss.gov.ua/en/node/4893>.

In order to implement an effective information policy, Putin has developed a large-scale network that works for propaganda: TV channels, news agencies, online publications, social networks, and even “troll factories” and “bot farms”. On February 26, 2022, the Security Service of Ukraine exposed and neutralized a Russian “bot farm” with 7,000 accounts that was engaged in war propaganda.

The Russian propaganda model is characterized by four distinctive features¹⁸

- large amount and multichannel nature
- speed, continuity and repeatability
- detachment from objective reality
- lack of consistency and
- narrativization.

The multiplicity of channels through which information is transmitted, its large volume and the speed (because fakes are often invented in advance) with which it is presented make the main narratives of propaganda more convincing to potential consumers.

The most paradoxical characteristic of Russian propaganda is its inconsistency. Different communication channels can broadcast different information on the same topic. Moreover, the same Russian source often changes its view or message. However, this does not cause consumer distrust.

Military and strategic

The Kremlin is actively building up its offensive military capabilities and actively using military tools in its foreign policy.

After the 2008 war against Georgia, one of the main directions of Russia’s military policy was the reform and transforme of the Russian armed forces.

Russia’s invasion of Georgia in 2008, the annexation of Abkhazia and South Ossetia, the capture and temporary occupation of Crimea in 2014, the temporary occupation of territories in Donetsk and Luhansk regions and the full-scale invasion of Ukraine are illustrative examples of the implementation of imperial policy. The peculiarity of Russia’s modern warfare is an undeclared war with hidden goals, where Russia denies its participation and exerts its influence through non-state actors – rebels, local population groups, organizations, whose connection with Russia is formally completely denied. Since the beginning of the large-scale invasion of Ukraine, an open military attack in 2022 by the Russian regular armed forces, the war in Ukraine has been called in Russia a special military operation to spread the Russian world, justifying it as a fight against “Ukrainian Nazis” and Banderites who oppress the Russian-speaking population.

¹⁸ Гібридна війна росії проти України. як перемогти на інформаційному фронті. посібник. 2023, <https://drive.google.com/file/d/1AEUYRLeYOx7kBbNPJL1XzwHXstCNJaJW/view>.

Conclusion

The main goal of imperial policy of RF is to increase its sphere of influence, return the “brotherly lands”, establish a multipolar world order and the ability to control and dictate its terms to the civilized world. The main consequence of the implementation of the imperial policy is the war, death, scorched earth, broken destinies. And as we can see from the Kremlin’s imperial ambitions and appetites, if Russia succeeds in seizing Ukraine, which is its first priority, Zbigniew Brzezinski wrote that “without Ukraine, Russia is no longer an empire. But with Ukraine controlled and enslaved, Russia becomes an empire automatically”¹⁹. So it will not stop there, and so it will be with anyone who resists Russia’s will and wants to leave its zone of influence. And who will be the next will be decided by Russia itself.

¹⁹ Brzezinski Z.: The Premature Partnership, Foreign Affairs, 1994, Vol.73. N2, p. 80.

THE TRINITY OF STATE, PEOPLE AND MILITARY – A STRATEGIC ADVANTAGE IN THE RUSSIA-UKRAINIAN WAR 2022–2024

Peter A Mattsson and Jakob Shapiro

The presentation by Peter A. Mattsson and Jakob Shapiro in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://youtu.be/P8VA1bT8ADs> starting from 5:40:12.

“Whoever brings the danger to his opponent demonstrates better fortitude than whoever repels the danger. What is more, the fear of the unknown grows as a result. When you penetrate the enemy’s land, you can clearly see the enemy’s strengths and weaknesses.”

Scipio Africanus¹

Introduction

“Ошибочно говорят о вредном влиянии политики на руководство военными действиями. Вред причиняет не влияние политики, а ошибочная политика. Правильная политика может только способствовать успеху военных действий”.

А.А. Свечин²

At the time of writing, the war between Russia and Ukraine has lasted more than two years.³ Neither Ukraine nor Russia was capable of waging a full-scale war in February 2022. Initially, in order to achieve the political goals of overthrowing the regime in Kiev, reducing Ukrainian military capabilities, and stopping NATO expansion, Russia launched a blitzkrieg against the cities of Kiev, Kharkiv, and Kherson. However, the Russian blitzkrieg did not succeed. The Ukrainian defense forces managed to protect the major cities and establish effective self-defense, which successfully forced the

¹ Tira, R.: *The Nature of War. Conflicting Paradigms and Israeli Military Effectiveness*. Brighton: Sussex Academic Press, 2010, p. 130.

² In our English translation: “It is misleading to speak of the harmful influence of politics on military leadership. It is not the influence of politics that causes harm, but the wrong politics. The right politics can only contribute to the success of military actions”. A. A. Svechin.

³ The military conflict between Russia and Ukraine started in February 2014 but first in February 2022 Russia used significant military forces in its Blitzkrieg against Ukraine. - Lewis, R. Ukraine Crisis. Ukrainian history [2013-2014]. *Britannica*. Source homepage: <https://www.britannica.com/-topic/Ukraine-crisis>. Accessed: 2024-02-22.

Russian armed forces to retreat from the major cities. Then the war turned into tactical battles for positions in the eastern regions of Ukraine, and a political-strategic war of attrition was expanded to a global scale.⁴

During these two years of war, mistakes in both Russian and Ukrainian political and military command, led to heavy losses on both sides, placing unprecedented political and strategic demands on the military command and the military-industrial complex to simultaneously maintain, develop and renew military capabilities. In the introduction to this article, Svechin states, in our interpretation, that military operations are usually successful when they are based on realistic political objectives. The Ukrainian-Russian War has largely not been directed by sound political objectives; it has rather taken the form of a total war with very heavy material and human losses for both belligerents.⁵ It is a war that has evolved from an initial war of destruction into a resource-intensive static war of attrition. This places considerable political and strategic demands on the Russian armed forces, which must make a significant contribution to the achievement of the desired political goals.

Therefore, our main purpose of this paper is to apply some key concepts of Carl von Clausewitz's military theory to discuss the interrelationship between the Russian state (political power), the Armed Forces of the Russian Federation (military power) and the Russian citizens (people's power). Our second aim is to argue how attrition warfare contributes to Russian strategic objectives in the ongoing war in Ukraine by explaining why attrition warfare became a doctrinal direction in the Soviet Union and later in Russia.

This paper consists of an analysis of German and Russian primary sources, a discussion of the expansion of the Russian state's civilian (from Homo Sovieticus to Vatrik) and military capabilities, the testing of some key military theoretical concepts against empirical data from the Ukrainian war, and finally the authors' conclusions, which constitute the paper's research contribution. Multimedia is also part of our multi-dimensional research approach.

In a historical review, Imperial Russia lost the World War and the Bolsheviks in Petrograd launched a successful uprising and revolution against their political and military leaders. After the revolutions of 1917, the Russian Red Forces fought a bloody six-year civil war against the Russian White Forces, who were supported by outside hostile nations. However, the Bolsheviks emerged politically and militarily victorious, having defeated the White Forces. In the aftermath of the Civil War, prominent Soviet military theorists debated war and warfare, Soviet military doctrine and defense, and whether the armed forces should be formed as a large popular army or a professional fighting force. Several of Clausewitz's central concepts of war were involved in these struggles over military theory and practice in the 1920s.⁶

⁴ *Ukraine Conflict Updates. Reports of 2022 and 2023*. Washington, D.C.: Institute for the Study of War. Source homepage: <https://www.understandingwar.org/>, Accessed 2024-02-22.

⁵ Russia Matters. *The Russian-Ukraine War Report Card, Feb. 20, 2024*. Boston, MA.: Harvard Kennedy School, Belfer Center for Science and International Affairs, 2024.

⁶ Vershinin A.A., Krivopalov A.A.: 'Russian strategic culture: the experience of a historical retrospective'. *Russia in Global Politics*. 2023. T. 21. No. 6. pp. 80–98 and Stoecker, S, W. *Historical Roots of Contemporary Debates on Soviet Military Doctrine and Defense*. Santa Monica, CA: RAND N-3348-AF/A. 1991.

The Timeless Influence of Carl von Clausewitz

Der Krieg ist nicht nur ein wahres Chamäleon, weil er in jedem konkreten Falle seine Natur etwas ändert, sondern er ist auch seinen Gesamterscheinungen nach in Beziehung auf die in ihm herrschenden Tendenzen eine wunderliche Dreifaltigkeit, zusammengesetzt aus der ursprünglichen Gewaltbarkeit seines Elements, dem Haß und der Feindschaft, die wie ein blinder Naturtrieb anzusehen sind, aus dem Spiel der Wahrscheinlichkeiten und des Zufalls, die ihn zu einer freien Seelentätigkeit machen, und aus der untergeordneten Natur eines politischen Werkzeugs, durch die er dem bloßen Verstande anheimfällt.

Carl von Clausewitz, *Vom Kriege* 1831/2008, p. 49.⁷

Carl von Clausewitz's book *Vom Kriege* has had a significant influence on military theory, both theoretically and practically. It holds a unique and prominent place in military and civilian education and research.⁸ The book's ideas on understanding war as a political instrument have also influenced politics and business to some extent, although not in a deep academic sense.⁹ *Vom Kriege* contains several key concepts presented in a dialectical style, such as 'the nature of war and the characteristics of war', 'absolute and real war', 'art and science of war', and 'offensive and defensive in war'.¹⁰

The objective of this paper is to analyze Clausewitz's trinity war theory, known as 'eine wunderliche Dreifaltigkeit', and discuss its influence on Soviet military theories of the 1920s, as well as its implications for the Russia-Ukraine war from 2022 to 2024. Clausewitz argued that war is a composition of three core elements: *Haß und Feindschaft*, *Wahrscheinlichkeit und.. Zufall*, and *Natur eines politischen Werkzeugs*. These elements must reinforce each other. *The first element of war is the Volk* (people), *Feldherren und Heer* (Military Leader and the Army), and *politischen Zwecke und Regierung* (Political purposes and the Government).

If political leaders, referred to as the political power, intend to initiate a war, they must persuade their citizens to participate and employ an instrument of violence to impose their will on the opposing party, known as the enemy. The army commander and their troops serve as the political instrument of violence, representing the military power in the trinity. Political power aims to shape the will of the people towards supporting

⁷ "War is, therefore, not only chameleon-like in character, because it changes its color in some degree in each particular case, but it is also, as a whole, in relation to the predominant tendencies which are in it, a wonderful trinity, composed of the original violence of its elements, hatred and animosity, which may be looked upon as blind instinct; of the play of probabilities and chance, which make it a free activity of the soul; and of the subordinate nature of a political instrument, by which it belongs purely to the reason" translated by Colonel J. J. Graham 1874/1909 (<https://www.gutenberg.org/files/1946/1946-h/1946-h.htm#chap01>, Accessed 2024-02-01).

⁸ Algreen Starskov K.: *Clausewitz's Trinity: Dead or Alive?* Fort Leavenworth, KS.: School of Advanced Military Studies, United States Army Command and General Staff College, 2013., Holmes, T. M. 'Clausewitz's "Strange Trinity" and the Dysfunctionality of War'. *The Philosophical Journal of Conflict and Violence*, Vol.VI, Issue 1/2022.

⁹ A group of academic people has established a special homepage in the name of Clausewitz, Source homepage: <https://clausewitz.com/index.htm>, Accessed 2024-02-22.

¹⁰ Herberg-Rothe, A. *Clausewitz's Puzzle: The Political Theory of War*. Oxford: Oxford University Press, 2007, pp. 68–88, and pp. 91–118.

the military system of violence by inciting hate and enmity. The non-military population is expected to contribute to the war effort through hard work and sacrifices. The military is expected to follow the political will.

From a Russian perspective, political leaders strive to control and influence the military and the people. Historical experiences of revolutionary wars in the 20th century had shown the importance of political agitation, propaganda, indoctrination, economic confiscation and terrible methods of terror to achieve real power. The Soviet leaders did not hesitate to learn from these pre-revolutionary experiences. The state became the central focus, maintained through political and repressive methods and organizational innovations for the next century. Soviet leaders used Clausewitz's three core elements of war to shape their people, history and state, with significant implications for the new millennium.

The Great Struggle of Soviet Military Theorists in the 1920's

During the 1920's it was quite dangerous to be a Russian military theorist, seeing that most of the below mentioned theorists died in "mysterious" circumstances. That shows you just how serious of a topic that they were discussing. The background of the discussion was the string of defeats and hardships that had plagued the Russian and later Soviet military during the early 20th century, in the form of the Russo-Japanese war of 1905, World War 1, The Russian Civil War and also the Polish-Soviet War. The common thread among the theorists was the need of a new improved Soviet military to counter it. The divisiveness was in the details over which a lot of blood was spilled. In the end the most important idea that won over and is still the crucial factor for Russia to this day is Shaposhnikov's idea of the STAVKA, which will be further explained below. The idea of the STAVKA has a big impact on von Clausewitz's idea of the triad and also the idea of attrition warfare. A long-term vertical of power or a centralized civil-military command creates certain benefits for Russia.¹¹

Frunze - Unified Military Doctrine and the Soviet Army

Mikhail Frunze (1885-1925) had been noted among communist leaders as possessing a very creative and almost unorthodox view on matters of implementation and policy. He gained the respect and admiration of his comrades thanks to his successful pursuit of complicated military objectives, and his endurance during the period when the Communist party was illegal. Frunze is remembered by some for his military doctrine.

Frunze identifies that the new type of warfare in the 20th century requires a new military science. Soviet Russia is an economically and politically underdeveloped country and its military lacks the military scientific knowledge to fight new modern wars. The old tsarist general staff had no strong military doctrine and only had experience of fighting small wars, which has led to several avoidable defeats in the early 20th century. This creates a strong need for a unified and new military scientific doctrine that is adapted to the new mass warfare, otherwise Soviet Russia risks continuing the streak of defeats that has plagued it until now. The doctrine must necessarily be unified, being an expression of the unified will of the social class in power. There is

¹¹ Stoecker S. W.: *Historical Roots of Contemporary Debates on Soviet Military Doctrine and Defense*. Santa Monica, CA: RAND N-3348-AF/A. 1991.

also a necessity to create both a unity of military thought, but also the unity of military and political organization. The focus of the unified doctrine is to develop Soviet Russia both in the technical (Russia is technically inferior to its neighbors) and political sphere (Russia is also politically weaker than its neighbors) according to the aims of the totality of the state, as an expression of the will of the proletariat.¹²

Trotsky – Military Doctrine or Imaginary-Military Doctrination

Leon Trotsky (1879-1940) was the first People's Commissar for Military and Naval Affairs and founder of the Red Army. He wrote on many different political and cultural topics from his own orthodox marxist perspective. His main idea was the idea of Permanent Revolution, which can be seen in his analysis on the issue of military doctrine, where he expresses analytical criticism on Frunze's ideas of a unified military doctrine.

Trotsky introduces his view on doctrines by referring back to von Clausewitz's famous maxim of "War is continuation of politics, by other means". Trotsky says that Marxism itself does not give a clear theory on war and the organization of armed forces in society, but he says "for if it is true that war is a continuation of politics by other means, then the army is a continuation and crowning of the whole social-state organization, only with a bayonet." Trotsky is skeptical of the need of a military doctrine and instead says that we proceed to military questions not from some "military doctrine" as a sum of dogmatic provisions, but from a Marxist analysis of the needs of self-defense of the working class. Trotsky points out that British, French, German and American military doctrines change over time and are derived from the political aims and possibilities in a certain historical context. For example Great Britain was a naval empire that in time lost its power, because of changing global politics, the same can be said about the rise of the USA, which went from an isolationist to an imperialist military doctrine, because of American interventions in first Asia in the 19th century and later Europe in the 20th century.

Trotsky and Neznamov share the same marxist understanding of military doctrine, as a holistic and organic view of the people's idea of war, willingness to fight for the world revolution, and its military-political organization. Trotsky criticizes Frunze's idea of the unified doctrine by clearly delineating between war as an international-political and operational-strategic phenomenon. War can not only be offensive, sometimes it is necessary to do strategic retreats, such as during the Russian Revolution, where the red army had to give up Poland or the Baltic States, to win the revolution in other territories of the Russian Empire, referring to the marxist dialectic of offensive contra defensive warfare, and political contra military operations. Trotsky concludes that the Soviet Union is an economically and politically underdeveloped revolutionary state in a complex international-political environment and can not reduce its view of military doctrine to a set of simple rules or dogmas, instead it is in need of

¹² Савикин. А (ред.): *Русская военная доктрина - Материалы дискуссий 1911-1939 годов*. Российский Военный Сборник - Выпуск V, 1994, Москва: www.rp-net.ru, с. 131–139 & Фрунзе, М.: *Единая Военная Доктрина и Красная Армия*, Москва, Военное Издательство Народного Комиссариата Обороны Союза ССР, 1941.

good and analytical military-political leadership that can use the proletariat to tackle the issues at hand in the aims of world revolution.¹³

Svechin – Strategic Factors and Attrition Warfare

Aleksandr Svechin (1878-1938) was a Russian and Soviet military leader, military writer, educator and theorist, and author of the military classic "*Strategy*". Svechin acknowledges that there is a lack of military thought in the Soviet Armed Forces. That there is a need for radical changes, this has to be made through new military pedagogy, a doctrine of the heart rather than a unified doctrine. This doctrine of the heart must aim towards activity and foster victory. Svechin refers to the Dragomirovan understanding of Suvorovan doctrine. For Svechin doctrine is like for Trotsky and Neznamov not an elitist scientific project. The development of military art and its mastery is the most important, not military science itself. Only when military art is mastered can there exist a unified military doctrine and a military science. According to Svechin, until then each soldier and each unit should develop his and master his own doctrine, until it becomes the collective unified doctrine.

In contemporary Russian military discussions Alexander Svechin has an important position and his strategic view, and his emphasis on strategic factors has had a great influence on military operations, which always should be considered as a unique operation. First, he stresses the alignment of military strategy with the political objectives, and the necessity to integrate economic factors in support of political and military objectives. Secondly, it must be a congruence of peoples will and morale in the support of political and military objectives. Thirdly, diplomacy and global initiatives are mandatory to achieve political objectives. Fourthly, to achieve this political and military symbiosis a centralized state power instrument is needed - STAVKA.

From this view we can see Svechin materialist and populist influences where attrition warfare and strategic factors become central.¹⁴

Neznamov – People’s War and Decisive battles

Aleksandr Neznamov (1872-1928) wrote on the essence and nature of wars of mass armies, planning and conduct of war, the essence of operation as a new phenomenon in military art. He also substantiated the theory of operation as a set of battles and battles united by the unity of purpose and design, and put forward the idea of successive operations of one army and a group of armies. In his major work "*Modern Warfare*" Neznamov tried to reveal the nature of an army operation. Neznamov is clearly influenced by the Marxist class perspective when authoring his works.¹⁵

According to the view of Neznamov there is a difference between what is a real doctrine and what is a purely theoretical doctrine, and also therefore there is a difference

¹³ Савикин. А (ред.): *Русская военная доктрина - Материалы дискуссий 1911-1939 годов. Российский Военный Сборник - Выпуск V*, 1994, Москва, www.rp-net.ru, с. 110–130. & Троцкий, Л.: *Военная доктрина или мнимо-военное доктринерство*, Петроград, Политическое Управление Петроградского Военного Округа. 1922.

¹⁴ Савикин. А (ред.): *Русская военная доктрина - Материалы дискуссий 1911-1939 годов. Российский Военный Сборник - Выпуск V*, 1994, Москва, www.rp-net.ru, с. 70–73. & Свечин, А.: *Стратегия*, Москва, Военный Вестник, 1927.

¹⁵ Азяский. Н.Ф.: Неznamов Александр Александрович. *Большая Российская Энциклопедия 2004-2017*, Министрство Культуры Российской Федерации. Доступно: https://old.bigenc.ru/military_science/text/2652581 (2024-02-24).

between the traditional purely militaristic idea of decisive battles and the idea of the people's war. According to Neznamov the real doctrine is the idea of the people's war. Neznamov has a class-perspective on the idea of military doctrine. According to Neznamov the real military doctrine is in short the proletariat's view and implementation of war, in other words the people's war. Which is an organic, holistic historical product, which can not be expressed simply in terms of a simple document. The military doctrine is expressed in a multitude of political and military documents and ideas, from the soldier's handbook and military high-commands ruling document. Neznamov juxtaposes this to the academic and according to him elitist understanding of war, which is based on the idea of decisive battles. It is a military scientific document written by a high-ranking generals and politicians, which has little to do with actual war and is also according to Neznamov very similar in all military headquarters across the world, while the idea of the people's war is implemented very differently according to the historical and political context of the war in question.¹⁶

Shaposhnikov – Centralization of the State and Armed forces

Boris Shaposhnikov, was Field Marshal and Chief of the General Staff, he was a former tsarist officer who studied at the Nikolaev General Staff Academy and participated in the First World War, where he was wounded. In 1917 he joined the revolution, but joined the Communist Party late, in 1930, as he had not been an outspoken political ideologue. He was among Stalin's most trusted officers. One of the few who was addressed in the old Russian way of addressing people with first name and patronymic instead of comrade and surname.

Shaposhnikov split wars into two categories, imperialist and proletarian wars. Imperialist wars are wars of the bourgeoisie that aim to enrich the elites, proletarian wars aim to further the world revolution. Shaposhnikov was a big admirer of Clausewitz and saw him as the “Napoleon” of Military science. His theory of the central command or STAVKA is inspired by Clausewitz 'understanding of the connection between politics and war. Shaposhnikov believes that Marx and Engels were inspired both by Hegel the great historian and by Clausewitz the great military scientist, and were inspired by both of their works when creating Marxism. Shaposhnikov refers to the fact that also Lenin has noticed the importance of Clausewitz in the works of Marx and Engels, but also that Lenin himself was inspired by Clausewitz. Shaposhnikov himself also quotes Moltke's view of Clausewitz when saying that “War is a continuation of politics, by other means, and that strategy is sadly not separate from politics, because politics uses war to reach its goals and has a deciding influence on the beginning and end of war.” Therefore, the STAVKA needs to consist of both political and military parts and the planning needs to include both.¹⁷

Authored the work *The Brain of the Army* in 1929, which talks about the new form of communist (progressive) wars, the connection between political, economic and military warfare and the need to create a strong and centralized military-political leadership. This leadership would be created through military-patriotic education, mainly

¹⁶ Савикин, А (ред.): *Русская военная доктрина - Материалы дискуссий 1911-1939 годов. Российский Военный Сборник - Выпуск V*, 1994, Москва, www.rp-net.ru, с. 74–76. & Незнамов, А.: *Современная война - часть 1*, Москва, Государственное издательство.

¹⁷ Шапошников, Б.: *Мозг Армии - Книга третья*, Москва, Государственное издательство, 1922, с. 226–256.

through the Suvorov Academies. The Soviet Union and Putin's Russia have extensive military patriotic education programs, which include everything from churches, schools, museums, newspapers, etc. The Soviet Union and Russia have national leadership centers formerly known as the Stavka.

The Trinity of Soviet-Russian State

The Power of the Russian People

Carl von Clausewitz studied the moral forces of war. Moral forces can be an instrument in overcoming frictions in a military conflict. The Russian government also interprets the moral force of “traditional values” as an important factor both nationally and globally in both military and political endeavors. The government uses traditional values both as a referent object in its military documents, but also as a source of legitimization of political military aims and a means of mobilizing the masses as have been a necessity to keep the power in Imperial Russia and the Soviet Union.¹⁸ The traditional values of the Russian Federation are seen being under global threat in the country’s national security. This can be identified in the national security strategy from 2021:

“Traditional Russian spiritual, moral, cultural, and historical values are under active attack by the United States and its allies, as well as by transnational corporations, foreign non-profit non-governmental, religious, extremist and terrorist organizations. They exert an informational and psychological impact on individual, group and public consciousness by disseminating social and moral attitudes that contradict the traditions, convictions and beliefs of the peoples of the Russian Federation.”¹⁹

These values are also seen as vital developmental resources for the Russian federation both nationally and globally. The Russian sees these values both as vital in international relations as well as in the Russian state. Russia also sees these values as being valuable in themselves and superior to liberal values. This can be seen in the following passage from the national security strategy:

*The formation of new architecture, rules and principles of the world order is accompanied for the Russian Federation by the emergence of not only new challenges and threats, but also additional opportunities. The prospects for Russia's long-term development and positioning in the world are determined by its internal potential, **the attractiveness of its system of values**, its readiness and ability to realize its competitive advantages by improving the efficiency of public administration.”²⁰*

The national security strategy from 2021 defines a set of different traditional values. These values encompass a great range of life, therefore creating a holistic, inclusive, and organic view of society as being united by values over space, people and time, rather than separated by them. These values are also not specific enough and are not bound to individual making them universal, but on the other hand, every nation on earth probable shares some similar values:

¹⁸ Sanborn, J, A.: *Drafting the Russian Nation. Military Conscripton, Total War, and Mass Politics 1905-1925*, DeKalb, IL., Northern Illinois University Press, 2003/2011.

¹⁹ National Security Strategy of the Russian Federation, 2021, p. 35.

²⁰ National Security Strategy of the Russian Federation, 2021, p.7.

*“Traditional Russian spiritual and moral values include, first and foremost, life, dignity, human rights and freedoms, patriotism, citizenship, service to the Fatherland and responsibility for its fate, high moral ideals, a strong family, creative labor, the priority of the spiritual over the material, humanism, mercy, justice, collectivism, mutual assistance and mutual respect, historical memory and the continuity of generations, and the unity of the peoples of Russia. Traditional Russian spiritual and moral values unite our multinational and multi-confessional country.”*²¹

We can see in the previous passage the outline of what the Russian Federative government considers as traditional values, and where they diverge from what is considered universal values such as human rights and freedoms. But for clarification I will consult another source that clearly defines these values from scientific and academic literature with a conservative philosophical perspective. This literature is also a lot more specific, using more Russian philosophical and religious terminology, that is less political and universal-like in nature:

*“Sensible messianism (defined as living to realize Lord’s plan), Faith in the Lord as the main characterizing trait of the Russian people, Fidelity towards Russian traditions and Russian history (Fidelity towards Russian norms, Russian holy traditions and ‘the ways of the holy Russian spiritual fathers and monks’), A conceptually indigenous understanding of truth, authenticity and justice (‘The Russian Idea’), Sobornost’ (defined as the integrity of Russian human, societal and political life), The Russian people’s predisposition for self-sacrifice, dedication and altruism, A contemplative, spiritual and eschatological paradigm of thought, The Russian people’s readiness for self-criticism, confession and exaggeration of one’s weaknesses and faults, Statism and Great-power status (‘Gosudarstvennost’ i ‘Derzhavnost’)*²²

Traditional values are also the basis for the work of mobilizing the masses through government agencies, state media, state patriotic organizations and NGOs, the orthodox church, legislature etc.²³ The aim of this mobilization is not only to increase the people’s readiness to fight and win wars but also to increase their overall morale. Clausewitz theory separates military victory from moral victory. Military victory is short term, while moral victory is long term. In his analysis of the Napoleonic wars, Clausewitz uses the idea of the trinity and military and political victory to show why Napoleon was more successful than the Prussians, which Napoleon easily defeated. Here Clausewitz pointed to the importance of both the trinity but also faith or religion. The traditional values are based on the Orthodox religion imbued with intrinsic, mystical and emancipatory properties that makes them instrumental for increasing the probability of a long-term moral victory. These traditional values also create a political alternative to the now liberal political order. The Russian orthodox faith, traditional values in combination with a cult of history (both Imperial and Soviet) form the basis for a kind of state ideology.²⁴

The Russian armed forces use orthodox rituals such as formal events, saints, readings, blessings, rites of passage, purification acts, holy objects etc. One of the most famous examples of this is the ritual blessing and purification of nuclear missiles. Russian

²¹ Ibid., p.35–36.

²² Зеленков, М.Ю.: *Основы теории безопасности*. Москва, Московский Университет, 2016, с. 59.

²³ Ordinance of the Government of the RF from 30 December 2015 No. 1493.

²⁴ Гольц, А.: *Военная реформа и русский милитаризм*. Санкт Петербург, Норма, 2019. с.284–343

Nuclear forces also have a saint, Saint Seraphim that they pray to. Other examples are the building of churches and cathedrals most notably the Main Cathedral of the Russian Armed Forces (Cathedral of the Resurrection of Christ, finished 2020), regular sermons, acts of contrition etc.²⁵

The Power of the Russian Armed Forces

The Russian Armed Forces have a mission to deter military and political threats and to support the economic and political interests of the Russian Federation. Additionally, they should be prepared for non-combat operations and to maintain the operational capabilities and availability of general purpose and nuclear strategic forces. The Armed Forces are trained to engage in armed conflicts, including local, regional, and large-scale wars.²⁶ The purpose of using force is to ensure the security of the Russian Federation. Russian forces are organized into five military districts and five operational commands. The General Staff of the Russian Armed Forces is the overall central command and control body for the Russian-Ukrainian conflicts.²⁷

The Military Balance 2024 states that the Russian Armed Forces comprise 1,100,000 personnel, with an additional 1,500,000 in the strategic reserve. The Russian armed forces comprise 500,000 ground troops, 140,000 navy personnel, 165,000 aerospace personnel, 50,000 strategic missile personnel, 35,000 airborne troops, 1,000 special operations personnel, 29,000 railway personnel, 180,000 command and support personnel, and 559,000 gendarmerie and paramilitary personnel.²⁸

The 2014 Russian Military Doctrine outlines the country's stance on armed defense and preparations for such defense. The current military doctrine includes a military economic section for defense. Its task is to ensure sustainable development and maintenance of the state's military-economic and military-technical potential at a level necessary for implementing military policy and meeting the needs of the military organization in peacetime, during the period of immediate threat of aggression, and in wartime. Equipping the armed forces with weapons, military and special equipment requires the development of a military-industrial complex as a high-tech and sustainable multi-industrial sector.

According to Israeli military researcher Udo Hecht, the Russian-Ukrainian conflict has challenged dominant Western military theories of high-intensity warfare supported by modern technologies. The conflict was not won through cyber warfare, high-precision weapons, or small ground forces with professional contracted soldiers. The military capabilities, doctrines, and operational environment were different from those of NATO and other Western countries. The large numbers of old Soviet-style weapons have had a significant impact on the battlefield. However, the use of vertical and asymmetric drone warfare has also had incredible effects in the war. This has

²⁵ Adamsky, D.: *Russian Nuclear Orthodoxy: Religion, Politics and Strategy*. 2019. Redwood City, CA., Stanford University Press. & Hollis, A.: Weapons in the Hand of God: The Russian Orthodox Church and Russia's Nuclear Weapons Establishment, *Nuclear Network*, Center for Strategic and International Studies, August 16, 2019, Source: <https://nuclearnetwork.csis.org/weapons-in-the-hand-of-god-the-russian-orthodox-church-and-russias-nuclear-weapons-establishment/>, Accessed: 2024-02-25.

²⁶ Source: <https://eng.mil.ru/en/index.htm>, Accessed 2024-02-25.

²⁷ Khudoleev, V.: 'At the origins of the country's defense'. *Red Star (Красная звезда)*, 02/18/2022.

²⁸ The International Institute for Strategic Studies. *The Military Balance 2024*. London: Routledge, 2024, p. 205.

resulted in high casualty numbers for both Russian and Ukrainian manpower, as well as significant losses in military units and equipment.²⁹

Even the Russian military industry was unable to replace these losses and the vast amounts of ammunition used. External vendors such as China, Iran, and North Korea helped to restore some of the operational inventory for the Russian armed forces. In contrast, Ukraine has relied on external economic and military aid since the beginning of the war and is currently in urgent need of ammunition and manpower. British researchers Watling and Reynolds provide a critical perspective on Russia's ability to achieve military objectives and their military capacity in the next two years. According to them, the Russian military-industrial complex is facing serious quality and productivity issues.³⁰ Other sources claim that Russia has a huge military-industrial capacity and therefore will not have a problem with producing large volumes of armaments and munitions. Civilian factories are soviet standard and can readily be converted from civilian to military production.³¹

The 2004 White Paper on the Russian Military clearly states the direction the Russian state has set for the 2020s. School visits to museums and meetings with war veterans can be understood as an organized internalization of war and its necessity. At present, this is being done much more extensively in Russia through the involvement of young citizens in patriotic and youth military associations [present in all major Russian cities], the rapid expansion of cadet schools, the establishment of cadet classes in civilian youth schools, compulsory civilian-military training from grades 3 to 11, and, not least, a youth army that is expected to include over one million young people by 2023.

The Power of the Russian State

The Russian regime's objective to maximize its regime's security is a part of a long Russian and Soviet tradition.³² That can either be by military or non-military means. The war in Ukraine create's more secure borders for Russia in its western periphery. Russia globally also wants to through the spread of its conservative values and the multipolar world order be a political alternative to western liberalism, which makes it gain traction with among others the BRICS states. Russia's military industry and resource extraction economy also poses a challenge for the G8, because the G8 is partly dependent on Russian gas and oil. In 2023, Russia was the world's 11th-largest economy by nominal GDP, 6th-largest by purchasing power parity (PPP) according to the IMF, and 5th-largest according to the World Bank. Therefore, it is obvious that Russia's political ambitions and capabilities are often underestimated by western experts.

²⁹ Hecht, U.: 'The Ukraine War After Two Years: Initial Military Lessons'. The Jerusalem Strategic Tribune. January 2024. Source: <https://jstribune.com/hecht-the-ukraine-war-after-two-years/>, Accessed: 2024-02-26.

³⁰ Watling, J. and Reynolds, N.: 'Russian Military Objectives and Capacity in Ukraine Through 2024'. RUSI, 13 February 2024. Source: <https://www.rusi.org/explore-our-research/publications/commentary/russian-military-objectives-and-capacity-ukraine-through-2024>, Accessed 2024-02-24.

³¹ Roth, A.: 'A lot higher than we expected': Russian arms production worries Europe's war planners. *Guardian* Thu 15 Feb 2024. Source: www.theguardian.com/world/2024/feb/15/rate-of-russian-military-production-worries-european-war-planners, Accessed: 2024-02-25. & Сергей Асланян: Об отличиях вооружений России и Украины | Фрагмент Обзора от Bild. *Youtube*, 19 February 2023. Accessed: <https://www.youtube.com/watch?v=y153YXzHbuk>, (2024-02-18).

³² Tsygankov, A, P.: *The Strong State in Russia. Development and Crises*. Oxford: Oxford University Press., 2014, Fedor, J.: *Russia and the Cult of State Security. The Chekist Tradition, from Lenin to Putin*. New York, NY.: Routledge, 2011, & Сорокин, В.: *День Опричника*. Москва: Захаров, 2006.

The complexity of understanding Russian economic and political power stems partly from the size of the country. Russia is the world's biggest country by size, extremely rich in natural resources such as oil, natural gas, iron, nickel, uranium, fish, beets, etc. But it is also one of the world's most unequal economies. This inequality is also understood as a threat to its future by the state. Still Russia has produced a very large volume of nuclear, military and space technology that is used all over the world. The established Soviet industrial base is a big benefit for Russian military production. Because these factories were built to be readily expanded and also converted to military war time production from civilian peacetime production.

Russia is also a command economy and has little transparency which makes it more difficult to analyze statistically than a liberal market economy. The fact though is that command economies have sometimes fared better than liberal market economies, especially when combined with effective leadership. The Four Asian Tigers or Dragons are an example of that. Singapore and South Korea are the more interesting examples for comparison because they are both ex-dictatorships or dictatorships. They prove the point that economic and political development don't have to go in tandem. The Chinese economic miracle is also a similar example.

The Russian state suppresses political, religious and other opposition through the means of mass surveillance³³, censorship of critical messages³⁴ and fighting terrorists and foreign agents/NGOs etc.³⁵ Especially Russian youths are seen as vulnerable and should therefore be protected against 'depraved' and 'dangerous' influence from hostile foreign countries by means of foreign media, religion and international NGOs.³⁶ The Russian government has subjected at least 116,000 Russians to criminal and administrative charges on political grounds since the start of Russian President Vladimir Putin's fourth term in office in 2018. Which is the biggest crack-down on political dissent since the times of Stalin.³⁷ Russia has a demographic problem, but this problem is not unlike most western countries, which are going into demographic issues starting now because of low birth rates vs death rates. Russia on top of that has a high emigration rate, but that is compensated by a large immigration rate from the south and east. This is seen by the current government as a threat to Russia's future, but the Russian state also acknowledges that Russia has been a country of emigration and immigration throughout history.³⁸

Russian and soviet imperial history is not something of the past, it still exists in the modern world. With Russian political, military, and human resources being spread out all over the planet, from Latin America to the depths of Africa, to the width of Asia and to the heart of Europe. Therefore, it is not easy to draw a clear line where the Russian state and its ambitions end. Russia has historically lost a lot of territory in the

³³ Borogan, I & Soldatov, A.: In Ex-Soviet States, Russian Spy Tech Still Watches You *Wired*, 2012: <https://www.wired.com/2012/12/russias-hand/>, (2024-01-07).

³⁴ Federal Law of 29 December 2010. No: 436-F3, Section 1 Article 5.

³⁵ Federal Law of 12 January 1996. No: 7-F3, Section 1 Article 6.

³⁶ Зеленков, М.Ю.: *Основы теории безопасности*. 2016, с. 59.

³⁷ Коростелев, А & Резникова, Е.: *Исследование путинских репрессий*. Проект.Медиа. 2024. Доступно: <https://www.proekt.media/guide/repressii-v-rossii/> (2024-02-25).

³⁸ Лабутин, А.: *К вопросу обывателя, почему Россия такая большая страна и как её сохранить?* Клуб военачальников РФ. 2021, Доступно: <http://kvrf.milportal.ru/k-voprosu-obyvatelya-pochemu-rossiya-takaya-bolshaya-strana-i-kak-eyo-sohranit/>, (2024-02-46).

last 30 years, more than in its 400 years of history, but its influence still reaches far and wide.

The Russian-Ukrainian War of February 2022 to February 2024

The Russian-Ukrainian war began in February 2014, but it escalated into a full-scale military conflict eight years later in February 2022. From the Ukrainian perspective, it was viewed as a brutal Russian military aggression, prompting a general mobilization on the first day of the war. Throughout the conflict, the Ukrainian armed forces were primarily engaged in a defensive and existential battle. On 21st February 2022, the Russian Security Council described a military operation as a 'Special Military Operation' to avoid mobilizing a full military force due to internal political risks associated with mobilizing a large number of reservists. However, the Special Military Operation was planned to be short and successful, so it was not necessary to involve a superior number of forces.

Clausewitz discussed the difference between absolute and limited wars; these differences could be analyzed in the war aims of both belligerents. The first Ukrainian war aim was to defend the country against Russian aggression, the second was to regain all the territories occupied by Russia in 2014, and the third was to put Russian political and military leaders on trial for war crimes. Russia's three war aims were to denazify Ukrainian political power, degrade Ukrainian military power and secure Ukrainian neutrality. At the start of the war the Russian forces were estimated at 150,000 to 180,000 soldiers, and the Ukrainian forces were estimated at 400,000 soldiers. The correlation of forces according to armored vehicles, artillery, airplanes, navy vessels gave a significant advantage for Russia. Not so few experts believed the war shouldn't last more than a few weeks.

Different sources give a variety of analyses and interpretations of how the Russia-Ukrainian war started and evolved over two years. Direct sources are the Ministry of Defense in Ukraine and Russia. But both have limited objectivity and can be understood as active strategic propagandic tools. Other more reliable sources are Institute of the Study of War, Russia Matters, Ministry of Defense UK, and Reuters.³⁹ In this description of the major campaigns of the Russia-Ukrainian war we have chosen to use perspectives and insights from the Begin-Sadat Center for Strategic Studies at Bar-Ilan University (BESA). In this paper we have added a sixth campaign (the Russian counter offensive) to the five campaigns that are described in the BESA research paper.⁴⁰

³⁹ Sources: <https://www.understandingwar.org/>, <https://www.russiamatters.org/>; <https://www.gov.uk/government/organisations/ministry-of-defence>, and <https://www.reuters.com/graphics/UKRAINE-CRISIS/MAPS/klyvgwawav/>, Accessed 2024-02-24.

⁴⁰ Hecht, E. & Shabtai, S (Eds.): *The war in Ukraine: 16 Perspectives, 9 Key Insights*. Mideast Security and Policy Studies No. 201, Ramat, Bar-Ilan University, The Begin-Sadat Center for Strategic Studies (BESA), 2023, pp. 16–19 and Hecht, E.: 'The Ukraine War After Two Years: Initial Military Lessons', *The Jerusalem Strategic Tribune*, January 24, 2024. Source: <https://jstribune.com/hecht-the-ukraine-war-after-two-years/>, Accessed 2024-02-25.

The Russian 'Special Military Operation' February 2022 - February 2024

1. Special Military Operation 2022 Feb-2022 Mar

The initial campaign was the 'Special Military Operation', which involved a swift Russian 'blitzkrieg' maneuver on multiple fronts. The Ukrainian defense was successful, and Russian military incompetence in operational planning and execution had a significant impact on their strategic defeat and failure on the Kiev and Kharkiv battlefronts. Russia's decision to conduct maneuver warfare by deploying a limited number of strategic forces, which were not coordinated with the mass of tactical Russian units, in order to achieve a swift military victory, was a strategic mistake against the highly motivated and tactically skilled Ukrainian defense units.

2. Russian Man Effort in Eastern Ukraine 2022 Apr-2022 July

A Russian withdrawal of forces from the Kiev front and a focus on military operations in eastern Ukraine was the beginning of the second campaign. This phase of the war showed classic Russian combined arms warfare according to normal Russian military doctrines. The concept of deep striking with dispersed understrength tactical battle groups from the first campaign was replaced by a concentration of recon tactical and operational strike fires, and use of small, dispersed assault forces. Russia's choice of a positional warfare along an almost 1,000-kilometer-long front wore out the Ukrainian forces that needed rapid force replacement, NATO reinforcement of military weapons and ammunition to survive the second campaign.

3. Ukrainian Counter-Offensive 2022 Aug-2022 Oct

During the third campaign, Ukrainian forces conducted a counter-offensive, expanding their armed forces to over one million soldiers, including 700,000 reservists, national guardsmen, and new volunteers. The deployment of large numbers of soldiers and newly delivered NATO weapons and ammunition resulted in a military advantage over the overstretched and outnumbered Russian forces. East of Kharkiv, Ukrainian forces break through the weak Russian front line and recapture a large area of territory within a month. The Ukrainian victory compelled the Russians to undertake a partial mobilization of 300,000 reservists. To summarize, the Russian defeat and losses in this third campaign were due to understrength forces, which allowed superior Ukrainian forces to succeed in a decisive offensive campaign.

4. Balance and Waiting 2022 Nov-2023 Apr

A prolonged and positional war marked the fourth campaign. Both sides were in a state of build-up and preparation for further military operations. The Russian forces were not strong enough to conduct major offensive operations, but they launched small operations and captured limited objectives to wear down the Ukrainian forces. In preparation for the expected Ukrainian counter-offensive, the Russians also built massive fortifications and redeployed operational reserves. Both the Russians and Ukrainians escalated their attacks during this campaign with intentions to weaken its opposing forces but without any deceive results on the battlefield.

5. *Second Ukrainian Counter-Offensive 2023 May-2023 Oct*

The fifth campaign saw the Ukrainian counter-offensive, supported by NATO-trained units, material, and doctrines, countered by the Russian armed forces' defensive in-depth strategy, employing combined arms and joint operations. However, this offensive approach failed from the outset, resulting in significant Ukrainian losses. The attempt to reduce larger brigade and battalions to use company and platoon units supported by indirect fires to achieve infiltration tactics also failed. As a result, the NATO-supported Ukrainian forces suffered a strategic defeat in this campaign.

6. *Russian Counter-Offensive 2023 Nov-2024 Feb*

Finally, the ongoing Russian counter-offensive is the sixth campaign of the war. It is characterized by a broad front assault in many vectors to weaken major Ukrainian frontal defense lines, as well as to find tactical opportunities to successfully penetrate and exploit weaknesses. This is combined and joint operation warfare of the Russian armed forces that probably aims to let the Ukrainian forces to culminate which could allow the Russian to conduct decisive deep offensive operations into Ukraine. This campaign can also be described as a Russian aggressive warfare of attrition.

Analysis of time, space, and strength in the Russia-Ukrainian War 2022-2024

“... generally speaking, there are two kinds of wars – those in which the object is the overthrow of the enemy, and those in which the object is merely to make some conquests on the frontier of his country or to win booty of some kind and gain advantages in negotiations”.

Byron Dexter - *Clausewitz and Soviet Strategy*. October 1, 1950.⁴¹

We are interested in Carl von Clausewitz's military concept of absolute and limited war because it has implications for the conduct of war as the concepts of destruction and attrition. Alexander Svechin, inspired in some part of Clausewitz, stated that: "Military operations can take different forms: destruction, war of attrition, defensive, offensive, maneuver and positional warfare".⁴² The most important forms, according to Svechin's thoughts, are the forms of destructive and attrition war. The strategy of destruction consists of combining time, space and force in a concentrated effort that results in the complete defeat of the enemy's main forces, usually the main elements of the army. Everything should be concentrated on the decisive effort of strength and location in time and space. It could be several successive operations combined to form a gigantic offensive operation. The risk of winning or losing everything is the great risk of destructive war. A great strategic victory or total strategic defeat could result for a daring commander. When using destructive warfare, only fight when the expected gains outweigh the risks.

⁴¹ Dexter, B.: 'Clausewitz and Soviet Strategy', *Foreign Affairs*, October 1950, p. 2.

⁴² Svechin, A. A.: 'Combining Operations for Achieving the Ultimate Goal of the War'. In Svechin, A. A.: *Strategy*. Minneapolis, MN., Eastview Press, 1992/2004, pp. 239–240.

A war of attrition can in the perspective of the Soviet military theorists be understood as a war with limited objectives⁴³. Its purpose is to use time, space and force to degrade the enemy's military and economic resources, to wear down his manpower physically and morally, and finally to defeat his political will. It relies on careful strategic studies of the military, political and economic situation and allows for a flexible long-term political strategy. A successful strategy of attrition often relies on inflicting direct casualties and undermining the enemy's logistics, morale, cohesion, and will to fight. Attrition could be a combination of military, economic and psychological methods. It could be dynamic, sustained and repeated to shape the war by staging phases of own material and manpower superiority to deprive the enemy of successful defensive operations. Economic and political mobilization of strategic reserves and allies as well as long term objectives make attrition war more complex and complicated with a dynamic widening and deepening character compared to the destructive short-term goal-oriented approach.⁴⁴

Campaign	Time period	WD	WA	MW	PW	OW	DW
1. Special Military Operation	2022 Feb-2022 Mar	x		x		x	
2. Russian Main Effort in Eastern Ukraine	2022 Apr-2022 July		<-x		<-x		<-x
3. Ukrainian Counter-Offensive	2022 Aug-2022 Oct		x		x		x
4. Balance and Waiting	2022 Nov-2023 Apr		<-x		<-x		<-x
5. Second Ukrainian Counter-Offensive	2023 May-2023 Oct		x		x		x
6. Russian Counter-Offensive	2023 Nov-2024 Feb		<-x		<-x		<-x

Legends: WD = War of Destruction, WA = War of Attrition, MW = Maneuver Warfare, and PW = Positional Warfare, OW = Offensive Warfare, DW = Defensive Warfare.

Table 1. Svechin's war and warfare concepts analyses of Russian six campaigns in Russia-Ukrainian War 2022-2024.

To be successful in attrition warfare a country needs supporting people, professional armed forces, all supported by a balanced state economy and a competitive military industrial-complex. Russia has strategic goals to increase its general reasonable ability by improvements in a patriotic spirit among its people, expanded education and training of soldiers, cadets and officers, reorganized and invested the armed forces into a modern army, tried to create a competitive economy and industry, as well as increase the quality of life in Russia. They didn't succeed to reach all goals but the new direction of the "New World Order" against the West had started, and in general Russian people were satisfied with the development in the 2000's compared to the dreadful

⁴³ Pavlenko, N.: 'Some Questions Concerning the Development of Strategic Theory in the 1920s' in *The Evolution of Soviet Operational Art 1927–1991: The Documentary Basis, Volume II, Operational Art 1965-1991*, London: Frank Cass, 1995.

⁴⁴ Naveh, S.: *In Pursuit of Military Excellence. The Evolution of Operational Theory*. London: Frank Cass, 1997/2004.

1990's. This was a period of increased militarism, patriotic mobilization, and confrontation with the West.⁴⁵

This analysis of the six campaigns of the Russian-Ukrainian war is based on Alexander Svechin's description of different forms of war and warfare that is thought as a derivation of Carl von Clausewitz's theoretical concepts. The first pair of analysis elements is the time character of War as destruction, and attrition, the second is the strength of the warfare as Offensive and Defensive, and finally the third of the space character of warfare as Maneuver and Positional. The results show that after the first failed offensive assault Russian military withdrew to a positional and attritional defensive warfare in all the following fifth campaigns.

Elements of time

Our analysis of the Russia-Ukrainian war shows that the Russian armed forces was initially assigned to a blitzkrieg to take out the Ukrainian political leadership located in Kiev. The Russian failed the first campaign and most of the following campaigns were mainly attrition warfare. From the very beginning of the war the Russians attacked strategic targets of military industrial capabilities. The purpose of that was to deny Ukraine a crucial ability to produce, maintain and repair domestic military equipment. This forced Ukraine to be dependent on external support of necessary military hard- and software, as well as huge economic support. Russia on the other hand had an intact military industrial complex that couldn't be affected by Ukraine strikes and sabotages.

Attrition warfare's big advantage is time and superior reach of strategic resources. Relative time against absolute time is the significant advantage for Russia in the war against Ukraine. This could be seen in losses of personnel and material. In absolute terms could the smaller and weaker part seem to be more successful but in a long-term perspective it must be a balance between quantitative and qualitative resources. Strategic attrition warfare's critical vulnerabilities are time, quantity and sustainability. To replace heavy losses of material and personnel could be understood as a process of procurement and reproduction of capabilities.

Elements of Space

Another element to analyze is the use of space in the Ukrainian-Russian war. Initially Russia conducted a blitzkrieg by using maneuver warfare to rapidly reach major cities and to overthrow the political power in Ukraine. The Russian armed forces were initially dispersed and lost its concentration of forces and fires. This conduct of warfare was against traditional Russian military doctrine and this fragmentation Russian offensive in weak tactical battle groups reinforced the Ukrainian defensive in their tactical defense. When Russian forces withdrew from the big cities and concentrated in a prolonged positional warfare along a fixed 1000 kilometers long front, they returned to an active defense doctrine. Strategic superior forces risks are fewer relative losses in a positional warfare compared to a maneuver warfare. Positional warfare usually

⁴⁵ Sakwa, R.: *Russia against the Rest. The Post-Cold War Crisis of World Order*. Cambridge, Cambridge University Press, 2017; Ledeneva, A.V.: *Can Russia Modernize? Sistema. Power Networks and Informal Governance*. Cambridge, Cambridge University Press, 2013; Clover, C.: *Black Wind, White Snow. The Rise of Russia's New Nationalism*. New Haven, CT.: Yale University Press, 2016, and Golts, A.: *Military Reform and Militarism in Russia*. Washington, D.C., The Jamestown Foundation, 2018.

gives the stronger part more control and can be reinforced by strategic reserves and fire strikes in the depth of the enemy. Sensor capabilities and recon strikes can over time systematically reduce the opponents defense capacity.

No military forces on either side have been strong enough to conduct decisive and deep operations so far in this war. Russian strategic units tried conducting deep maneuver operations initially, but the forces were too small, and it lacked necessary coordination with their own combined joint forces. Ground forces have been too large in numbers and have had stronger defensive than offensive capabilities, having the chance to achieve an operational strategic effect. Another explanation to the positional war is the absence of air superiority in both tactical and operational depth. The same conclusion can be made of the sea domain, with a superior Russian Black Fleet that cannot match the Ukrainian sea defense systems that set Russian ambitions of amphibious landing operations and deep naval operations at a very high risk. Tactical fires of towed and self-propelled howitzers, multiple launch rocket systems, and long-range precision missiles of the ground forces, unguided and guided bombs and rockets of front aviation platforms have been the dominating ground fire systems in the war. Strategic air force and missile platforms of the navy have delivered strategic strikes over all operational and strategic depth in Ukraine. But a large amount of surveillance assets from satellites to drones combined with lethal and accurate kinetic weapons of the sky have had the most significant impact on territorial space. The space domain and the vertical dimension of warfare had its heydays during this war so far.⁴⁶.

Elements of Strength

In this analysis offensive and defensive are the elements of strength. According to Clausewitz, the defensive has been stronger than the offensive in war. Defensive approach has usually to be chosen when the opponent is numerically stronger, and its military capabilities are more advantageous. In the Russian-Ukrainian war the correlation of forces is not easy to analyze and understand correctly. When the war started in February 2022 Ukraine had a quantitative superiority in the numbers of manpower but was greatly outnumbered in military capabilities in the army, marine and air force. The high intensity of a long frontline in many vectors has caused very high losses in military assets and in manpower on both sides.

According to latest Russia-Ukraine War Report Card, Feb. 27, 2024⁴⁷ from Harvard Kennedy School the relative numbers of military casualties is negative to the Ukrainian forces, as well as military vehicles and equipment. In absolute number Russian losses is bigger, but the Russian capabilities to regenerate new military capabilities through a much larger population could be seen in the numbers of Russian young army members, cadets, numbers of conscripts, examined second lieutenants, and as well as volunteers to join the Russian Armed Forces. And there is the strategic reserve of 1,500,000 men to be used if necessary. Ukraine is politically, economically, and

⁴⁶ Watling, J.: *The Arms of the Future. Technology and Close Combat in the Twenty-First Century*. London, Bloomsbury Academic, 2023.

⁴⁷ Harvard Kennedy School, Belfer Center for Science and Internal Affairs in Boston MA, publish every week a Report Card that contains relevant and interesting data of the Russia-Ukraine War. Source: <https://www.russiamatters.org/news/russia-ukraine-war-report-card/russia-ukraine-war-report-card-feb-27-2024>, Accessed: 2024-03-01.

militarily fully dependent on foreign support to replace and balance its economic and military losses during this war.

In the Russia-Ukraine War Report Card there is strategic quantitative data as: change in military territory control, military casualties and equipment losses, civilian fatalities, displaced citizens, economic impact, infrastructure, and popular support. These indicators influence the outcome of the war, but there are other criteria and important qualitative indicators as ammunition and military equipment supply, ability to generate new forces, political and military leadership, time and depth of military training/exercises, moral support of own population, attraction to voluntarily join armed forces, foreign economic, political as well as military support. All these criteria have in some way to be considered when the element of strength - fighting power and military ability - is to be discussed on both sides.⁴⁸

Combine the State, People and Military for Achieving the Ultimate Goal of the War

*“We must understand the war at all levels - the long term national and political objectives, the grand strategy, the military strategy, the systemic-operational planning, the tactical battle, the techno-tactics, the logistics, the information, the narrative, and of course the buildup of forces and the concept of how to apply it. In order to win a war that is ever more complex and losing clear boundaries, we must demonstrate superiority at every level and in every aspect. Perhaps most of all, we must understand a war in its distinctive context”.*⁴⁹

Israeli military theorist Ron Tira emphasizes the complexity of war, which involves military, civilian, and political interactions. He argues that a holistic approach enhances our understanding. The Russian state has handled complexity...

The Russian triad of state, people, and military can create a political strategic synergy if it is harmonized and balanced. Cohesion and character of the Russian people is based on a deep understanding of history, religion, and conservative values. This core has been formed and exploited by the state for centuries. Military institutions have indoctrinated individuals of all ages, from children to young soldiers, with its identity and legitimacy through its long traditions and historic deeds. The state has systematically prepared young Russians to serve and join the military in future conflicts.⁵⁰

The cohesion and character of the Russian people can both be compared both to Spain during the Napoleonic wars or the early Chinese empire during Sun Tzu in terms of its small war, but also to Napoleonic France or Frederick the Great's Prussia in terms of big war. Russian history contains both the largest land battles in history, such as Borodino and Stalingrad, but also many examples of Cossack raids, scorched earth tactics, partisans, etc. This shows that Russian people throughout history have had a deep cohesion and strong militarization which results in a strong will to fight both small and big wars with a clear civilizational goal of protecting, expanding, and strengthening Russia. These qualities have successfully been and are continued being

⁴⁸ Ibid.

⁴⁹ Tira, R.: *The Nature of War. Conflicting Paradigms and Israeli Military Effectiveness*. Brighton, Sussex Academic Press, 2010, p. 130.

⁵⁰ Danchenko, A. M. & Vydrin, I. F. (Eds.): *Military Pedagogy. A Soviet View*. Honolulu, HI., University Press of the Pacific, 1973/2002.

used by the Russian state to further its goals. The Russian state has both strong assets and strong narratives, which makes it easy to mobilize for conducting wars.

In the last part of this paper, our conclusion will elaborate on the strategic strength and weaknesses of Russia.

Conclusion: The symbiosis of the Russian State, Armed forces and People

In the context of the Russian-Ukrainian war, Clausewitz's theory is still relevant for the analysis of the Russian way of war. War is essentially the use of weapons and people, with people being the most important, according to the Russian experience of crucial moments in history - the Civil War, the Great Patriotic War and the Russian-Ukrainian War - and its development of military theory. The Russian symbiosis of the state, the military and the people is a prerequisite for the conduct of successful attrition warfare that is conducive to the Russian political and strategic objectives in the Russian-Ukrainian war.

Not a very few military theorists have explored the Clausewitz's trinity through the analysis of concepts, interpretations, or contexts. Our research approach has interpreted the primary concepts of passion (*Hass und der Feindschaft*), chance (*Wahrscheinlichkeiten und... Zufall*) and politics (*Natur eines politischen Werkzeugs*) into the secondary concept of people (*Volk*), armed forces (*Feldherren und... Heer*) and the state (*Politischen Zwecke ... Regierung*). We recognize the importance of the integrative logic of the three parts, and not as a paradox. The strength of a trinity is its mutual reinforcement and ability to increase its synergy and power. This method of analysis of the Russian-Ukrainian War, based on Clausewitz's theory, is relevant and worthwhile, as our conclusion shows.

Russia can be described as two parts, the Motherland as the people and the Fatherland as the armed forces, that are unified and commanded by the state. Historical experiences from the Mongol invasion to the current war in Ukraine shows the necessity of a comprehensive approach - a total war approach - to survive as an independent nation. These experiences have been an important driving force to develop Russian military power, by combining military systems, human beings, and politics. The primary tool for the military power was to develop a relevant military theory, practice, and a centralized command in the hands of the Russian General Staff as "the brain of the army".

Clausewitz had an emphasis on the nature and characteristics of war. War could be conducted as an absolute war or as a restricted war. Absolute war is very hazardous and requires full total access to national resources including, for Russia, nuclear weapons. The preferred alternative is a restricted war using a balanced force that is sustained over a strategic long term. This alternative implicates attrition warfare that requires long term substantial material, and human resources. Strategic effects must be developed over a long time. Russia has in the last 20 years internalized a deep-rooted military patriotic spirit in its own people, as well as a significantly reinforced military industrial capabilities.

Overall, our main conclusion in this paper is that the center of gravity of the Russian nation is the balanced symbiotic relationship between the people, the army, and the state. This strategic strength is also Russia's critical strategic vulnerability. Winning

tactical battles without realistic political goals is not a successful military mission for the armed forces and their military leaders. Carl von Clausewitz's military concept of the wonderful trinity implies for us a holistic and dynamic understanding of the most important elements of war.

References

English-language sources:

Adamsky, D.: *Russian Nuclear Orthodoxy Religion, Politics, and Strategy*. Stanford, CA., Stanford University Press, 2019.

Adamsky, D.: *The Russian Way of Deterrence: Strategic Culture, Coercion, and War*. Stanford, CA., Stanford University Press, 2023.

Borogan, I & Soldatov, A.: In Ex-Soviet States, Russian Spy Tech Still Watches You *Wired*, 2012, <https://www.wired.com/2012/12/russias-hand/>, (2024-01-07).

Clover, C.: *Black Wind, White Snow. The Rise of Russia's New Nationalism*. New Haven, CT., Yale University Press, 2016.

Danchenko, A. M. & Vydrin, I. F. (Eds.): *Military Pedagogy. A Soviet View*. Honolulu, HI., University Press of the Pacific, 1973/2002.

Dexter, B.: 'Clausewitz and Soviet Strategy'. *Foreign Affairs*, October 1950.

Dugin, A.: *The Fourth Political Theory*. London, Arktos, 2012.

Federal Law of 29 December 2010. No: 436-F3, Section 1 Article 5.

Federal Law of 12 January 1996. No: 7-F3, Section 1 Article 6.

Fedor, J.: *Russia and the Cult of State Security. The Chekist Tradition, from Lenin to Putin*. New York, NY., Routledge, 2011.

Gareev, M, & Slipchenko, V.: *Future Warfare*. Moscow: Ob'edinennoye Gumanitarnoye Izdatelstvo (O.G.I), 2005.

Gareev, M.: *If War Comes Tomorrow? The Contours of Future Armed Conflict*. London, Frank Cass, 1995/1998.

Golts, A.: *Military Reform and Militarism in Russia*. Washington, D.C., The Jamestown Foundation, 2018.

Hecht, E.: 'The Ukraine War After Two Years: Initial Military Lessons'. *The Jerusalem Strategic Tribune*, January 24, 2024. Source: <https://jstribune.com/hecht-the-ukraine-war-after-two-years/>, Accessed 2024-02-25.

Hecht, E. & Shabtai, S (Eds.): *The war in Ukraine: 16 Perspectives, 9 Key Insights*. Mideast Security and Policy Studies No. 201, Ramat, Bar-Ilan University, The Begin-Sadat Center for Strategic Studies (BESA), 2023.

Hollis, A.: Weapons in the Hand of God: The Russian Orthodox Church and Russia's Nuclear Weapons Establishment, *Nuclear Network*, Center for Strategic and International Studies, August 16, 2019, <https://nuclearnetwork.csis.org/weapons-in-the-hand-of-god-the-russian-orthodox-church-and-russias-nuclear-weapons-establishment/>, (2024-02-25).

- Howard, C., & Pukhov, R.: *Brothers Armed. Military Aspects of the Crisis in Ukraine*. Minneapolis, MN., East View Press, 2014.
- Ledeneva, A.V.: *Can Russia Modernize? Sistema. Power Networks and Informal Governance*. Cambridge, Cambridge University Press, 2013.
- Lewis, R.: Ukraine Crisis.Ukrainian history [2013-2014]. *Britannica*. Accessed: <https://www.britannica.com/-topic/Ukraine-crisis>, (2024-02-22).
- Lo, B.: *Russia and the New World Disorder*. Washington D.C., Brooking Institution Press, 2015.
- National Security Strategy of the Russian Federation, 2021.
- Naveh, S.: *In Pursuit of Military Excellence. The Evolution of Operational Theory*. London, Frank Cass, 1997/2004.
- Ordinance of the Government of the RF from 30 December 2015 No. 1493.
- Roth, A.: ‘A lot higher than we expected’: Russian arms production worries Europe’s war planners. *Guardian*, Thu 15 Feb 2024, Source: www.theguardian.com/world/2024/feb/15/rate-of-russian-military-production-worries-european-war-planners, Accessed: 2024-02-25.
- Russia Matters. *Economy*. Harvard. 2023, Accessed: <https://www.russiamatters.org/facts/economy>, (2024-02-26).
- Russia Matters. *Russia #1s*. Harvard. 2023, Accessed: <https://www.russiamatters.org/facts/russia-1s>, (2024-02-26).
- Sakwa, R.: *Russia against the Rest. The Post-Cold War Crisis of World Order*. Cambridge, Cambridge University Press, 2017.
- Sanborn, J, A.: *Drafting the Russian Nation. Military Conscription, Total War, and Mass Politics 1905-1925*, DeKalb, IL., Northern Illinois University Press, 2003/2011.
- Stoecker, S, W.: *Historical Roots of Contemporary Debates on Soviet Military Doctrine and Defense*. Santa Monica, CA, RAND N-3348-AF/A. 1991.
- Strachan, H. & Herberg-Rothe, A. (Eds.): *Clausewitz in the Twenty-First Century*. Oxford: Oxford University Press, 2007.
- The International Institute for Strategic Studies. *The Military Balance 2024*. London: Routledge, 2024.
- Thornton, R.: *Asymmetric Warfare*. Cambridge, Polity Press, 2007.
- Tira, R.: *The Nature of War. Conflicting Paradigms and Israeli Military Effectiveness*. Brighton, Sussex Academic Press, 2010.
- Tsygankov, A.P.: *The Strong State in Russia. Development and Crises*. Oxford, Oxford University Press, 2014.
- Watling, J. and Reynolds, N.: ‘Russian Military Objectives and Capacity in Ukraine Through 2024’, *RUSI*, 13 February 2024, Source: <https://www.rusi.org/explore-our-research/publications/commentary/russian-military-objectives-and-capacity-ukraine-through-2024>, Accessed 2024-02-24.

Watling, J. (2023): *The Arms of the Future: Technology and Close Combat in the Twenty-First Century*, London, Bloomsbury Publishing Plc.

German-language sources:

von Clausewitz, C. *Vom Kriege*. Hamburg, Nikol Verlag, 1831/2008.

Clausewitz - Lebensbild eines preußischen Generals. (DDR TV-Archiv). Wolf-Dieter Panse (Director). Hamburg, Studio Hamburg Enterprises, 1980/2016, 90 Minuten.

Scharnhorst. Preußens General und Heeresreformer. (DDR TV-Archiv). Wolf-Dieter Panse (Director). Hamburg, Studio Hamburg Enterprises, 1978/2016, 4 x 75 Minuten.

Die Welt Klar Sehen! Carl von Clausewitz - Vom Kriege: Das Leben des berühmtesten Militärstrategen aller Zeiten. Quelle: <https://www.youtube.com/watch?v=feVjpxXNfQk> Accessed: 2024-02-02.

Die Welt Klar Sehen! Carl von Clausewitz - Krieg ist eine politische Mittel. Quelle: <https://www.youtube.com/watch?v=CY0XC9JvOAs>, Accessed: 2024-02-02.

Russian-language sources:

Азяский, Н.Ф.: Незнамов Александр Александрович. *Большая Российская Энциклопедия 2004-2017*. Министерство Культуры Российской Федерации. Доступно: https://old.bigenc.ru/military_science/text/2652581, (2024-02-24).

Гольц, А.: *Военная реформа и русский милитаризм*. Санкт Петербург, Норма, 2019.

Зеленков, М.Ю.: *Основы теории безопасности*. Москва, Московский Университет, 2016.

Коростелев, А & Резникова, Е. (2024): *Исследование путинских репрессий*. Проект.Медиа, 2024. Доступно: <https://www.proekt.media/guide/repressii-v-rossii/>, (2024-02-25).

Лабутин, А.: *К вопросу обывателя, почему Россия такая большая страна и как её сохранить?* Клуб военачальников РФ, 2021, Доступно: <http://kvrf.milportal.ru/k-voprosu-obyvatelya-pochemu-rossiya-takaya-bolshaya-strana-i-kak-eyo-sohranit/>, (2024-02-46).

Незнамов, А.: *Современная война - часть 1*. Москва, Государственное издательство. 1922.

Савикин, А (ред.): *Русская военная доктрина - Материалы дискуссий 1911-1939 годов*. Российский Военный Сборник - Выпуск V, 1994, Москва. www.rp-net.ru.

Свечин, А.: *Стратегия*. Москва, Военный Вестник, 1927.

Сергей Асланян об отличиях вооружений России и Украины | Фрагмент Обзора от Bild. *Youtube*, 2023. Доступно: <https://www.youtube.com/watch?v=y153YXzHbuk>, (2024-02-18).

Сорокин, В.: *День Опричника*. Москва, Захаров, 2006.

Троцкий, Л.: *Военная доктрина или мнимо-военное доктринерство*. Петроград, Политическое Управление Петроградского Военного Округа, 1922.

Фрунзе, М.: *Единая Военная Доктрина и Красная Армия*. Москва, Военное Издательство Народного Комиссариата Обороны Союза ССР, 1941.

Шапошников. Б.: *Мозг Армии - Книга третья*. Москва, Государственное издательство, 1929.

THE IMPACT OF THE WAR IN UKRAINE ON THE RUSSIAN MILITARY PRESENCE IN THE SOUTH CAUCASUS AND THE MIDDLE EAST

Sergei Melkonian

The presentation by Sergei Melkonian in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://youtu.be/P8VA1bT8ADs> starting from 6:01:40.

Introduction

Russia has gradually extended the geographical reach of its military activities over the last few years, and now has a presence in the South Caucasus, the Middle East, and Africa. However, the start of the active phase of the war in Ukraine in 2022 has inevitably affected the location and nature of Russia's military presence in other areas.

This study examines the dynamics of Russia's presence in Nagorno-Karabakh (South Caucasus) and Syria (Middle East). These case studies were chosen for the following reasons. First, both are considered by Russia as successful examples of accomplishing military objectives. The Russian military operation in Syria, aimed at preserving the current regime and destroying terrorist organizations, was evaluated by Moscow as successful. President Vladimir Putin, during his visit to Syria in 2017, declared that the set tasks had been brilliantly achieved and announced the withdrawal of part of the contingent.¹ However, a significant portion of the Russian military contingent remained in the territory of the Syrian Arab Republic (SAR). Similarly, the deployment of a Russian peacekeeping mission in Nagorno-Karabakh was considered an important achievement. The main focus was on the role of peacekeepers as guarantors of peace in the region.²

Second, in Nagorno-Karabakh and Syria Russian armed forces are officially deployed, which is not the case in Libya, Algeria, and other African states, where Russian private military companies and other organizations not officially linked to the Russian armed forces have been active.

Third, the Russian military presence in Nagorno-Karabakh and Syria occurred in the context of low-intensity conflicts. In other words, the military-political situation in these areas was dynamic and influenced Russian positions. Therefore, comparisons with Abkhazia and South Ossetia, for instance, are not relevant.

¹ Владимир Путин посетил авиабазу Хмеймим в Сирии. “За два с небольшим года Вооружённые Силы России вместе с сирийской армией разгромили наиболее боеспособную группировку международных террористов. В этой связи мною принято решение: значительная часть российского воинского контингента, находящегося в Сирийской Арабской Республике, возвращается домой, в Россию” (December, 2017). Президент России: <http://kremlin.ru/events/president/news/56351>.

² Путин: миротворцы РФ выступают гарантом достигнутого режима перемирия в Нагорном Карабахе (October, 2021). ТАСС: <https://tass.ru/politika/12673841>.

The war in Ukraine has exacerbated the existing confrontation between Russia and the West, which projects onto regional subsystems. Moscow views the Middle East and the post-Soviet space as areas of competition with the West, and these regions have a growing importance in light of its long-term perspective on this confrontation. Therefore, its military presence in these regions is part of a comprehensive foreign policy strategy.

The dynamics of Russia's military presence in Syria

Analysis of shifts in Russia's military footprint in Syria will focus on three key aspects: first, troop numbers, armaments, and military hardware, which may have varied due to the reallocation of forces and assets to the Ukrainian front, a priority shift that emerged in 2022; second, deployment geography of Russian forces, encompassing the military infrastructure within Syria; and third, the operations of the Wagner private military company, which has been a proxy instrument for establishing Russian spheres of influence.

Personnel, weaponry, and military equipment

According to estimates, the strength of Russian ground forces in Syria was around 3,000³ in 2018. Discussions about redeploying personnel and recruiting Syrian military forces intensified immediately after the start of the war in Ukraine.⁴ Another indicator was a statement made by Foreign Minister Sergey Lavrov in May 2022: He declared that the Russian contingent in Syria had almost no military tasks left, and the number of troops on the ground was determined by specific tasks, with decisions on how many military personnel should be in Syria to be taken based on the principle of expediency.⁵ This provided a political rationale for reducing personnel in Syria. However, a subsequent statement from the Russian Ministry of Foreign Affairs confirmed logistical difficulties, redeployment, and rotation of units, stating that it was not accurate to talk about a reduction of Russian forces in Syria as the grouping, air defense systems, and aviation equipment remained in the country.⁶ Up to 2024, a large-scale withdrawal of personnel from Syria was not confirmed, according to open sources.

The only possible example of a partial personnel withdrawal could be their redeployment along with military equipment that was transferred from Syria back to Russia. Immediately after the outbreak of large-scale hostilities in Ukraine, the Su-25 attack squadron was withdrawn from Syria.⁷ Their departure has had little effect on the capabilities of the Russian military. Su-25s were withdrawn from Syria for the first time

³ Michael Kofman, Matthew Rojansky, JD.: What Kind of Victory for Russia in Syria? Army University Press (January 2018): <https://www.armyupress.army.mil/Journals/Military-Review/Online-Exclusive/2018-OLE/Russia-in-Syria/>.

⁴ Russia Mobilizes Reinforcements from Syria and Africa to Ukraine. Institute for the Study of War (March 2021): <https://understandingwar.org/backgrounder/russia-mobilizes-reinforcements-syria-and-africa-ukraine>.

⁵ Глава МИД считает, что у российских военных в Сирии почти не осталось задач (May, 2022). Интерфакс: <https://www.interfax.ru/world/843176>.

⁶ “О сокращении российских сил в Сирии говорить абсолютно нельзя” (June 2022). Коммерсант: <https://www.kommersant.ru/doc/5420967>.

⁷ Anton Madrasov: Keeping Up Appearances: The Ukraine War's Effect on Russian Deployments in Syria. Middle East Institute (December 2022): <https://www.mei.edu/publications/keeping-appearances-ukraine-wars-effect-russian-deployments-syria>.

in 2016, before being redeployed to the area to support the offensive in East Aleppo. Since no large-scale operations requiring active air support were anticipated in Syria in the short term, there was no need for the Su-25 aircraft. However, their withdrawal and use on the Ukrainian front can be considered a direct consequence of the war's outbreak.

The most notable change was the relocation of S-300 anti-aircraft missile system batteries in August 2022 from Masyaf in northwest Syria⁸ to a port at Tartus and then on to Novorossiysk, a Russian port on the Black Sea near Crimea. Previously, it was reported that four S-300 batteries were located in Masyaf.⁹ Israeli sources offered different estimates on the number of troops being pulled from Syria: two put the number at a couple of battalions, or 1,200–1,600 soldiers,¹⁰ while a third said the number was much higher. A senior Israeli defense official said the withdrawn troops had been replaced with military police officers.¹¹ However, despite the withdrawal of the system from this region, there continues to be a presence of Russian S-400, Syrian S-200, and Pantsir-S1 on the hills close to Masyaf.¹² The position for the S-300, which is located equidistantly northeast of Tartus and southeast of Khmeimim, was originally chosen based on the experience of the S-200VE SAM system on duty in the coastal area. Yet the hilly local terrain and short radio horizon made the operation of S-300s there difficult from a technical standpoint. The Israeli air force, which flies at extremely low altitudes using false maneuvers over Lebanon, would periodically provoke false firings by these expensive Russian SAMs. Therefore, it cannot be ruled out that, given the expanding Iranian network of ammunition and missile factories and its actions to strengthen proxy forces after the killing of Qasem Soleimani (commander of the Quds Force, Islamic Revolutionary Guard Corps (IRGC) Moscow might have preferred to withdraw its S-300s from Syria, on the pretext of strengthening Crimea, to eliminate any possibility of unnecessary escalation in the Middle East region in the midst of the war in Ukraine.¹³

Russia's military presence in Syria is important for maintaining its position in the Mediterranean Sea. In this context, it is noteworthy that a portion of its naval forces had been redeployed before the outbreak of the war in Ukraine. This was partly due to the risk of Turkey closing the Bosphorus and Dardanelles straits. On February 6, 2022, it was reported that six amphibious landing vessels had departed the Mediterranean and were headed to the Black Sea. Transit through the Sea of Marmara was

⁸ Russian S-300 Air Defense Battery Deployed from Syria to Russia. ImageSat Intl (August, 2022). Twitter: <https://twitter.com/ImageSatIntl/status/1563812006104268802?lang=en>.

⁹ СМИ сообщили место расположения четырех батарей С-300 в Сирии (October, 2018). Интерфакс: <https://www.interfax.ru/world/634990>.

¹⁰ Russia Shrinks Forces in Syria, a Factor in Israeli Strategy There (October, 2022). The New York Times: <https://www.nytimes.com/2022/10/19/world/middleeast/russia-syria-israel-ukraine.html>.

¹¹ Toi Staff. Report: Russia Draws Down Forces in Syria, Removes S-300 System that Troubled Israel (October, 2022). The Times of Israel: <https://www.timesofisrael.com/report-russia-draws-down-forces-in-syria-removes-s-300-air-defense-system/>.

¹² The S-300 Air Defense Battery in the Mountains Northwest of Masyaf Has Been Removed in Recent Months. = Obretix (August, 2022). Twitter: <https://twitter.com/obretix/status/1563520254386802691>.

¹³ Anton Madrasov: Keeping up Appearances: The Ukraine War's Effect on Russian Deployments in Syria. Middle East Institute (December, 2022): <https://www.mei.edu/publications/keeping-appearances-ukraine-wars-effect-russian-deployments-syria>.

observed to be faster than usual and all six vessels passed through the Bosphorus late in the evening, possibly to avoid detection by ship-spotters.¹⁴

Despite the reduction in the number of Russian troops in Syria following the outbreak of the war in Ukraine, reports began to emerge in 2023 of the transfer of Russian military personnel back to Syria.¹⁵ This could have two causes. First, such a decision could align with the logic of a statement made by Syrian President Bashar al-Assad during his visit to Moscow in March 2023: In particular, he stated that he would welcome any Russian proposals to set up new military bases and boost troop numbers in Syria, suggesting that Russia's military presence there should become permanent.¹⁶ Second, the increase in the number of Russian military personnel in Syria could be a response to the United States tripling its contingent there in 2023¹⁷ and planning further increases in 2024 in Syria and Iraq.¹⁸

Geography of force deployment

In the initial stages of the war in Ukraine, Russian forces in Syria reportedly withdrew from some positions and regrouped elsewhere, including at the Hmeimim air base and the Qamishli, Deir ez-Zor, and T-4 airports. Russian forces and the Fifth Corps, a Moscow-backed Syrian military force, also turned over the Mahin military depot east of Homs—one of the largest arms depots in Syria, containing twenty-five equipped warehouses—to Iran-backed militias and Hezbollah in early April after withdrawing to the Palmyra military airport. In mid-April 2022, the same forces withdrew from the airport, as well, also in favor of Iran-backed militias. Moscow did not announce any of these withdrawals officially or through its affiliated media.¹⁹ In parallel Iran and pro-Iranian forces were enlarging their presence to fill the security vacuum.

However, a geographical expansion of Russian military deployment in Syria was later observed. The most significant acquisition was the Jirah airport. Russian and Syrian military personnel restored the Jirah airbase, which had been destroyed during combat, in the northern part of SAR. This allowed for the joint basing and use of aviation by the Russian Aerospace Forces and the Syrian Air Force. Anti-aircraft defense systems from the Russian troop grouping and the Syrian Armed Forces' (Syrian Arab Army, SAA) air defense forces were deployed. The joint basing of the aviation of the Russian Aerospace Forces and the Syrian Air Force at the Jirah airbase enabled coverage of the state border and ensured security in the northern and northeast areas of

¹⁴ Frederik Van Lokeren: Russian Forces in the Mediterranean (February, 2022). Russian Navy – News and Analysis: <https://russianfleetanalysis.blogspot.com/2022/02/russian-forces-in-mediterranean-wk062022.html>.

¹⁵ Россия перебрасывает войска Сирию и Африку (October, 2023). Livejournal: <https://colonelcas-sad.livejournal.com/8732359.html>.

¹⁶ Guy Faulconbridge, Caleb Davis: Syria's Assad Would Like More Russian Bases and Troops (March, 2023). Reuters: <https://www.reuters.com/world/middle-east/syrias-assad-says-would-welcome-more-russian-troops-2023-03-16/>.

¹⁷ СМИ: США увеличили численность своих военных на базах в Сирии с 500 до 1,5 тыс. (July, 2023). ТАСС: <https://tass.ru/mezhdunarodnaya-panorama/18343347>.

¹⁸ Stella Youssef: US Intends to Deploy 1,500 Troops to Syria and Iraq – CBS Philadelphia (January, 2024). North press agency: <https://npasyria.com/en/110022/>.

¹⁹ Walid Al Nofal: Amid War in Ukraine, Russia Withdraws and Iran Expands in Syria (May, 2022). Syria Direct: <https://syriadirect.org/amid-war-in-ukraine-russia-withdraws-and-iran-expands-in-syria/>.

SAR.²⁰ Additionally, the establishment of a military airfield in northern Syria enhanced the operational capabilities of Russian tactical and army aviation. In the current military-political context, the deployment of the Russian Aerospace Forces at the Jirah airfield enables control of the airspace in areas adjacent to the Syrian Democratic Forces (SDF) and pro-Turkish factions and facilitates the use of Russian-Syrian aviation in areas where a Turkish Armed Forces offensive in northern Syria might occur. Despite the Jirah airbase being relatively small, it plays a crucial role in the eastern parts of Aleppo, southeast of the Al-Bab district controlled by pro-Turkish forces, and south of Manbij, where Kurdish units remain, much to Turkey's displeasure. Moreover, Jirah serves as one of the logistical military hubs capable of facilitating cargo transfers to Asia and Africa under conditions of a total closed sky and sanctions affecting civilian air/maritime transport.

In 2022, several units of Russian military personnel, six Ka-52 "Alligator" combat helicopters, and two Su-34 planes were deployed at Qamishli airport. Russian patrols appeared in Manbij and Tal Rifaat, with dozens of armored vehicles. The Russian military increased the activity of its Aerospace Forces in the provinces of Hasakah and Aleppo.²¹ These actions were aimed at deterring Turkey, which had announced a large-scale military operation in northeastern Syria. Against the backdrop of escalating Turkish rhetoric, Russia deployed aviation near the Idlib zone.²²

Russia also expanded its presence in eastern Syria, where the positions of the US and its allies are concentrated. This process occurred with the support of the SAA and the IRGC. It is important to note that in this case, Russia used Russian-backed forces' SAA 5th Corps.²³ In parallel, Russian military personnel and the groups they support conducted joint exercises in eastern Syria.

Besides military activities in new areas, Russia continued to carry out traditional tasks after the outbreak of the war in Ukraine. In 2022, Moscow authorized strikes against Syrian opposition forces near the US presence in al-Tanf. In addition, in June 2022, Federal Security Service (FSS/FSB) special forces in Syria carried out anti-terrorist operations that resulted in the death of one Russian officer. At the same time, Russian military personnel continued their interactions with groups that have joined the ranks of the 5th Corps.²⁴ and did not suspend joint patrolling with Turkey. Moreover, in 2023 Russia has become more active in the skies over Syria. In addition to strikes against militants, aviation actions are being directed against US forces present in the SAR. Russian planes and drones fly over American facilities, contrary to the agreements between the two sides on delineating zones of activity. The US military has repeatedly reported dangerous maneuvers that Russian air force pilots have performed in the vicinity of American drones and fighters. However, Russian military

²⁰ Российские и сирийские военнослужащие восстановили разрушенный в ходе боевых действий аэродром Джейрах. Министерство обороны Российской Федерации: <https://structure.mil.ru/structure/forces/ground/structure/tank/address/more.htm?id=12452348@egNews>.

²¹ Кузнецов А.А.: О трансформации военно-политической роли России в Сирии в контексте спецоперации на Украине (June, 2022). Институт Ближнего Востока: <http://www.iimes.ru/?p=87257>.

²² The Ukraine War's Effect on Russian Deployments in Syria _ Middle East Institute. p. 2.

²³ Andie Parry, Ashka Jhaveri, Johanna Moore, Brian Carter: Iran, Russia, and the Syrian Regime Are Coordinating to Expel US Forces from Syria (August, 2023). ISW: <https://understandingwar.org/backgrounder/iran-russia-and-syrian-regime-are-coordinating-expel-us-forces-syria>.

²⁴ Кузнецов А.А.: О трансформации военно-политической роли России в Сирии в контексте спецоперации на Украине (June, 2022). Институт Ближнего Востока: <http://www.iimes.ru/?p=87257>.

officials claim that it is the Americans who are violating deconfliction protocols, leading to aviation incidents.²⁵ The only change in this context might be the absence of official news about providing humanitarian aid during the periods of April–October 2022 and December 2022–July 2023. Before the war in Ukraine, such extended breaks were almost non-existent.

Wagner Group's activity

The Russian private military company Wagner has been actively involved in the Syrian war since 2015. Initially, their focus was on guarding oil fields, industrial sites, and several other positions, as well as being deployed in the de-escalation zone. Various sources estimated Wagner's personnel in Syria to be around 3,000 at the onset of the war in Ukraine.²⁶ By mid-2023, reports emerged that the number of fighters in Syria had dropped to between 250 and 400.²⁷ Despite disagreements with official Russian structures after 2016, when a part of the Wagner group was withdrawn from Syria following the active phase of combat, this organization has served as one of the tools for exerting Russian influence in the Middle East and Africa.

The primary change in Wagner's positioning in Syria occurred after its leader Yevgeny Prigozhin's march on Moscow in June 2023. After this event, members of the group were summoned to the Russian Hmeimim base and offered the chance to sign a contract with the Ministry of Defense, in the same manner as other members in Russia and Africa. During his visit to Syria Russian Deputy Defense Minister Yunus-Bek Yevkurov asked Syrian army commanders to inform Wagner forces that they had to withdraw from Syria or join troops of the Russian army deployed there. Accordingly, the Syrian regime Minister of Defense, Lieutenant General Ali Mahmoud Abbas, met with commanders of Wagner forces in Syria and gave them the option of surrendering their weapons and leaving Syria in no more than one month or joining troops of the Russian army in Syria and operating under Russian command.²⁸

In the initial stages of the war in Ukraine, Russia's military presence in Syria was reduced: military ships, some aviation, air defense systems, and personnel servicing this equipment were relocated. This can be considered a direct consequence of the war on Russia's military presence in the Middle East. Subsequently, a new phase began—the expansion of Russian presence in Syria, largely as a reaction to Turkey's attempts to capitalize on Russia's failures in Ukraine and to launch an offensive operation. In response, Russia began to qualitatively and quantitatively expand its presence in SAR. Such actions demonstrate political will and capabilities on the ground to deter Turkey in Syria, hundreds of kilometers away from Russia. Finally, a third phase can be identified—the expansion of Russia's military presence in the Middle East. With a strong position in Syria, Russia began to plan for expanding its presence in the Mediterranean

²⁵ <https://carnegieendowment.org/politika/90742>.

²⁶ The Military Balance 2022, p. 357.

²⁷ Suleiman Al-Khalidi, Maya Gebeily: Syria Brought Wagner Fighters to Hheel as Mutiny Unfolded in Russia (July, 2023). Reuters: <https://www.reuters.com/world/syria-brought-wagner-group-fighters-heel-mutiny-unfolded-russia-2023-07-07/>.

²⁸ Russian Deputy Defense Minister Orders Syrian Regime Minister of Defense to Option Wagner Forces to Leave Syria or Join Russian Army (August, 2023). Syrian Observatory for Human Rights: <https://www.syr-iahr.com/en/309318/>.

Sea (creating a naval base in Libya) and establishing a presence in the Red Sea (a naval base in Sudan).

The dynamics of Russia's military presence in the South Caucasus

Before the outbreak of the war in Ukraine, Russia's military presence in the South Caucasus had significantly expanded. For more than 15 years, Russia has continued to maintain its positions in Abkhazia (the 7th military base with a total strength of about 4,000.²⁹), South Ossetia (the 4th military base, with a total also about 4,000).³⁰ According to a statement from the General Staff of the Armed Forces of Ukraine, personnel from the base in Abkhazia (around 800) and from the base in South Ossetia (around 1,200) were redeployed to Ukraine.³¹ Russia also maintains its presence in Armenia. Personnel at the 102nd military base (which includes an airfield in Erebuni and support points in other regions of the country) is estimated at 3,500.³²

The expansion in 2020

The most significant change in Russia's military presence in the South Caucasus was the Nagorno-Karabakh War in 2020. Based on the Trilateral Statement of November 9, 2020, Russia deployed a peacekeeping contingent in Nagorno-Karabakh. According to the statement, the Russian military force was to consist of 1,960 personnel, 90 armored personnel carriers, and 380 vehicles and special equipment.³³

In parallel, Russia expanded its presence within Armenia itself. In 2021, two new support points of the 102nd military base were established on the Armenian—Azerbaijani border. Additionally, Russian military personnel began using the airport in the city of Sisian, in southern Armenia, which can be considered an aerial component of the expansion of Russia's military presence.

From Moscow's perspective, the deployment of a peacekeeping contingent was seen as a significant achievement. The logic was as follows: Russia now has a military presence in all countries of the region. Previously, military bases in Abkhazia and South Ossetia allowed influence over Tbilisi, and in Armenia, over Yerevan. Now, with a presence in Nagorno-Karabakh, there was the capacity to influence Baku.

²⁹ В Абхазии около 4 тыс. российских военнослужащих ЮВО примут участие в месячнике сплочения воинских коллективов (February, 2019). Министерство обороны Российской Федерации: https://z.mil.ru/spec_mil_oper/brief/humanitarian_response/more.htm?id=12215601@egNews.

³⁰ Гаврилой Юрию. Российские базы в Южной Осетии и Абхазии узаконили на 49 лет (September, 2011). Российская Газета: <https://rg.ru/2011/09/29/bazy.html>.

³¹ С военных баз на оккупированных территориях Грузии на территорию Украины Россией переброшено около 2 тыс. военнослужащих – Генштаб ВСУ (March, 2022). Интерфакс: <https://interfax.com.ua/news/general/819236.html>.

³² The Military Balance 2022, p. 208

³³ Заявление Президента Азербайджанской Республики, Премьер-министра Республики Армения и Президента Российской Федерации (November, 2020). Президент России: <http://www.kremlin.ru/events/president/news/64384>.

Reduction of Russia's military presence in Nagorno-Karabakh after 2020

Despite the end of the 2020 war and the initiation of a negotiation process between Yerevan and Baku, Azerbaijan continued to exert military pressure on Nagorno-Karabakh and Armenia. Alongside the deployment of the Russian peacekeeping contingent and the achievement of a ceasefire, Azerbaijan began capturing settlements and positions, thus repeatedly violating the ceasefire. Importantly, the use of force against Nagorno-Karabakh Armenians despite the presence of Russian military personnel, began *before* the war in Ukraine. But the intensity of ceasefire violations sharply increased once the Russo-Ukrainian war started (Table 1). While there were thirteen cases of ceasefire violations during November 2020–February 2022, by March 2022 the number of violations reached at least twenty.

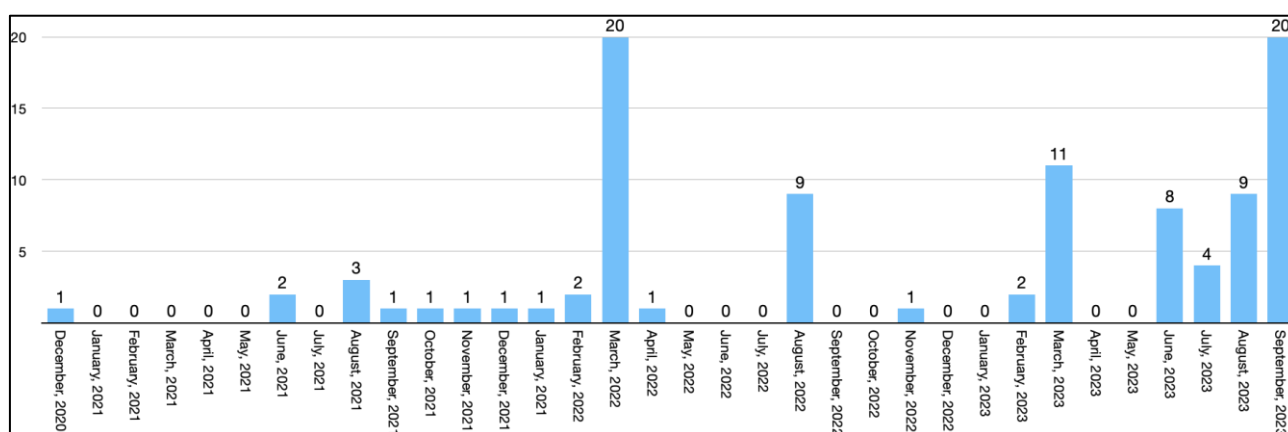


Table 1. Violations of the ceasefire regime in Nagorno-Karabakh.³⁴

Azerbaijan also exerted nonmilitary pressure. On December 12, 2022, Baku began a blockade of Nagorno-Karabakh that lasted until September 2023. In the initial phase, government-supported “eco-activists” set up an indefinite blockade of the Lachin corridor, hindering movement to and from Nagorno-Karabakh. As a result, Nagorno-Karabakh could only rely on its resources and partial humanitarian aid that was delivered. Later, once the Prime Minister of Armenia recognized the territorial integrity of Azerbaijan, to include Nagorno-Karabakh, Baku established a checkpoint on the Lachin corridor. Thus, a full blockade of Nagorno-Karabakh began, and Russia partially lost control of the corridor.

The final point of Azerbaijan’s military pressure on Nagorno-Karabakh was the launch of a large-scale offensive on September 19, 2023. During this one-day war, the Nagorno-Karabakh defense army was defeated and subsequently disbanded. The offensive also resulted in the death of six Russian peacekeepers, with one severely injured. However, a strong response from Moscow did not follow.

³⁴ Данные собраны автором на основе Информационных бюллетеней Министерства обороны Российской Федерации о деятельности российского миротворческого контингента в зоне нагорно-карабахского конфликта. Примечательно, что после этнической чистки и полного перехода Нагорного Карабаха под контроль Азербайджана, название информационных бюллетеней изменилось: «Информационный бюллетень Министерства обороны Российской Федерации о деятельности Российского миротворческого контингента в зоне Карабахского экономического района Азербайджанской Республики». Более того, Министерство обороны России более перестало публиковать бюллетени после 9 января 2024 г.

During the Azerbaijani offensive, Armenia took a distant stance. The first statement from the Armenian Ministry of Defense came several hours later, stating that “as of 2 p.m., the situation on the borders of the Republic of Armenia is relatively stable.”³⁵ A few hours later, a new statement was released, in which it was noted that “Armenia does not have an army in Nagorno-Karabakh.”³⁶ This publication was intended to prevent Armenia from being drawn into the conflict, despite Yerevan traditionally positioning and acting as a security guarantor for Nagorno-Karabakh.

As a result of Azerbaijan establishing control over Nagorno-Karabakh, the following key changes occurred. First, Russian military forces lost control of the Lachin corridor, which connected Armenia with Nagorno-Karabakh, as stipulated in the Trilateral Statement from 2020. In reality, as said above, communication had already shifted to partial Azerbaijani control, with the establishment of a checkpoint after the Armenian Prime Minister Nikol Pashinyan declared that Yerevan recognizes the territorial integrity of Azerbaijan, including Nagorno-Karabakh.

Second, the nature of the Russian military presence changed. An analysis of information bulletins from the Russian Ministry of Defense revealed that Russian peacekeepers no longer patrolled established routes. The presence of the contingent became static rather than dynamic.

Thirdly, there was a reduction in the geographic scope of the presence on the ground. Since September 2023, Russian peacekeepers have altogether dismantled twelve observation posts and fifteen temporary positions. Typically, these were located along key communication lines connecting settlements, or in close proximity to the line of contact with Azerbaijani armed forces.

Considering the ethnic cleansing and mass exodus of the Armenian population, the necessity for the Russian peacekeepers’ presence was called into question and became a subject of discussion at the highest level between President Putin and President Aliyev during the Commonwealth of Independent States summit in Bishkek on October 12–13, 2023. It is important to note that Armenia refused to participate in this summit. During the negotiations, Moscow and Baku agreed to maintain the presence of Russian peacekeepers according to the agreement until November 2025.

After the war in September 2023, Russia withdrew a portion of its forces from Nagorno-Karabakh. According to a report from the Russian Ministry of Defense, on November 6, 2023, the rotation of the peacekeeping contingent’s personnel was completed, as well as the dispatch of weapons and military equipment to Russia for scheduled maintenance.³⁷ There are no specific details about the amount of equipment that was transported from Nagorno-Karabakh through Azerbaijan to Russia. However, video footage reveals that along with Russian equipment, equipment belonging to the Nagorno-Karabakh defense army was also being evacuated (the equipment was inadequately covered in boxes, making it visible that it was painted in Armenian camouflage). It can be inferred that with the reduction in the peacekeepers’ geographic

³⁵ Ministry of Defense of the Republic of Armenia (September, 2023): <https://www.mil.am/en/news/11814>.

³⁶ Ministry of Defense of the Republic of Armenia (September, 2023): <https://www.mil.am/en/news/11815>.

³⁷ Информационный бюллетень Министерства обороны Российской Федерации о деятельности Российского миротворческого контингента в зоне Карабахского экономического района Азербайджанской Республики (November, 2023). Министерство обороны Российской Федерации: https://mil.ru/russian_peacekeeping_forces/news/more.htm?id=12484591@egNews.

presence, the withdrawal of some weaponry, and the lack of necessity for patrolling various routes, the number of personnel in the peacekeeping contingent has also decreased.

Russian presence in Armenia

Concomitant with the military pressure on Nagorno-Karabakh exercised by Azerbaijan, Armenia has been a target, too. After the end of the 2020 war, escalations occurred along the Armenia–Azerbaijan border, unrelated to Nagorno-Karabakh. As a result of Azerbaijani attacks in May and November 2021, and September 2022, as of today, Azerbaijan continues to occupy approximately 220 square kilometers of Armenian territory.

In November 2021, considering the escalation on the Armenia–Azerbaijan border, Russia increased the number of border troops deployed in Armenia.³⁸ It appears that its forces were stationed in the southern region of Armenia, bordering Azerbaijan. In August 2021, the Armenian Ministry of Defense reported the deployment of Russian border troops in Tavush region, which also borders Azerbaijan but is located in the northern part of Armenia.³⁹

The last major escalation in September 2022 occurred the day after Russian troops had almost completely withdrawn from the territory of the Kharkiv region. For Russia one of the key consequences of these Azerbaijani attacks against Armenia was the latter's decision to outsource its security. From Yerevan's perspective, Moscow was no longer capable of serving as the sole and exclusive provider of security. Therefore, there was a need to create alternative means of deterring Azerbaijani aggression.

Within the framework of this policy, two key changes occurred that impacted Russia's position in the region. First, Armenia refused to host a Collective Security Treaty Organization (CSTO) mission on the Armenia–Azerbaijani border until the organization agreed that Armenia's sovereign territory had been subjected to aggression. The lack of political will from the organization led to the freezing of relations between Armenia and the CSTO: Yerevan withdrew its permanent representative to the CSTO, refused to host the organization's exercises on its territory, declined to participate in exercises on the territories of other member states, and ceased participating in CSTO meetings. Essentially, Armenia's involvement in CSTO activities is reduced to zero, while it formally remains a member of the organization. Later, the Armenian Prime Minister publicly stated that in practice the country has frozen its participation in the CSTO⁴⁰ and if it does not receive an answer to the question regarding the area of responsibility of the CSTO in the Republic of Armenia, it will *de jure* freeze its involvement as well.⁴¹

³⁸ РФ увеличила число пограничников в Армении (June, 2021). Интерфакс: <https://www.interfax.ru/russia/770583>.

³⁹ Russian Border Guards Deployed in Voskepar Community of Tavush Province (August, 2021). Armenpress: <https://armenpress.am/eng/news/1060033.html>.

⁴⁰ Armenia Freezes Participation in CSTO (February, 2024). Armenpress: <https://armenpress.am/eng/news/1130942.html>.

⁴¹ Pashinyan warns of potential *de jure* freeze of Armenia's activities in CSTO if the current process continues. "We asked the CSTO a question and we have not received an answer yet. The absence of clarity on this issue, in our opinion, poses threats to the national security and territorial integrity of Armenia. The question is very simple: what is the CSTO's area of responsibility in the Republic of Armenia?" (February, 2024). Armenpress: <https://armenpress.am/eng/news/1131379.html>.

Second, Armenia opted for a European Union monitoring mission. On October 6, 2022, at a quadrilateral meeting in Prague, the presidents of Azerbaijan and France, the Prime Minister of Armenia, and the President of the European Council agreed on the deployment of an EU monitoring mission. On October 20, the European Union deployed forty civilian experts in Armenia, along its internationally recognized border with Azerbaijan. This mission lasted two months, with a mandate to “monitor the situation” on the border from the Armenian side, “support the strengthening of trust between the two countries,” and “allow the EU to better support the work of bilateral border commissions.” A new mission with a two-year mandate was deployed in January 2023. The objective of the mission is to contribute to stability in the border areas of Armenia, build confidence on the ground, and ensure an environment conducive to normalization efforts between Armenia and Azerbaijan supported by the EU. Following the fallout of Nagorno-Karabakh in September 2023, the mission’s personnel has increased from 138 to 209 individuals.⁴²

Third, Armenia raised the issue of the presence of Russian border guards at Zvartnots Yerevan Airport. Armenia’s position is that the service at the Zvartnots international airport should be fully performed by the border guard troops of Armenia. Armenia has a clear position on this issue and has informed the Russian Federation about it in an official letter.⁴³

Based on the above, we can identify the following trend: Russia’s inability or unwillingness to fulfill its security commitments in Nagorno-Karabakh led to a reduction of its military presence in the unrecognized republic, and also triggered a reassessment of its positions within Armenia itself.

Conclusions

In the early stages of the war in Ukraine, Russia reduced its military presence in Syria: redeployment of weapons, military equipment, and personnel to the Ukrainian front. This reduction did not qualitatively affect Russia’s positions in Syria. Moscow was able to respond on the ground to attempts by Turkey to change the status quo and start a military operation, partly due to support from Iran and Syria.

The partial withdrawal by Russia in the initial stages did not lead to Iran replacing its positions. Tehran had been expanding its presence before the war in Ukraine, and the new positions it acquired continued this trend. Despite reduced capabilities, the Russian military continued to fulfill the same tasks in Syria that they had before the war in Ukraine.

⁴² Foreign Affairs Council: Press remarks by High Representative Josep Borrell after the meeting. “As a first step of this increasing cooperation, today the Foreign Affairs Council agreed to strengthen our civilian [CSDP] mission in Armenia (EUMA), increasing our presence on the ground from 138 staff to 209. This is an important increase of the size of the mission, and this is a way of increasing the stability of Armenia’s international border with Azerbaijan” (November, 2023). European Union external action: https://www.eeas.europa.eu/eeas/foreign-affairs-council-press-remarks-high-representative-josep-borrell-after-meeting-8_en.

⁴³ Service at Zvartnots Airport Should Be Fully Performed by Armenian Border Guards: Security Council Secretary. “Armenia’s Position Is that the Service at the “Zvartnots” International Airport Should Be Fully Performed by the Border Guard Troops of Armenia” (March, 2024). Armenpress: <https://www.armenpress.am/eng/news/1131888.html>.

Nagorno-Karabakh	Syria
Military presence	
<p>Reduced; indicators for enlargement</p> <p>In the context of the South Caucasus, Russia plans to expand its military presence in the Black Sea by establishing a naval base in Ochamchira (Abkhazia).</p>	<p>Reduced in short term; enlarged in mid term</p> <p>The expansion of Russia’s military presence in Syria serves as an important foundation for extending its geographical reach in the Middle East and Africa: Russia plans to secure a presence in the Red Sea (a logistics support base in Sudan) and the Mediterranean Sea (a base in eastern Libya).</p>
Deterrence role	
<p style="text-align: center;">Passive</p> <p>Russia did not take preventive diplomatic and military measures to deter Azerbaijan in Nagorno-Karabakh. In the case of Armenia, Russia took preventive steps by expanding the geographical range of its presence on the border with Azerbaijan.</p>	<p style="text-align: center;">Active</p> <p>Russia undertook preventive diplomatic and military measures to deter Turkey. The accumulated experience allowed it to demonstrate the existence of red lines.</p>
Different approach	
<ul style="list-style-type: none"> ● Peacekeeper mandate <p>Russia felt constrained in its capabilities within the framework of the peacekeeping mandate—lacking an initial directive to use force against any party.</p> <ul style="list-style-type: none"> ● Secondary role in the region <p>Russian peacekeepers in Nagorno-Karabakh served as a tool that could be used in relation to both Armenia and Azerbaijan. Russian military bases in Armenia, Abkhazia, and South Ossetia play the primary role in its presence in the region.</p> <ul style="list-style-type: none"> ● No support from local ally <p>In the case of Nagorno-Karabakh, Russia could not rely on Armenia, which recognized the region as part of Azerbaijan. The only support could come from the leadership of the unrecognized republic.</p>	<ul style="list-style-type: none"> ● Side of the conflict <p>In Syria, Russia has been involved in the conflict for more than 10 years, enabling it to make on the ground decisions for resolving military tasks.</p> <ul style="list-style-type: none"> ● Primary role in the region <p>The Russian military contingent in Syria is a major component of Moscow’s presence in the Middle East, making this asset traditionally highly valued.</p> <ul style="list-style-type: none"> ● Support from local ally <p>Russia was able to take proactive and, in certain instances, preventive actions, facilitated by the unwavering support of the Syrian government and Iran’s willingness to collaborate.</p>

Table 2. Comparing Russian military presence in Nagorno Karabakh and Syria from 2022.

After changes within the Wagner Group, it can be concluded that Russia's military presence in Syria improved both qualitatively and quantitatively. If previously members of Wagner were outside the formal and real control of the Ministry of Defense, the situation has now fundamentally changed.

In the South Caucasus, Russia's presence was based on its ability to act as a security provider. After the beginning of the war in Ukraine, Azerbaijan increased its military pressure on Nagorno-Karabakh and Armenia. Event analysis shows a direct correlation between Russia's focus on Ukraine and Azerbaijan's military aggressions.

The lack of political will and/or ability to deter Azerbaijan led to a reduction in Russia's military presence in Nagorno-Karabakh and set the conditions for a weakening in Armenia itself. Weapons, military equipment, and personnel that were transferred back to Russia could be used on the Ukrainian front in the future. They also include the weaponry and military equipment of the Nagorno-Karabakh defense army, much of which was handed over to Russian peacekeepers in September 2023.

THEORETICAL RELATIONS BETWEEN THE "STATE AND WAR" IN THE POST-INDUSTRIAL ERA, TAKING INTO ACCOUNT THE COMBAT EXPERIENCE OF THE WAR OF RUSSIA AGAINST UKRAINE

Margaryta Kapochkina and Stanislav Kovalkov¹

Abstract

The results of scientific research concerning the reasons for the unjustified declaration of the Russian Federation of its imperial ambitions are presented and their economic futility is presented. It was determined that the imperial character of the Russian foreign policy hides its fear of the leadership of the Russian Federation accusing it of state terrorism. The intentions of the implementation of the "USSR 2.0" project are aimed at restoring the multipolar world order that was lost after the collapse of the USSR. It is shown that the war is the main argument of the Russian Federation in the implementation of its doctrine regarding the restoration of dominance in the geopolitical space. We have disclosed the planning of the foreign policy of the Russian Federation at the conceptual, strategic and operational-tactical levels. The results of the preparation of the Russian Federation for the war in Ukraine and the methods of its conduct are also has been analyzed.

Introduction

If in the industrial era the old doctrine of territorial wars is implemented, that is, wars are waged over resources, then in the post-industrial era the motivation to seize territories is significantly reduced. Now the world is on the threshold of the third world war, which according to the Vatican's definition in the form of a war of a new hybrid type, already began in 2013. In the 21st century, the war of a new hybrid type for the multipolarity of the world order has not yet lost the signs of war of the industrial age and at the same time has begun to use weapons (autonomous unmanned weapons) and technologies of the post-industrial age (cybernetic weapons, artificial intelligence). Thus, the third world war of the new hybrid type is still being fought for territories and resources, associated with significant destruction and human losses, including among the civilian population, but winning the war with old conventional weapons is now practically impossible. What does it mean? The modern combat experience of the war in Ukraine shows that the use of unmanned weapons with elements of artificial intelligence allows a small country with a small gross domestic product, but one that has entered the post-industrial era, to win over a powerful country of the industrial era. If even two years ago Taiwan's victory in the war against China was not considered real, then after the magical destruction of Russian ships in the Black Sea by Ukrainian unmanned attack drones, China's naval operation against Taiwan may

¹ Writers of this article contributed the text without presentation.

turn out to be a failure for China. And without the PRC's physical seizure of the territory of Taiwan, the war for the "unification of China" makes no sense.

Analytical overview of the topic

Karl Haushofer was the founder of geopolitics. The basis of Karl Haushofer's views was the concept of the Malthusian "living space". He believed that the goal of every empire was the expansion of "living space". Karl Haushofer developed a variant the military-geopolitical doctrine of the "Continental Bloc". It refers to the creation of the axis Berlin - Moscow - Tokyo, which was supposed to unite the states of Eurasia, such as: Spain, Italy, France, Germany, Russia and Japan - being an eastern counter-weight and alternative to the British Empire and the USA. The modern foreign policy of the Russian Federation declares a similar doctrine - "from Lisbon to Vladivostok."

In the post-industrial (information) era, wars are fought for dominance at the informational level, and therefore the capture of territories and resource base ceases to motivate wars. At the current stage of human existence, there is a gradual transition from the industrial to the post-industrial (informational) stage of the development of society. At this stage of society's development, the economy is dominated by the innovative sector. Wars in the conditions of globalization are characterized by greater interdependence of countries' economies². Therefore, in the post-industrial era, the acquisition of resources will take place without the seizure of territories, that is, exclusively through political and economic means. It should be remembered that a military stratagem consists of: military cunning; diplomacy; tactics; and only in the last place of "frontal assault on fortresses". The pinnacle of military art is victory without the use of weapons, when the enemy did not even realize that he had lost the war.

The countries of the industrial era, which have already begun to use the achievements of other countries of the post-industrial era, inevitably fall into dependence. That is, in the war between the countries of the industrial era against the countries of the post-industrial era, the country of the post-industrial era wins. This happens because the country of the post-industrial era is economically located in the circle of the commonwealth of countries of the post-industrial era, which directly or indirectly take part in the war on its side.

The Institute for the Study of War points out that "Putin presents himself as a modern Russian czar entitled to a historically justified imperial reconquest". Over the past 20 years, in violation of the status of a federal presidential-parliamentary republic, the imperial doctrine of the Russian Federation has been declared, which is advertised by Putin's public question: "Where are the borders of Russia?" and his own answer: "There are no borders in Russia". In this way, Putin's declaration about the intentions of allegedly legitimate expansion on the territory of neighboring countries was made. In fact, the imperial character of the foreign policy of the Russian Federation is dictated by the desire to change the world order that developed after the collapse of the USSR. Russia is indeed making enormous efforts to justify its imperial right to restore the USSR by military means. Now the Russian Federation is preparing for war against Lithuania, Latvia and Estonia. Then the main question arises, what does the Russian

² Economic War [electronic resource] URL: <https://cyberleninka.ru/article/n/ekonomicheskaya-voyna-pro-ishozhdenie-suschnost-strategii/viewer>.

Federation want by declaring the status of an empire? It is often mistakenly believed that the Russian Federation wants to implement the historical mission of territorial expansion, seeks to annex (conquer) other peoples and territories by force. But such a doctrine is economically inefficient. In the course of the Russian Federation's war with Ukraine, the aggressor country by all means dares to create the impression that it is carrying out its inherent imperial ambitions (using the empire's right to recovery), that is, it is fighting for resources and waging war according to the canons of the past industrial era. This is done in order to avoid the legal accusation of the leadership of the Russian Federation in state terrorism. It is well known that The Geneva Declaration on Terrorism³ defines an attack on a neighboring state with the aim of threatening the civilian population as state terrorism.

We carried out a scientific study with the aim of obtaining an answer to the question: «Does the Russian Federation really have the right, allegedly as an empire, to restore borders»? Obtaining a scientifically based negative answer to this question can be used to accuse the leadership of the Russian Federation of state terrorism. Unfortunately, in 2022, the mentioned question moved from a theoretical to a practical level. This happened as a result of the annexation to the Russian Federation of parts of the territories of the Luhansk, Donetsk, Zaporizhzhya and Kherson regions of Ukraine captured by military means. That is, the Russian Federation does not declare, but demonstrates that it has no geographical borders and will seize the territory of any independent state where people speak the Russian language or consider themselves Russian.

It is important to realize why the main question in the discussion on the topic "state and war" is the question: "Is there a scientific reason to consider the Russian Federation an empire?". In this regard, it is necessary to take into account the postulate - "A capitalist empire exists only when it is constantly at war and expanding." In other words, it sounds like this: "Is war an integral attribute of the successful existence of the Russian Federation? If the answer is positive, then the expansionist policy of the Russian Federation (a nuclear power) is inevitable, that is, a circumstance of irresistible force. This means that war between NATO and the Russian Federation is inevitable. From this follows the need for active actions regarding the guaranteed deterrence of the aggressive policy of the Russian Federation.

If the answer is negative and military conflicts are not inevitable, and wars are carried out as a result of the voluntarism of the leadership of the Russian Federation, then the need to change the leadership of the Russian Federation follows from this. Such experience exists. The USSR was disintegrated into 15 independent states through long-term ideological and economic influence directly on the leadership of the USSR. Practical experience has shown that the collapse of the USSR did not require military intervention. Everything was done in such a way that in the first years the USSR did not realize the loss in the war.

So, let's consider the main feature of the emperor, his right to expansion. In previous historical periods, such a natural right was the right of the stronger. We have recognized that in the past empires really forcibly annexed countries that were less powerful militarily. The emperor's right to annex territories was not given to him by the nation, not by arms, but "from God", and was fixed through the ritual of consecration to the

³ The Geneva Declaration on Terrorism UN General Assembly Doc. A/42/307, 29 May 1987, Annex [electronic resource] URL: <https://i-p-o.org/GDT.HTM>.

emperor by the Patriarch of the church. That is, the basis of the empire is spiritual power, which is exercised in the material plane by God's anointed - the emperor (king). Unlike the president of the country, which Putin actually is, the emperor combines ecclesiastical, secular and military power in one person. In the historical past, the Russian monarchy was indeed an empire of the continental type. The last coronation of the emperor in the Russian Empire took place in 1896. The consecration ritual was performed by the head of the Holy Synod. But Russia lost the status of an empire. Russia's last emperor abdicated, and Putin is not his blood heir. Thus, we state that the Russian Empire has ceased to exist and is not subject to restoration.

It should be noted that before the collapse of the USSR, the USA informally characterized it as socialist imperialism. That is, there is a question about the possibility of recognizing Putin as emperor in modern historical conditions. It should be noted that indeed, until 1721, the religious ritual of consecration to the emperor could take place in relation to any ordinary person. Therefore, we investigated the fact of the alleged religious "consecration" of Putin, which took place in Greece 30.05.2016. It should be noted that the spiritual leader of Eastern Orthodox Christians worldwide, Ecumenical Patriarch Bartholomew I, was absent from the religious procedure. The imperial flag of the Byzantine Empire was hoisted at the religious ceremony. This empire disappeared many centuries ago. In addition, its borders do not intersect with the borders of the Russian Federation. In addition, the ritual of the religious procedure in Greece, according to formal features, did not correspond, for example, to the procedure of the ritual of ascending the throne of the new British monarch Charles III on May 6, 2023. Thus, we have established that Putin did not undergo the ritual of consecration to the emperor.

It should be noted that, in addition to the specified religious procedure of inappropriate status in Greece, Putin was given excessive, i.e. inappropriate to the status of the country's President, honors during his visits to Israel on June 26, 2012 and to Saudi Arabia on December 6, 2023. The reasons for such recognition of Putin's "personality" by the Christian, Jewish and Muslim world religious communities are still unclear to us.

It is common knowledge that an empire is a territorial entity within which one nation is considered dominant, and other nations are subordinate. That is, the empire is a monarchical state built on a rigidly hierarchical principle, incompatible with a democratic form of government, legal system, and civil society. The empire is ruled by the emperor alone. The title of emperor is inherited.

Results

Continental empires in relation to the countries of the buffer zone carry out a policy of absorption. In relation to the countries of the external contour, a policy of gradual destruction of the state administration system is carried out by bribing the highest-level managers.⁴ Although the Russian Federation is not an empire, its foreign policy uses the methods of a continental empire.

⁴ С. В. Кульчицький: Імперія // Енциклопедія історії України: Т. 3: Е-Й / Редакол.: В. А. Смолій, НАН України. Інститут історії України. — К.: В-во «Наукова думка», 2005.

The imperial nature of the foreign policy of the Russian Federation is dictated by the desire to legitimize expansion with the aim of changing the world order. The desire of the Russian Federation to restore a multipolar world is realized by the policy of dominance in geopolitics. This is carried out by the violent seizure of the territories of the countries of the buffer zone, and is also manifested by the expansion of the borders of the BRICS-type political blocs. The imperial policy of the Russian Federation is also manifested by military and political activity on the African and South American continents.

In order to hide its aggressive policy, the Russian Federation creates the appearance of a "massive" process of redistribution of borders in Europe. For this, the Russian Federation artificially created the appearance of an intention on the part of the monarchist opposition of Germany (Reichsbürgerbewegung), an attempt at a coup d'état. The monarchist opposition party declares its intention to violently change the borders of Germany in accordance with the state of 1919. It refers to the violent change of the existing borders of Poland, Denmark, Belgium, and France. In the future, according to the plans of the Russian Federation, this should provoke the expansion of Poland on the territory of Ukraine, Hungary on the territory of Ukraine and Croatia, and Romania on the territory of Ukraine. In order to give signs of the "massiveness" of the process of redistributing the borders of independent countries, the Russian Federation, for example, "organized" Venezuela's statement on the seizure of the territories of Guyana. That is, the goal of the Russian Federation is to give a mass character to the wars for redistribution of borders and under this cover to legalize the seizure of the territories of Ukraine and other republics of the former USSR.

As a result of the conducted research, we formulated arguments that confirm the thesis that the Russian Federation is an empire. Separately formulated arguments contradicting the thesis that the Russian Federation is an empire.

According to the laws of formal logic, it was established that the presence of facts confirming the thesis that Russia is an empire is necessary, but not sufficient. However, the presence of at least one sign that contradicts the fact that Russia is an empire is sufficient to reject the statement that the Russian Federation is an empire.

Let's consider the arguments that support the thesis that the Russian Federation is an empire.

Argument #1. The Russian Federation, like all empires, intervenes in the internal affairs of independent states. Ideological and political influence is carried out in the countries of the outer contour (Serbia, Greece, Italy, Venezuela, Brazil). Some countries of the external contour additionally fall into economic dependence (Hungary, Cyprus, Slovakia, Bulgaria).

The Russian Federation is trying to annex the countries of the buffer zone (Ukraine, Belarus, Georgia, Lithuania, Latvia, Estonia, Finland).

Argument #2. The Russian Federation, like all empires, continuously participates in military conflicts, provokes them or carries out direct armed invasion with the aim of changing borders. During its 31 years of existence, the Russian army participated in 14 wars and armed conflicts on the territories of Ichkeria, Georgia, Moldova, Syria, Azerbaijan, Ukraine. The Russian Federation is increasing the number of military

bases abroad. Since 2014, the Russian private military company "Wagner" has intensified military and political activity in 32 countries of the world.

Argument #3. The Russian Federation, like all empires, has a policy of genocide in the captured territories. The plan for the genocide of the Ukrainian people was calculated for a quick victory in the war, which did not guarantee the destruction of several hundred thousand Ukrainian patriots in battle. After the blitzkrieg, they planned to kill us secretly, deporting us to remote areas of Siberia with an unfavorable climate. On February 20, 2024, ex-president of Russia Medvedev publicly announced the plan to deport patriotic Ukrainians to Siberia for further extermination. To implement the genocide plan, 6 months before the start of the war, the Minister of Defense of the Russian Federation proposed to build a settlement for a million people in Siberia, in a remote area with unsuitable conditions for life.⁵ Ukrainians have already been deported to this region of Siberia twice. Several hundred thousand Ukrainians were already exterminated there in 1931 and 1959.

Argument #4. By analogy with the empires of the past, for example, with the Ottoman Empire, the Russian Federation forcibly selects children from Ukrainian families and organizes their forced upbringing in the spirit of hatred for Ukraine.

Arguments contradicting the thesis that the Russian Federation is an empire.

The basis of the empire is religious power, which provides a combination with secular and military power in the person of the emperor. Enslaved peoples who did not accept the religion of the empire find themselves on the lowest rung in the hierarchy, as they are not protected by the moral canons of the ruling church.⁶

The existence of the enslaved independent republic of Ichkeria in the Russian Federation can be a proof that the Russian Federation is not an empire. After losing the war, the Chechens kept the Muslim religion.

Despite this, they live better than the titular nation, receiving 40 billion dollars from the federal budget of the Russian Federation. They do not pay taxes, use public utilities for free. Chechnya has formed its own modernly armed 30,000-strong army, which actually does not obey the federal authorities of the Russian Federation.⁷ In the war in Ukraine, Chechen units are tasked with shooting and torturing ethnic Russians if they retreat from the fighting line.

In the Russian Federation, hybrid operations against Ukraine are carried out by the 5th Service of Operational Information and International Relations of the Federal Security Service of the Russian Federation (performs foreign intelligence functions). We analyzed the activities of this organization in Ukraine. Since 2004, the Federal

⁵ Сибирские миражи Сергея Шойгу [electronic resource] URL: <https://www.svoboda.org/a/sibirskie-mechty-sergeya-shoygu-efir-v-18-05/31518568.html>.

⁶ Hont I.: The Permanent Crisis of a Divided Mankind: Contemporary Crisis of the Nation State' in Historical Perspective // J. Dunn (ed.): Contemporary Crisis of the Nation State? — Oxford, UK; Cambridge, MA: Blackwell, 1995. — P- 172; Doyle M. W.: Empires. — Ithaca: Cornell Univ. Press, 1986. — p. 45.

⁷ Выстрел в спину для дезертиров: как и для чего работают российские заградотряды [electronic resource] URL: https://24tv.ua/ru/zagraditelnye-otryady-kak-rabotajushhie-i-streljajushhie-rossijanam-v-spinu-24-kanal_n2191715.

Security Service of the Russian Federation has sharply intensified its activities in Ukraine (its funding has increased sharply).⁸

As an example of the successful activity of the Federal Security Service of the Russian Federation in Ukraine, we will cite the career of Russian citizen Salamatin. In 2006-2011, he was a People's Deputy of Ukraine (obtained the necessary political connections).

In 2011, he was already the director of the Ukrainian Defense Industry State Concern (apparently, he had the task of creating an agency network of the Russian Federation in the system of the military-industrial complex).

In 2012, he was already the Minister of Defense of Ukraine (apparently, he had the task of creating an agent network of the Russian Federation in the Armed Forces of Ukraine). Probably not without the influence of the Russian intelligence agency, in the two years before the war, almost all operations abroad were failed in the Main Intelligence Directorate of the Ministry of Defense of Ukraine.⁹ According to publications, Solomatin's successor as Minister of Defense of Ukraine (Lebedev), according to the plans of the Russian Federation, after the planned blitzkrieg of the Russian Federation in the war in Ukraine, was to head the government of Ukraine.

An interesting fact indicates the probability of the Russian Federation creating a network of traitors in the Armed Forces of Ukraine. On the second day of the Russian attack on Ukraine, Putin personally addressed the network of traitors among the officers of the Armed Forces of Ukraine with a call - "Take power into your own hands! It will be easier for us to come to an agreement with you..."¹⁰ Putin was waiting for a military coup d' état in Ukraine until February 28, 2024. This confirms the fact that for three days the Russian Federation temporarily stopped using aviation against the Ukrainian army.

Let's consider another example of the imperial influence of the FSB of the Russian Federation on the internal politics of Ukraine. In the 2 years before the full-scale invasion of the Russian Federation into Ukraine, officials of the pro-Russian Yanukovich government began to be appointed to leadership positions throughout the administrative vertical of Ukraine. The return of these people to power should have ensured the meeting of the Russian troops with flowers on February 24, 2022. For the failure of this plan, after the failure of the blitzkrieg in Ukraine, the head of the 5th Department of the FSB of the Russian Federation was dismissed.

We have analyzed the negative influence of the Russian Federation on the dynamics of Ukraine's movement into NATO. At the Bucharest NATO summit (April 2, 2008), Germany and France blocked the accession of Ukraine and Georgia to NATO. This provoked the Russian attack on Georgia 4 months later.

⁸ Буданов назвав проблемного російського генерала: чим він шкодить Україні [electronic resource] URL: https://24tv.ua/chim-nebezpechniy-nachalnik-5-slubzhi-fsb-yak-rosiyski-agenti_n2410925.

⁹ «Вагнергейт»: бывшие разведчики ГУР МО заявили о давлении и угрозах со стороны Офиса президента [electronic resource] URL: <https://ru.slovoidilo.ua/2021/12/04/novost/bezopasnost/vagnergejt-byvshie-razvedchiki-gur-mo-zayavili-davlenii-i-ugrozax-storony-ofisa-prezidenta>.

¹⁰ «Берите власть в свои руки!» [electronic resource] URL: https://www.youtube.com/watch?v=Qm_1JmoqUwM.

After the Russian Federation's hybrid attack on Ukraine in 2014, on December 2, 2014, the Secretary General of NATO again invited Ukraine to NATO. Due to this, on 23.12.14, Ukraine renounced its non-aligned status, and on 21.02.19, it amended the Constitution on Ukraine's new strategic course in NATO. Unfortunately, after that, apparently under the influence of the Russian Federation, the vector of Ukraine's movement towards NATO changed to the opposite. On October 31, 2019, during the visit to Ukraine of the NATO North Atlantic Council, which consists of 29 states, Ukraine refused to apply for NATO membership.

We conducted an analysis of the negative impact of the Russian Federation on Ukraine's defense capability. Immediately before the war, the military-industrial complex of Ukraine worked almost entirely on the orders of the Russian Federation. Just one example. One of the enterprises of Ukraine took part in the maintenance of the intercontinental ballistic missile 15P118M "Satan" in the Russian Federation until 06.01.2023.¹¹

We will try to reveal the peculiarities of the preparation and conduct of the Russian Federation's war in Ukraine using the example of the Odesa region, where we serve in the Ukrainian Armed Forces, the capture of which is still the main goal of the Russian Federation's war in Ukraine.

It is common knowledge that a significant number of the population of Odesa had pro-Russian sentiments, therefore, in the first months of the war, the Russian Federation expected a "people's uprising" on the territory of the city. We have personally recorded the facts of the influence of agents of the Russian Federation on the negative dynamics of the development of territorial defense forces in Odesa.

As of March 2, 2022, when the landing ships of the Russian Federation approached Odessa, the territorial defense brigade was just beginning to form.¹²

We investigated the facts of deployment of the network of the Main Intelligence Directorate of Russia on the basis of private security structures in Ukraine.¹³

The created network of the Main Intelligence Directorate of Russia was armed, well organized, knew the terrain and was supposed to accompany convoys of armored vehicles of the Russian Federation in the conditions of urban development. Address lists of patriotic citizens who are to be destroyed were formed in advance.

We have also recorded the facts of the influence of agents of the Russian Federation on the process of involvement in subversive activities against Ukraine by the Russian Church. Even before 2014, the construction of monasteries of the Russian Church was launched in Ukraine. The geographical location of the monasteries is planned in accordance with the plans for the military capture of Odessa. The capture of Odessa is planned with the participation of the Russian military in the city of Tiraspol (an

¹¹ Кабмін розірвав угоду з РФ про сервісне обслуговування міжконтинентальних ракет «Сатана» [electronic resource] URL: <https://sud.ua/uk/news/publication/258561-kabmin-rastorg-soglashenie-s-rf-o-servisnom-obslyuzhivaniu-mezhkontinentalnykh-raket-satana>.

¹² Нових людей в тероборону не беруть, іншим зброю не видають: чи "зливає" влада Одесу окупантам [electronic resource] URL: <https://odesa.novyyny.live/novykh-liudei-v-teroboronu-ne-berut-drugim-oruzhie-ne-vydaut-sliває-li-vlast-odessu-okupantam-41486.html>.

¹³ СБУ: викрили російську агентурну мережу, яка готувала вторгнення і до якої входив депутат Деркач [electronic resource] URL: <https://www.radiosvoboda.org/a/news-derkach-sbu-rosiyskyy-ahent/31913377.html>.

unrecognized republic on the territory of Moldova). On the path of the likely advance of Russian troops from Tiraspol to Voznesensk, on the strategic road E95 (Kyiv-Odesa), a network of 5 monasteries was deployed, where subversive groups of the Russian Federation and traitors of Ukraine could be concentrated in advance. Built monasteries have a fenced territory, residential buildings, duplicate life support systems.

It should also be noted that long before the war, a network of thousands of video surveillance cameras with software from a Russian manufacturer was created in Ukraine. Video from such cameras, before it appears at the consumer, gets to the servers of the Russian Federation.¹⁴ In February 2024, such video surveillance cameras were installed by the FSB of the Russian Federation in Poland on the logistical routes of movement of NATO military equipment to Ukraine.

Let's consider the combat experience gained on the territory of Odessa after the large-scale invasion of Ukraine.

According to the publications, in the first days of the war, when two attempts were made to land an amphibious assault from the sea, when the Russian troops were 100 km from the city of Odessa, the Russian Federation organized sabotage of the draft of volunteers, sabotage of the creation of territorial defense forces, sabotage of the issuance of weapons to civilians.

We evaluated the effectiveness of the measures against the landing of the Russian Federation from the sea, which were carried out in Odessa. The analysis was carried out by comparing the Odessa defense system with a similar Russian system in Crimea. The analysis was performed using Google Earth satellite images as of May 2022. According to our assessment, the special Fortification structures on the shore of the Black Sea in Odessa could probably be successfully used by the Russians to create an amphibious bridgehead.

In conclusion, we will summarize the implementation of the plans of the Russian Federation on the territory of Ukraine in order to prepare for the blitz on February 24, 2022. We made this generalization in the interests of such countries as Moldova, Georgia, Latvia, Estonia, Lithuania, Finland, and Poland, which, like Ukraine, are located in the buffer zone of the Russian Federation, which implements against them the imperial policy of inevitable absorption.

It is important to state that the war of the Russian Federation against Ukraine was inevitable, because it was part of the strategic imperial plan of the Russian Federation. This is evidenced by the fact that the formal legal grounds for the restoration of the USSR were artificially laid by the Russian Federation on December 8, 1991, during the termination of the existence of the USSR. The pre-planned intentions of the Russian Federation regarding the violent restoration of the USSR are confirmed by the fact that a year before the annexation of the Autonomous Republic of Crimea (Ukraine) by the Russian Federation, in February 2013, the Executive Committee of the Commonwealth of Independent States reported that it did not have the original

¹⁴ В Україні роками працювали тисячі камер спостереження з серверами у Москві — "Схеми" [electronic resource] URL: <https://suspilne.media/634966-v-ukraini-rokami-pracuvali-tisaci-kamer-sposterezenna-z-serverami-u-moskvi-shemi/>.

agreement dated December 8, 1991. In the fall of 2013, it was declared that none of the signatory states owns the original agreement dated December 8, 1991.

After the defeat of the Russian Federation in the border conflict with Ukraine in the Kerch Strait on October 23, 2003, ammunition depots began to explode in Ukraine (ammunition depots in Bulgaria and the Czech Republic began to explode in 2014). That is, before the large-scale invasion of the Russian Federation into Ukraine, a plan was implemented to destroy ammunition in Ukraine and its allied states. It is important to add that, just like in Ukraine, before the invasion of the Russian Federation troops into Georgia on August 8, 2008, on July 3, 2008, 1,453 tons of Soviet-style ammunition were destroyed in an explosion in Bulgaria.

The Russian Federation's implementation of the "USSR 2.0" project entered an active phase after Yanukovich's successful promotion to the post of President of Ukraine. Immediately after Yanukovich came to power in 2010, the Russian intelligence agency blocked the production of weapons by Ukrainian enterprises.

Defense Ministers of Ukraine Solomatin and Lebedev apparently created a network of Russian agents in the Armed Forces of Ukraine, the liquidation of which we have not yet been informed about. The facts of blocking the draft of volunteers in the Armed Forces of Ukraine, blocking the deployment of territorial defense forces, indicate that the military and military-industrial chain link of the plan to capture the Russian Federation of Ukraine was implemented in full.

Immediately before the war, the Ministry of Internal Affairs of Ukraine deployed Russian technical means of video surveillance throughout Ukraine, which transmitted information about the movement of Ukrainian troops to the Russian Federation. In some cities of Ukraine, which were under the threat of invasion by the Russian army, the Ministry of Internal Affairs sabotaged the decree of the President of Ukraine, which referred to the unhindered issue of firearms to the civilian population for the protection of the homeland. Before the war, the main intelligence agency of the Russian Federation in Ukraine created a network of private security companies. The purpose of the created network is to prevent the partisan movement on the occupied territory of Ukraine. And this chain link of the plan to seize the Russian Federation of Ukraine was fully implemented.

In the political sector, the greatest achievement of the Russian intelligence agency in Ukraine was the shameful change in the vector of movement of Ukraine from NATO to the Russian Federation. That is, this chain link of the plan to seize the Russian Federation of Ukraine was fully implemented.

The most unexpected was the Russian Federation's blocking of the mobilization potential of Ukrainian nationalist parties and movements in the first days of the war. In our opinion, this is a manifestation of the implementation of the powerful plan of the Russian Federation to destroy the national resistance of the Ukrainian nation, the pre-planned aggression of the Russian Federation against Ukraine. Within the framework of this plan, in the 2 years before the full-scale invasion, the leaders of Yanukovich's time, who were dismissed from their positions according to the law of Ukraine on lustration, began to return to leadership positions in all managerial verticals of Ukraine. The activity of these people in power was supposed to ensure the meeting with flowers of the Russian troops on the territory of Ukraine. Such a plan of Russia, which did not work, is evidenced by the dismissal of the head of the 5th department

of the Federal Security Service of the Russian Federation. That is, even this chain link of the plan to capture the Russian Federation of Ukraine was implemented in full.

Conclusions and recommendations

We present the results of scientific research concerning the reasons for the Russian Federation's artificial declaration of its imperial ambitions and argue for their economic futility. It was determined that the imperial nature of the foreign policy of the Russian Federation hides its hopes for the restoration of the multipolar world order, which was lost after the collapse of the USSR. It is shown that the war is the main argument of the Russian Federation in the implementation of its doctrine regarding the restoration of dominance in the geopolitical space.

The results of the preparation of the Russian Federation for the war in Ukraine and the methods of its conduct are presented. We ascertained that after 2003-2004, the Russian Federation began an active phase of a new hybrid type of war against independent Ukraine as a result of the failure of the Russian special operation to appoint the pro-Russian candidate Yanukovich to the post of President of Ukraine on November 21, 2004. Such hybrid actions (seizure of power as a result of elections) were successfully implemented by the Russian Federation against Moldova (2006), Ukraine (2010), Georgia (2013) and were planned for 2020 against Latvia.

The legal basis for the restoration of the USSR was laid by the Russian Federation as early as December 8, 1991, during the termination of the existence of the Union of Soviet Socialist Republics. It is important to add that in 2013, the original agreement dated December 8, 1991 was destroyed.

Let's consider the imperial actions of the Russian Federation in the internal politics of independent Ukraine in chronological order. We made this generalization in the interests of such countries as Moldova, Georgia, Latvia, Estonia, Lithuania, Finland, and Poland, which, like Ukraine, are located in the buffer zone of the Russian Federation, which implements against them the imperial policy of inevitable absorption.

After the defeat of the Russian Federation in the border conflict with Ukraine in the Kerch Strait on October 23, 2003, ammunition depots began to explode in Ukraine for the first time.

In 2010, the agents of the Russian Federation in Ukraine began to block the production of weapons by Ukrainian enterprises.

In 2011, the special services of the Russian Federation may have started to create a network of Russian agents in the Ministry of Defense of Ukraine, which manifested itself at the beginning of the war in blocking the recruitment of volunteers, blocking the deployment of the territorial defense forces.

Thanks to the actions of the Russian intelligence agency, in the Ministry of Internal Affairs of Ukraine, Russian technical means of video surveillance were deployed throughout the country, transmitting to the Russian Federation information about the movement of Ukrainian troops.

In the political sector, the most tragic achievement of the agents of the Russian Federation in Ukraine was the shameful change after 2020, the vector of movement of Ukraine from NATO to the Russian Federation.

THEORETICAL AND POLITICAL RELATIONS BETWEEN “STATE AND ARMED FORCES” - THE RUSSIANS WIVES OF MOBILIZED RECRUITS

Oleksandr Ponypaliak¹

Abstract

We are witnessing the emergence of a new social movement in Russia: the wives of mobilized recruits of the the Russian Armed Forced. They demand that those who have been boots on the ground for over a year does not returned to home. Ever since the Russian total war against Ukraine in 24 February 2022 started, many people were puzzled by the inertia of the “soldiers’ mothers,” – an anti-war grassroots movement that was active during both Chechen wars.

Before the mobilization kicked off, the Russian government had been quite circumspect when it came it recruitment 80 % of inmates had no one waiting for their release on the outside. But it wasn’t just about the convicts. Some Russians volunteered to go to war just to make quick money and opportunity. These persons wanted to take in a \$2,000 monthly paycheck. We know for a fact that was the principal motivation. After all, it was the sole incentive cited by the Kreml. It was mainly volunteers and professional soldiers, but after collapse “*Blitzkrieg war*” in spring – summer period of 2022 and defeats in Kharkiv and Kherson in September – October 2022 Kreml was forced to announce mobilization.

Mobilized recruits. With mobilized recruits it’s a different story. These are usual regular guys, typical civilians Russians. The fundamental difference between the mobilized recruits and the volunteers who fell for an easy \$2,000 jackpot is that the first mentioned have loving families and are cared for. Wives of mobilized recruits wouldn’t just swap their men for a pile of cash. That what sparked the protests in the RF. A year into the mobilization drive, it finally clicked with people. No one’s willing to bring their loved ones back. This situation provokes misunderstanding and possible protest in Russian society a couple of months before Putin’s presidential election.

¹ Oleksandr Ponypaliak had to cancel his partisipation in the seminar due to operational reasons.

TOWARD A RUSSIA'S STRATEGY IN A HYBRID WAR AGAINST UKRAINE: SYNTHESIS OF KINETIC AND NON-KINETIC ACTIONS TO ACHIEVE A SYNERGETIC EFFECT

Valerii Hordiichuk

The presentation by colonel Valerii Hordiichuk in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://www.youtube.com/watch?v=5NofPSfLSSU&t=499s> starting from 2:27:51.

Introduction

Hybrid wars have become part of geopolitical confrontation. New strategies, tactics and actions of a hybrid nature have taken a central place in modern military theory and practice.

Regarding the very definition “hybrid war”, scientists are still debating. Some believe that such a term characterizes interstate (inter-alliance) confrontation before the emergence of an armed conflict, and this confrontation combines all levers of influence except armed aggression.

The author of this chapter is a supporter of the fact that the term “hybrid war” unites all possible forms and methods of confrontation, including armed aggression.

Thus, F. Hoffman, a classic of the hybrid war theory, concludes that conducting a *hybrid war* is a *coordinated use of military and non-military means*, which on the main battlefield achieve *synergy* in the physical and psychological dimensions of the conflict¹.

Ukrainian scientist Volodymyr Horbatenko gives such a definition: *hybrid war* – is a type of conflict escalation characteristic of the 21st century, which *combines* the use of state and non-state, traditional and non-traditional strategies, resources, means, methods of subversive activity, and mechanisms of cyber warfare with the aim of achieving certain political goals².

However, along with the massive use of conventional weapons, Russian aggressive war strategy continues to contain all the hallmarks of a hybridity. To understand how to resist such a type of aggression we need to identify and learn lessons of such hybrid synergy. Therefore, the analysis of the most significant strategies (campaigns) of such a hybrid synergy after the start of the full-scale invasion of Russia into Ukraine is carried out in this research.

¹ Hoffman F.: Conflict in the 21st Century: The Rise of Hybrid War. Arlington, Potomac Institute for Policy Studies, (2007). p. 20–22.

² Велика українська енциклопедія, <https://vue.gov.ua/>, Гібридна війна (visited: 16.09.2023)

Research methods: collection and processing of statistical and analytical information from open sources; empirical expert assessment; analysis and synthesis of collected materials; “magic quadrant” visualizing.

Methodology. After the strategies analysis, using the method of expert assessment, the degree of various types of influence in each campaign will be determined. Based on this assessment, the level of influence and participation activity in hybrid campaigns of this or that impact factor is determined.

Evolution of the Russian hybrid warfare against Ukraine

Russian politics towards Ukraine has gone all the way: from the policy of using “soft power” and hybrid threats to a hybrid war with large-scale armed aggression.

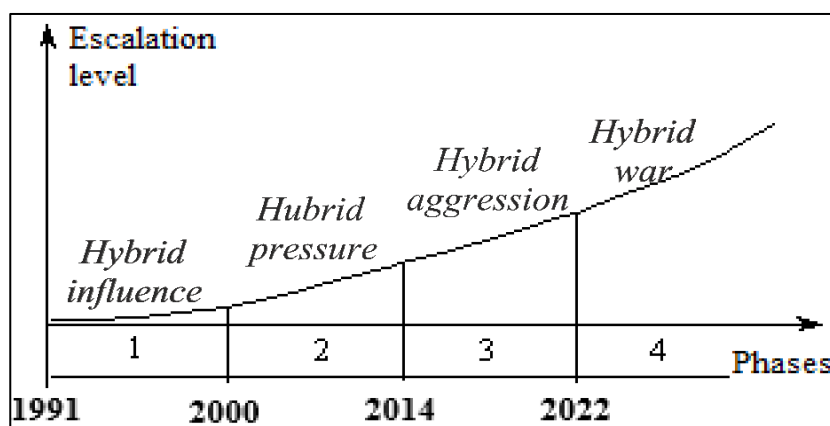
It is possible to distinguish four stages of this path:

Hybrid influence. The use of “soft power” politics³;

Hybrid pressure. The use of a wide range of hybrid actions, which covered the political-diplomatic, economic, energy, and information spheres of influence, with the aim of forcing integration with Russia;

Hybrid aggression with the aim of annexing a strategically and economically important part of the territory of Ukraine, significantly reducing its economic potential and ensuring political control over the government of Ukraine;

Hybrid War. A large-scale, high-intensity war with the aim of occupying and annexing the entire territory of Ukraine to Russia.



Picture 1. The dynamics of the Russian hybrid warfare against Ukraine.

One of the features of hybrid wars is their long-term nature, which requires a preventive and long-term policy of countermeasures organized at the state level. Other distinguishing features of a hybrid war are the lack of its formal announcement and difficult to predict long-term consequences, as societies, both the aggressor countries and the victim countries of aggression, are extremely destabilized and disorganized in all spheres of life. In addition, there is such a feature as the growth of nonlinearity, which means a high probability of the occurrence of conditions capable of significantly intensifying the consequences of small events that will radically affect the course of the entire conflict.

³ Joseph S. Nye.: Soft Power. The Means to success in world politics. N/Y/ *Public Affairs*, 2004, <https://wcfia.harvard.edu/publications/soft-power-means-success-world-politics>.

Therefore, the task arises not only to adapt the military strategy to the long era of hybrid wars, in particular the Russian-Ukrainian war, but also to introduce military-political mechanisms that would not allow their further expansion. For this, it is necessary to conduct an analysis of hybrid threats, a part of which should be analysis of lessons already learned.

Hybrid strategies (hybrid campaigns) and their main strategic and operational consequences

Campaign of information and psychological influence “special military operation” (daze)⁴

For years, the Kremlin has been spending incredible amounts of money on means of information influence, inlaying everything possible with its narratives. As we know, Russian tanks never enter first, first come the Moscow church, ballet, Bulgakov, Tchaikovsky, the Russian language, and only then do the tanks enter.

The “special military operation” information and psychological influence campaign began long before the large-scale invasion. Its result was absolute support for armed aggression by the population of the Russian Federation and partial support for armed aggression by the pro-Russian population of Ukraine and the world. This allowed the authorities of terrorist Russia to decide on the start of an armed invasion.

Other consequences: the possibility of deploying a wide agent network on the territory of Ukraine from among supporters of Putin's politic; weakening of international support due to the cognitive dissonance created by the common audience; the use of conflicts and imperfections of the norms of international law to “legitimize” armed aggression, etc.

Energy resources as a weapon (genocide)⁵

For the implementation of energy politics, Russia relies, in particular, on huge natural resources. Russia's energy strategy aims to help achieve its geopolitical goals.

⁴ Парахонський Б., Яворська Г.: Породження війни з безсилля миру: смислова логіка війни. *National Institute for Strategic Studies*. September 23, 2022, <https://niss.gov.ua/news/statti/porodzhennya-viyny-z-bezsyllya-myru-smyslova-lohika-viyny>; Козубенко О.: Як виконується «спеціальна військова операція рф на Україні», або Про провалені плани кремля. August 25, 2022, <https://armyinform.com.ua/2022/08/25/yak-vykonuyetsya-speczialna-vijskova-operacziya-rf-na-ukrayini-abo-pro-provaleni-plany-kremlya/>; Aleksejeva N. and others, Carvin A. (Eds.): Narrative Warfare. How the Kremlin and Russian news outlets justified a war of aggression against Ukraine. *Atlantic Council*. 2023, <https://www.atlanticcouncil.org/in-depth-research-reports/report/narrative-warfare/>; and Kolesnikov A.: How Putin’s “Special Military Operation” Became a People’s War. Carnegie Endowment for International Peace. April 10, 2023, <https://carnegieendowment.org/politika/89486>.

⁵ Tath M.: The Energy Dimension of Hybrid War and the Ukraine Crisis. *International Journal of Social Humanities Sciences Research (IJSHSR)*. July, 2023, https://www.researchgate.net/publication/372448538_The_Energy_Dimension_of_Hybrid_War_and_the_Ukraine_Crisis; Senior Official Condemns Russian Federation’s Missile Strikes against Ukraine’s Critical Infrastructure, as Security Council Holds Emergency Meeting on Attacks. United Nations. November 23, 2022, <https://press.un.org/en/2022/sc15118.doc.htm>; Frum D.: Why Putin’s Secret Weapon Failed. *The Atlantic*. June 2, 2023, <https://www.theatlantic.com/ideas/archive/2023/06/russia-ukraine-natural-gas-europe/674268/> and Devine K. and van der Merwe B.: Lights over Ukraine: the energy war. 2023, <https://news.sky.com/story/the-energy-war-satellite-images-show-the-scale-of-russian-attacks-on-ukraine-infrastructure-12773049>.

Before the full-scale invasion began, Russia had achieved some results in its favour. The oil and gas needle is still partially doing its dirty work. Unfortunately, the sanctions introduced by Europe and the United States are not enough to curb Russian aggression, and the European Union pays Russia almost a billion euros a day for energy resources (mainly gas) that finance Russian military machine⁶.

At the same time, Moscow's blackmail convinced the EU countries that Russia is not a reliable supplier of energy. As a result, Europe is redoubling its efforts to break its dependence on Russian hydrocarbons. The bloc is also accelerating plans to develop renewable energy sources. Thus, it appears that in about three years, Europe will no longer need Russian oil and gas⁷.

It would not be an exaggeration to say that things look dire in Russia's energy sector, which accounts for a third of the country's economy, about half of its budget revenues and about two-thirds of its exports. The forecasts from the International Energy Agency (IEA) predict that Russia's annual income from energy exports will drop by more than half by 2030, down to \$30 billion from \$75 billion before the start of the war in Ukraine⁸.

Due to sanctions, Russian energy companies no longer have access to Western financing and technology. For the Kremlin, this is an existential threat, their current energy reserves are gradually depleting, and although they have new deposits in the Arctic, their development will require a lot of money and top-notch Western technology.

However, it should be noted that energy will continue to be a key factor in Russia's foreign economic and geopolitical influence not only in the region, but also throughout the world.

Nuclear intimidation and blackmail⁹

On the one hand, intimidation of the Kremlin with nuclear weapons has partially brought results. In particular, as a result of the publication of reports about the possible detonation of the Zaporizhzhya Nuclear Power Plant. The intensity of this issue discussion in social networks and queries in search engines increased, which indicates, if not panic, then excitement among the civilian population.

⁶ European energy security post-Russia. Dirksen Senate Office Building, United States. June 07, 2022, <https://www.csce.gov/international-impact/events/european-energy-security-post-russia>.

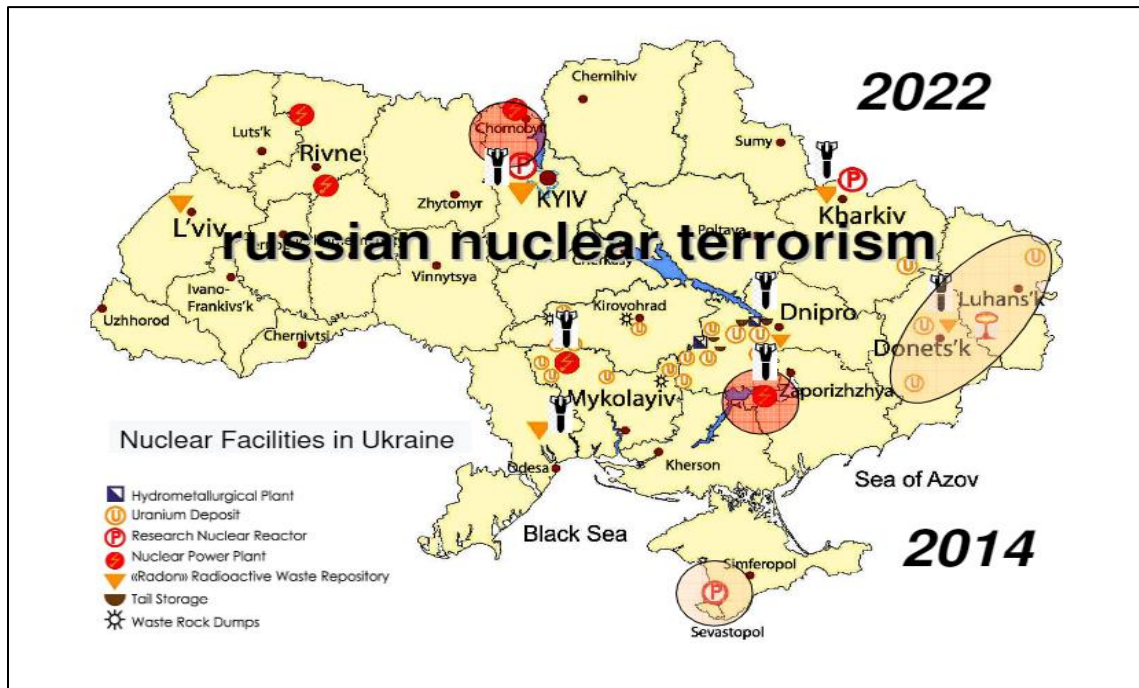
⁷ Demarais Agathe: Russia will lose the energy war Putin started. November 11, 2022, <https://www.politico.eu/article/russia-will-lose-the-energy-war-putin-started/>.

⁸ World Energy Outlook 2022. Report. International Energy Agency. October, 2022, <https://www.iea.org/reports/world-energy-outlook-2022>.

⁹ Brusylovska O.: Russia's Nuclear Blackmail as a Threat to the Global Nuclear Order. Russia's War on Ukraine (39-52). September, 2023, https://www.researchgate.net/publication/373614536_Russia%27s_Nuclear_Blackmail_as_a_Threat_to_the_Global_Nuclear_Order; Halunko V., Buglak I., Boiko V.: Putin's Nuclear Blackmail. *Advanced Space Law*, 9 (93-107). June, 2022, https://www.researchgate.net/publication/362150433_Putin%27s_Nuclear_Blackmail; Dolin V., Kopylenko O.: Global Nuclear Threats. April, 2022, https://www.researchgate.net/publication/360194439_Global_Nuclear_Threats and Lerner K. Lee: Zaporizhzhia nuclear plant perils part of novel challenges regarding nuclear safety. August 9, 2022, https://www.researchgate.net/publication/362608905_Zaporizhzhia_nuclear_plant_perils_part_of_novel_challenges_regarding_nuclear_safety.

On the other hand, Russia's threats of a nuclear catastrophe allowed Kyiv to demonstrate the barbarism of Putin and his invasion army. This increased the determination of some countries and international organizations to support Ukraine.

Given the unpredictability, defeatism, and idiotic resoluteness of Putin and his pocket powers, planning and other actions must constantly take into account the fact that the order to use nuclear weapons is unlikely, but potentially possible.



Picture 2. Radiation facilities under russian shelling and occupation.¹⁰

Food as a weapon (holodomor)¹¹

By its actions with the “Grain Deal” and others, the Russian Federation dealt a tangible blow to the economy of Ukraine. Such a situation can lead to a global increase in food prices, especially in the poorest countries.

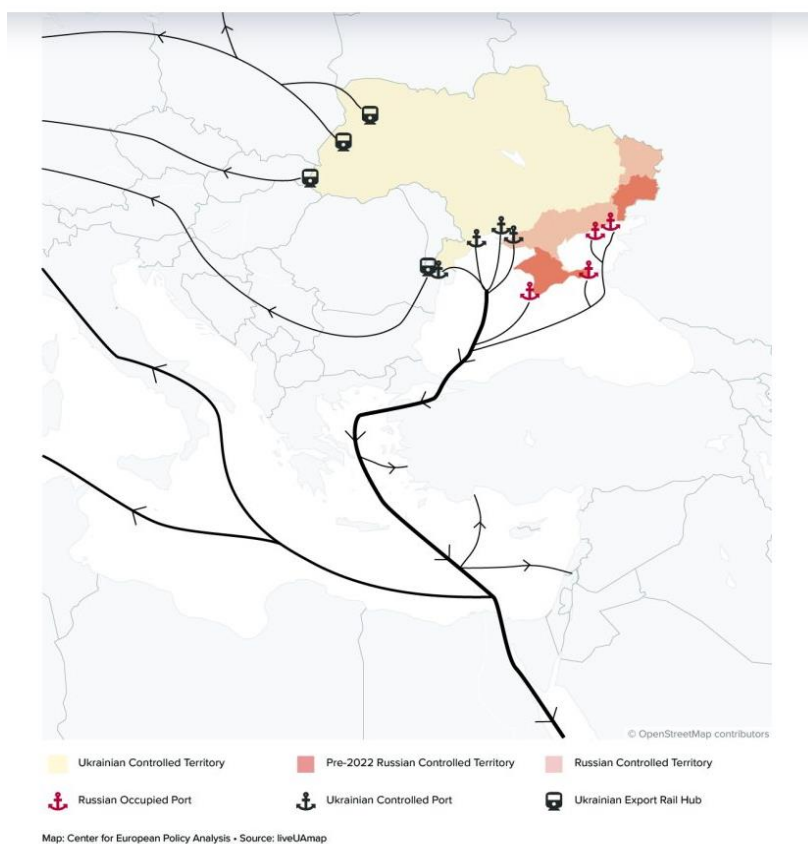
Russian food blackmail partially worked: Reuters sources reported that UN Secretary-General Antonio Guterres made an offer to Putin that would allow the extension of the grain deal in exchange for the connection of subsidiaries of the Russian

¹⁰ Dolin V., Kopylenko O.: Global Nuclear Threats. April, 2022, https://www.researchgate.net/publication/360194439_Global_Nuclear_Threats.

¹¹ Sydorenko S.: Re-Launching Grain Deal. How to Save Ukraine's Black Sea Exports after Russia's Demarche. European Pravda. October 31, 2022, <https://www.eurointegration.com.ua/eng/articles/2022/10/31/7149686/>; War Speeches. Russia swallows the "grain deal" and complains that Patriot is shooting down: "Kinzhals". May 22, 2023, <https://www.pravda.com.ua/eng/columns/2023/05/22/7403278/>; Colibășanu A.: Are Blockade Runners Challenging Russia's Grain Gauntlet? August 1, 2023, <https://cepa.org/article/are-blockade-runners-challenging-russias-grain-gauntlet/>; Martin N.: Ukraine war: Russia blocks ships carrying grain exports. March 17, 2022, <https://www.dw.com/en/ukraine-war-russia-blocks-ships-carrying-grain-exports/a-61165985> and Prokopenko A.: Is This the End of the Road for the Ukraine Grain Deal? July 19, 2023, <https://carnegiendowment.org/politika/90225>.

agricultural bank to SWIFT¹²; Bloomberg published an article with information that Erdogan is appealing to European leaders at the G20 to “satisfy Putin's needs”¹³; Russia still managed to bring Ukraine head-on with certain EU countries through which a land corridor for grain transit was organized, in particular with one of its closest partners – Poland.

However, there is another side of the coin. Putin's wishes are far from their realization: Ukraine does not agree to launch a “grain corridor” with Moscow on its terms; The USA sees alternatives as to how to implement the grain corridor (without Moscow)¹⁴; The USA plans to adopt a law that provides for the deployment of a contingent in the Black Sea, which will not contradict the “Montreux doctrine”¹⁵; The Telegraph reported that the British Air Force is increasing the number of air patrols to protect large cargo ships leaving Ukraine.



Picture 3. World Grain Delivery Routes¹⁶.

¹² Nichols M.: UN asks Putin to extend Black Sea grain deal in return for SWIFT access, sources say. July 13, 2023, <https://www.reuters.com/markets/commodities/un-chief-sends-putin-proposal-keep-black-sea-grain-deal-alive-2023-07-12/>.

¹³ Hacaoglu S., Nardelli A., and Bhatia R.: Erdogan Urges G-20 to Meet Russian Demands on Grain Deal. September 9, 2023, <https://www.bloomberg.com/news/articles/2023-09-09/erdogan-urges-g-20-leaders-to-meet-russian-demands-on-grain-deal?srnd=premium->; Зернова угода в обмін на SWIFT: як шантаж Росії починає набирати обертів, – Reuters. July 13, 2023, https://24tv.ua/economy/prodovzhat-zernovu-ugodu-chogo-hoche-rosiya-oon-vede-listuvannya_n2352201.

¹⁴ У держдепі США побачили «життєздатні маршрути» для експорту українського зерна. August 25, 2023, <https://zn.ua/ukr/ECONOMICS/u-ssha-pobachili-zhittjezdatni-marshruti-dlja-eksportu-ukrajinskoho-zerna.html>.

¹⁵ The USA adopts the law on Black Sea Security, <https://www.newgeopolitics.org/2023/09/10/the-usa-adopts-the-law-on-black-sea-security/> (visited: 28.02.24)

¹⁶ <https://www.openstreetmap.org/about>; Lasheras B. and Shelest H.: Russia Chooses to Starve the World's Poor (Again). July 20, 2023, <https://cepa.org/article/russia-chooses-to-starve-the-worlds-poor-again/>.

On September 11-15, the Sea Breeze exercise was held with the participation of the ships of the USA, Romania and the military of Ukraine, Bulgaria, Great Britain, and France¹⁷. These exercises are not mega news (they take place systematically), but they are revealing, especially since most of them physically covered the grain corridor.

It is important that this “courage” of NATO countries is not caused by the initial position regarding the grain corridor (they considered the possibility of concessions), but by the position taken by Ukrainian diplomacy and the General Staff of the Armed Forces of Ukraine.

Undermining hydroelectric power facilities (ecocide)¹⁸

What did Russia achieve by blowing up the Kakhovka HPP?

Certain islands on the Dnipro, located between the right and left banks, were flooded, which the Armed Forces could use as a certain bridgehead for landing and overturning, in particular, sabotage and reconnaissance or small mobile groups.

Russian troops destroyed the last bridge over the Dnipro in the Kherson region, which could theoretically be used by the Armed Forces to move equipment to the left bank.

Large-scale flooding of settlements significantly destabilized the situation in the region. Added to this were environmental and potential threats of a nuclear nature due to problems with cooling the reactors of the Zaporizhzhya NPP.

Russia excluded the left-bank Kherson region as a potential arena for a Ukrainian offensive. Now they can withdraw most of their troops from there to strengthen positions near Melitopol, Berdyansk or in the Donetsk region.

In addition to military and operational circumstances, this terrorist act had negative economic consequences. A large number of infrastructure facilities are located on the flooded territory: water supply, electricity supply, all of which were connected to the locks of the Kakhovka HPP. In particular, due to the occupiers undermining the Kakhovka HPP in the Kherson region, Ukraine lost a year's supply of drinking water¹⁹.

Where did Russia miscalculate? As a result of the decrease in the water level, there were interruptions in the supply of water to the Crimean Channel. The spilling of the

¹⁷ Sea Breeze 23.3 пройдуть в Чорному морі та дельті Дунаю і матимуть протимінний характер. September 8, 2023, <https://mil.in.ua/uk/news/sea-breeze-23-3-projdu-t-v-chornomu-mori-ta-delti-dunayu-i-matymut-protyminnij-harakter/>.

¹⁸ Шинкаренко С., Барталев С.: Последствия повреждения плотины Каховской ГЭС на реке Днепр. July 2023, https://www.researchgate.net/publication/372447200_Posledstvia_povrezdenia_plotiny_Kahovskoj_GES_na_reke_Dnepr The consequences of damage to the Kakhovka Reservoir dam on the Dnieper River; Kupriianova L., Kupriianova D.: Ecocide as a precursor of a particularly acute and postponed genocide of Ukrainian and European population in 2023. June, 2023, https://www.researchgate.net/publication/373648078_Ecocide_as_a_precursor_of_a_particularly_acute_and_postponed_genocide_of_Ukrainian_and_European_population_in_2023 and Filatov S.: Barbarians: Who Destroyed the Kakhovka Hydroelectric Power Plant and Why. August, 2023, https://www.researchgate.net/publication/373547369_BARBARIANS_Who_Destroyed_the_Kakhovka_Hydroelectric_Power_Plant_and_Why.

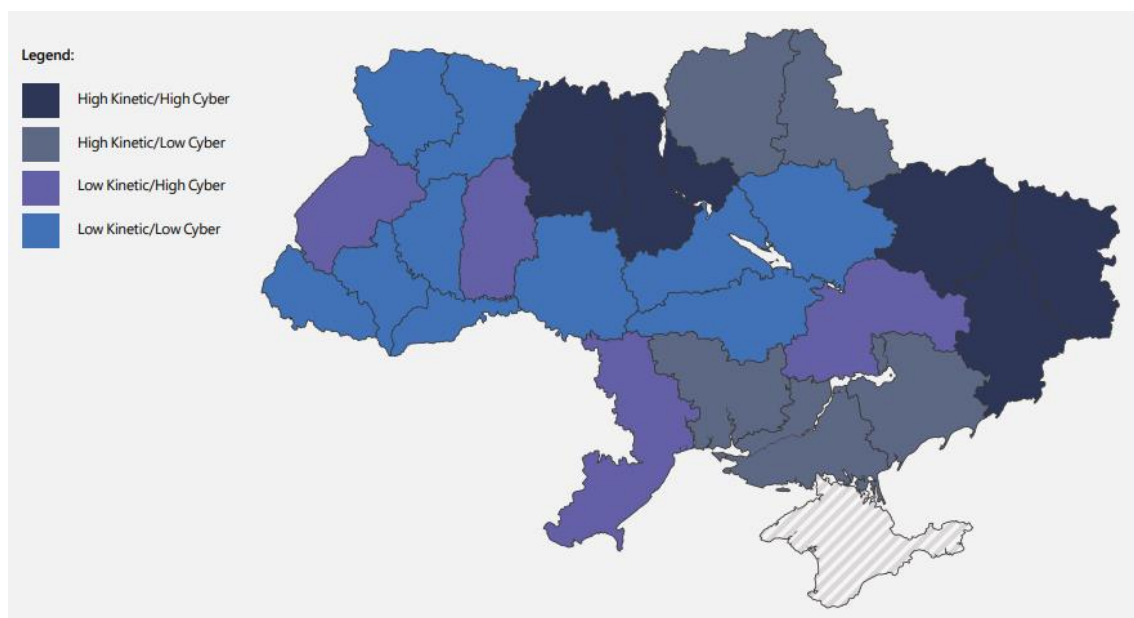
¹⁹ Тарасовський Ю.: Прасад А. Російські військові підірвали греблю Каховської ГЕС. June 6, 2023. <https://forbes.ua/news/rosiyski-viyska-pidirvali-kakhovsku-ges-pochalas-evakuatsiya-naselennya-zelenskiy-sklikav-rnbo-onovlyuetsya-06062023-14022>.

Dnieper due to the explosion of the Kakhov Reservoir also helped to reduce artillery fire, Russian troops moved further from the left bank²⁰.

Cyber terror

With the beginning of the large-scale invasion, Ukraine faced an unprecedented cyber aggression of the prevailing enemy. In a number of cases, cyber terrorists of the Russian Federation carried out significant interference in the work of information and communication systems of Ukraine. But, as a number of international cyber experts point out, the cyber aggression of the Russian Federation did not achieve its goals, which was also confirmed by the deputy head of the State Special Forces of Ukraine²¹.

Groundless aggression against Ukraine and a powerful campaign of cyberattacks provoked the support and consolidation of the international cyber community. As a result of such consolidation and unique rapid synergy of efforts of Ukrainian and foreign, state, private and volunteer cyberspace clusters aimed at cyber defence of Ukraine and ensuring its cyber security, the phenomenon of fairly successful cyber resilience of Ukraine in conditions of large-scale military aggression arose.



Picture 4. Synergy of Russian Kinetic and Cyber Activity in Ukraine from 23.02.2022 until 06.04.2022.²²

The armed aggression unleashed by the Russian Federation against Ukraine is one of the dirtiest conflicts in history; during the war, the following were committed. Violations of the rules of warfare and the laws of war, international law; the use of prohibited weapons (phosphorus, mines and other ammunition of prohibited principles of

²⁰ Черниш О.: Підлив Каховської ГЕС: кому він вигідний і чи зупинить наступ ЗСУ. June 6, 2023. <https://www.bbc.com/ukrainian/articles/cw4vw5qn4kzo>.

²¹ Досвід кіберстійкості з європейськими партнерами. Державна служба спеціального зв'язку та захисту інформації України : державний сайт України, <https://cip.gov.ua/ua/events/u-mezhakh-misyacya-kiber-bezpeki-v-yes-derzhspeczv-yazku-podilitsya-ukrayinskim-dosvidom-kiberstiiosti-z-yevropeiskimi-partnerami>, (visited: 14.04.2023).

²² An overview of Russia's cyberattack activity in Ukraine. Special Report: Ukraine: Microsoft Publishing, 2022, p. 10.

action...), prohibited methods of waging war (blocking international maritime routes, covert mass destruction and torture of prisoners and civilians, use of civilians and civilian objects as shields, use of mercenaries, etc.).

As it clear from the above, to organize and ensure the conduct of a large-scale hybrid war, the Russian Federation used all executive power bodies and the means by which they manage them. The range of domains and dimensions of hybrid activities is extremely broad. In order to contain such attacks and not to violate the critically important foundations of the state functioning, Ukraine needs to create an effective mechanism of resilience, accordingly, it is possible, with the full involvement of all state authorities and relevant means.

Assessing and prioritizing types of the hybrid influence

Having studied the works of international researchers, think tanks and research institutions²³, the following groups of hybrid warfare impacts (also known as operational environments – dimensions) are determined for further research: informational-cognitive (Info-Cog); cyber; financial-economic; international-political/diplomatic; military; special (environmental, social, religious, etc.).

Hybrid campaign Type of influence	Info-psycho Campaign “SMO”	Energy resources as a weapon	Nuclear intimidation and blackmail	Food as a weapon	Undermining hydro-electric stations	Cyber terrorism	Total
Informational-cognitive	6	3	6	3	4	5	27
Cyber	5	1	2	2	2	6	18
Financial-economic	1	5	1	5	3	3	18
International-political/diplomatic	4	4	4	6	1	4	23
Military	3	6	5	4	6	2	26
Special (eco, social, religious, etc.)	2	2	3	1	5	1	14

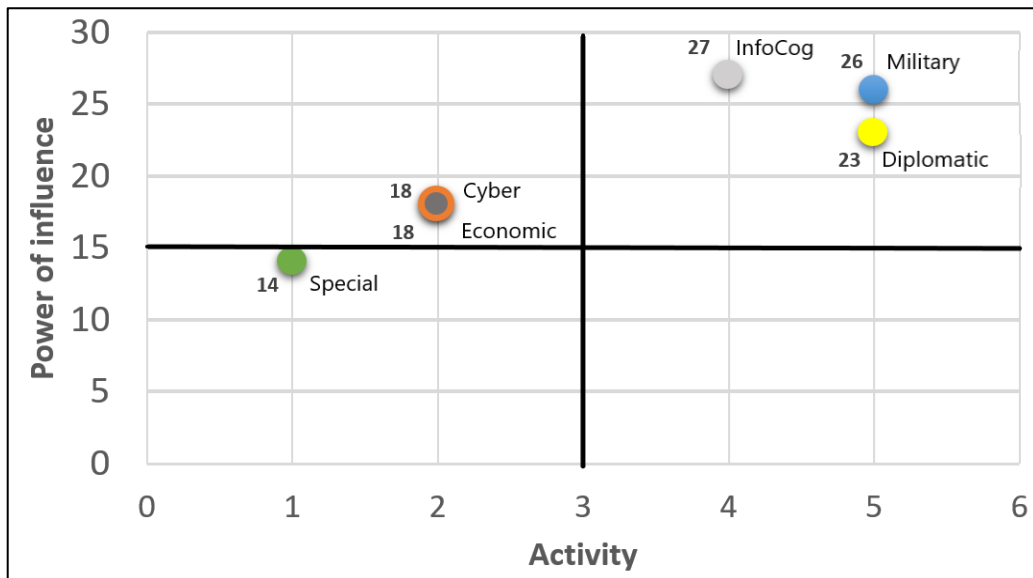
Table 1. Expert assessment of the intensity of different types of hybrid influence in each individual hybrid campaign.

Let us prioritize them using the simplest method - the method of an expert assessment, based on the analysis above by simple arrangement. Based on analysis of hybrid strategies, using the method of an expert assessment (involving the Center of Military and Strategic Studies experts, including the author of this research), we gave scores

²³ Countering hybrid threats. NATO, 2023, https://www.nato.int/cps/en/natohq/topics_156338.htm; Горбулін В.: Світова гібридна війна: український фронт. Київ, НІСА, 2017, <http://resource.history.org.ua/item/0013707>; Koval M. (Ed.): Theoretical and applied aspects of the Russian-Ukrainian war: hybrid aggression and national resilience. Kharkiv: TECHNOLOGY CENTER PC, 2023, <https://doi.org/10.15587/978-617-8360-00-9> and Сиротенко А. (ред.): та ін. Воєнні аспекти протидії “гібридній” агресії: досвід України. Київ, Національний університет оборони України, 2020, https://nuou.org.ua/assets/monography/mono_gibr_viin.pdf.

from 1 to 6 characterizing the intensity of impact (by consequences) in each individual hybrid influence campaign. Where 6 is the highest score so the highest impact, and 1 is the lowest one.

On the Picture 5, the most active and most intense influences are determined by the magic quadrant method. The number of hybrid companies determines the activity where one or another influence had a power greater than average (above 3 points). Intensity is determined by a simple rating from the rating table.



Picture 5. Visualization of the intensity and activity of different types of hybrid influence.

Thus, we can see that the most active and intensive influences are information-cognitive, military, and international-political. Cyber and economic influence are identified as powerful but less active. Special, which is ecological, religious, social, etc., is defined as the least active and least powerful among the analysed campaigns of hybrid aggression.

Conclusion

One of the principles of defence planning is that the goal must justify the means, which is especially important for Ukraine now. Russia accumulates resources and, in the process, continues to deplete Ukraine's resources, while the difference in the economic indicators of Russia and Ukraine is not times, but orders of magnitude. Therefore, a very urgent task for Ukraine is to spend on defence and security exactly as much as is necessary, and if more, then not significantly.

In this purpose, it is necessary to be able to determine correctly the need for the resource necessary for the expenditure. It is one of the tasks that this work was devoted to and an appropriate approach was proposed for the hybrid integration of various types of influences aimed at countering various hybrid war strategies.

The method based on the analysis allows distributing efforts between the components of *national resilience system* conceptually on a certain inertial perspective. However, military conflictology is a dynamic science, and with the development and progress of society, people invent new and new insidious ways to destroy each other. As for the

prejudice of the destructive influence of new tools and strategies of hybrid warfare, it is necessary to have an appropriate system for their identification (perhaps focused on detection according to the characteristic principle, or others). Then, using a combined assessment of lessons learned and trends based on the identification of signs will be more complicated but much more effective.

A STUDY OF THE IMPACT OF MILITARY OPERATIONS IN UKRAINE ON THE CHANGING POLITICAL GOALS OF RUSSIA

Emma Chimbanga and Dmytro Zhukov

The presentation by Emma Chimbanga and Dmytro Zhukov in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://www.youtube.com/watch?v=5NofPSfLSSU&t=499s> starting from 2:57:35.

The military philosophical thinking of the leadership of the Russian Federation, which is the undisputed aggressor in the Russian-Ukrainian war of the early twenty-first century, has many thoughts, theories and requires careful study and analysis in order to stop and prevent similar violations of the socio-ethical and political foundations recognised by international law and society as a whole.

The philosophy of war and its impact on socio-political goals and relations in society have been the subject of many works by philosophers and scholars, both foreign and domestic. One of these fundamental works is the book "On War" by the Prussian General Carl von Clausewitz, which is one of the most important treatises on military-political analysis and strategy ever written and remains both controversial and influential for strategic thinking.

In the course of writing this article, the author has studied, firstly, the political goals and basic principles of the Russian military and political leadership during the armed aggression of the Russian Federation (hereinafter - RF), and, secondly, the relationship between the political goals of the state leadership and the war.

First of all, it should be noted that Russia's National Defence Strategy, approved by the Russian President on 2 July, 2021, is a document with many contradictions and disagreements. The Russian authorities did not take into account the responsibility for the tense relations with Western countries, and sanctions were perceived as a limitation of competitive advantages and lack of market access. The document also fails to take into account the views of the younger generation, focusing instead on the old ideology.

In order to obtain the necessary data and understand the relationship between "political goals and war", it is advisable to establish a chronological sequence of military events and their impact on the political decisions of the Russian leadership, to study the existing relationship between changes in the results of hostilities on the territory of Ukraine depending on Russia's political goals. Thus, Russia's open military attack on Ukraine began on Thursday 24 February 2022. The military campaign began after a long build-up of Russian troops, strategic and logistical preparations, and the definition of the main political goals and objectives. These goals, as of 24 February 2022, included a short-term military offensive on Kyiv to change the country's leadership, which prevented Russia from extending its political influence in Ukraine, especially with regard to the Ukrainian leadership's policy of becoming part of the European Union and NATO.

Russia used cyber attacks as part of its military strategy. In particular, on 15 February, before the start of the overt invasion, it temporarily disabled the websites of Ukrainian institutions and banks. According to Microsoft, Russian military and intelligence services carried out disruptive attacks and espionage operations while Russian forces attacked the country by land, air and sea. The primary goal was to disrupt or degrade the leadership and communication functions of Ukrainian government and military structures, as well as to create chaos and undermine public confidence. Disinformation was also an important tool in the conflict. Russia used disinformation to try to influence public opinion. This included spreading false information and distorting facts in order to distort the understanding of events.

On 24 February 2022, Vladimir Putin announced the launch of a "special military operation" to justify the invasion. The Russian president repeated the theories spread by Russian propaganda, such as the need for "denazification" and "demilitarisation", and that modern Ukraine is run by Nazis and corrupt officials. The latter have allegedly brought Ukraine to the brink of bankruptcy and mock those who support Russia. Yet Putin is trying to convince the entire civilised world that the state of Ukraine is kept afloat only by Russia.

Immediately after the invasion of Ukraine's sovereign territory, Russia made significant progress, but quickly faltered and eventually lost its potential and offensive effectiveness. After the failure of its plans, the defeat of the first echelons of the Russian troops and heavy losses of men and equipment, the Russian leadership decided to change its goals in the following days and applied the theory of the ideological philosophy of "quick, victorious war", which could be used, firstly, to demonstrate the strength and power of the Russian Armed Forces (hereinafter - the RF Armed Forces), their military-technological and scientific uniqueness, and, secondly, to raise the moral and patriotic spirit of the RF Armed Forces and society as a whole. At that time, a constant propaganda technique was to recall the history and ideas of the Second World War, when the Soviet Army was powerful and made a significant contribution to victory.

Instead, a month after the start of the full-scale invasion, Russian troops failed to achieve their goals and objectives and failed to capture Kyiv, Kharkiv or any other major Ukrainian city, forcing the Russian leadership to change its objectives. At a Russian defence ministry briefing on the results of a month of hostilities, defence ministry officials declared that the "first stage of the special operation" had been completed, that all objectives had been met and that the main goal had been achieved. They claimed that the Ukrainian army's power had been undermined and the enemy's military infrastructure and equipment destroyed. In the second stage, according to senior security officials, Russia will focus on "liberating" the territories claimed by the so-called Donetsk and Luhansk People's Republics (hereinafter - DPR and LPR).

The ideas of 'denazification' and 'demilitarisation' of Ukraine have almost completely disappeared from the declarations and objectives of Russia's armed aggression. Then, on 25 March 2022, the head of the Main Operational Directorate of the General Staff of the Russian Armed Forces, Sergei Rudsky, publicly declared: "The main goal of the special operation is to help the people of the DPR and LPR, who have been subjected to genocide by the Kyiv regime for eight years. It was impossible to achieve this goal by political means. Kyiv publicly refused to implement the Minsk agreements". The political goals, from the capture of Kyiv and Ukraine, the change of political

leadership, the so-called "denazification" and "demilitarisation", have changed to help the people of the DPR and LPR. This was made possible by several factors, the most important of which were the failures of the Russian army on almost all fronts, heavy losses of men and equipment, and the realisation that Russia urgently needed to reduce the line of contact and increase the concentration of troops in key areas.

In addition, the arguments for a 'special military operation' changed dramatically after the full-scale invasion of Ukraine. This was due to the need to quickly and precisely justify the military invasion of Ukraine, mobilise supporters and silence critics. In this way, the following theses were added to the political arguments after 24 February: all Russians who do not support the invasion of Ukraine are traitors; there is no alternative to the denazification of Ukraine, because the Nazis create problems for Russia and mock Russians; a significant number of Ukrainians are guilty of bringing the Nazis to power, so they deserve to be punished; NATO is trying to use other people's hands to foment military conflicts against Russia.

The peak periods of denial of Russian war crimes and violations of international humanitarian law in Ukraine, and the change of political goals and ways of justifying them, can be observed in April-May, August-September, and November 2022, when the Ukrainian army liberated the occupied territories and inflicted heavy losses on the Russian side in terms of personnel and equipment.

Russia's constant disinformation throughout most of 2022 was the use of chemical, biological and nuclear weapons, as well as a "dirty bomb" with nuclear waste, which was used to divert attention from Russian actions. For example, reports about the threat of a 'dirty bomb' reappeared in the information space in October 2022, during the crisis surrounding the Zaporizhzhia Nuclear Power Plant (hereafter Zaporizhzhia NPP), created by the Russians, the shutdown of its power units, the blocking of the work of the IAEA mission, and the deployment of a military contingent at the plant.

After fierce fighting between Kyiv and Kharkiv, Ukraine announced a deceptive counter-offensive in the direction of Kherson and conducted an effective counter-offensive operation in the Kharkiv region, liberating almost the entire occupied part of the region (a total of 300 settlements in the Kharkiv region, 3800 km² of territory with a population of 150,000 people) during the active period from 06 to 09 September 2022. At the time, the Russian leadership was confused and lacked clear plans and objectives. Because of the defeat and the need to explain to the public the loss of control over the Kharkiv region, it was stated that the political goal of leaving the Kharkiv region was to reduce tensions with Russia and to demonstrate a willingness to make political concessions in order to achieve peace and certain agreements, but these were false statements. On the contrary, Russia launched an operation to deliberately destroy Ukraine's energy infrastructure, using drones it had obtained from Iran. At the same time, it took Russia almost two weeks to identify and set new targets, which led to the announcement of a decree on partial mobilisation on 21 September 2022. Troop deployment: According to the BBC, 97 per cent of Russian troops were deployed in Ukraine. At the same time in September, the Russian leadership decided to hold referendums in the occupied territories to annex them to Russia.

A major blow to Russia was the Ukrainian counter-offensive in the Kherson region. As of 11 November, 12 settlements have been liberated, some 10,000 square kilometres of land are back under Ukrainian control, and Western precision weapons

are within reach of Crimea. However, Russia still controls about 60% of the Kherson region, the southern and eastern parts of the Dnipro River, including the coast of the Sea of Azov. The de-occupation of Kherson is one of the key events that caused Russia's heavy losses during the war and forced it once again to change its strategy to achieve its political goals.

On 6 June 2023, the Kakhovka hydroelectric power station (hereafter Kakhovka HPP) was blown up, probably as part of a Russian military strategy to create chaos and destroy infrastructure. In the case of the Kakhovka HPP in particular, OSINT researchers argue that the environmental and economic consequences of its destruction are comparable to the consequences of the use of tactical nuclear weapons of 5 to 10 kilotons, which are not accompanied by radiation contamination.

The explosion resulted in the evacuation of the population, the destruction of enterprises and facilities with harmful and toxic substances, including chlorine, ammonia, oil products, etc., the destruction of water and electricity infrastructure, sewage, the collapse of food and medical logistics, and the pollution of the Black Sea ecosystem. It should also be noted that the explosion of the Kakhovka hydroelectric power station has had a significant impact on the ecosystem not only of the region, but of Ukraine as a whole. At least 150 tonnes of motor oil were spilled into the Dnipro River, and there was a risk of more than 300 tonnes being spilled. Thus, the explosion of the Kakhovka HPP could have been aimed at: causing significant damage that could affect the country's ability to wage war effectively, making it impossible to conduct offensive actions in this area for some time, and focusing the attention of the Ukrainian leadership and society on a new problem.

After analysing the information received, we can conclude that the main narratives of Russian propaganda during the Russian-Ukrainian war were: denazification and demilitarisation of Ukraine; support for the fraternal peoples of the DPR and LPR, preservation of their territory recognised by Russia; protection of the Russian-speaking population; fight against the Western enemy, including NATO; use of the idea of the sacred Russian religion and Church, high ideals of the Russian people in comparison with Ukrainian "non-traditional" values; demonstration of the power of the Russian state; and, last but not least, the war against the Soviet Union.

In addition, there is a clear dependence of Russia's political goals in the war on the results of the hostilities on the territory of Ukraine. Thus, with the increasing intensity of hostilities and the resulting losses, as well as the inability of the armed forces to fulfil their tasks, the Russian authorities are forced to change their political goals and use new propaganda narratives for their population.

This information is confirmed by the content analysis of the main speeches of the Russian political and military elite on the aims of the war. As noted above, in a statement on 24 February, Vladimir Putin claimed that it was necessary to "denazify" and "demilitarise" Ukraine. At the same time, Russian Defence Minister Sergei Shoigu said that the main goal of the Russian authorities was to protect the Russian Federation from the military threat of Western countries trying to use the Ukrainian people in the fight against Russia.

Sergei Rudsky, head of the Main Operational Directorate of the General Staff of the Russian Armed Forces, publicly stated that the main purpose of the special operation was to provide assistance to the people of the DPR and LPR.

After the retreat of Russian troops in some key areas, especially near Kyiv, it was announced that the main military operations would be concentrated in Donbass, which caused a strong reaction from Chechen leader Ramzan Kadyrov, who then made a statement about the need to continue the capture of Kyiv.

At the same time, the Russian Foreign Ministry continues to say that the purpose of the war is to weaken the influence of the United States and NATO, and the head of the Kremlin press service, Dmitry Peskov, expresses hope for negotiations and a quick end to the war.

As the Russian forces failed to achieve their objective, Russia tried to undermine the morale of the Ukrainian people by launching rocket attacks on civilian infrastructure, and on 14 July Russia launched a rocket attack on the Officers' House and the central square of Vinnytsia. Twenty-seven people were killed, including three children (a 4-year-old girl and boys aged 7 and 8), and more than 200 injured. On 28-29 July, Russia attacked a camp where captured Ukrainian soldiers were being held, in violation of international humanitarian law, which guarantees the preservation of the life and health of prisoners. According to the occupiers, 53 AFU prisoners were killed. On 24 August, Russia launched a rocket attack on the Chaplino railway station in the Dnipro region. The attack killed 15 Ukrainians and injured around 50. On 29 August, Ukraine launched the aforementioned counter-offensive in the Kharkiv region.

On 21 September, the Russian president announced in his address a partial mobilisation in Russia and the intention to hold referendums in the temporarily occupied regions of Ukraine. A few days later, on 30 September, Putin announced the incorporation of the DPR, LPR, Zaporizhzhya and Kherson regions into the Russian Federation, a reaction to Russia's growing losses and the futile hope of holding on to territories that allegedly already belong to Russia. This reaction was made possible by the successful offensive actions of the Ukrainian armed forces, which led to the loss of control over the Kharkiv region.

During the winter, the enemy decided not to conduct active offensive actions but to focus on defence, launching missile attacks on Ukraine's energy infrastructure in the hope of weakening the counter-offensive and forcing negotiations. Although Russia's missile attacks on Ukrainian power plants began as early as 16 September, when the Kharkiv thermal power plant was damaged, it was not until October that the Russian authorities began to claim that the missile attacks on energy infrastructure were a response to Ukraine's attacks on the Crimean bridge. Later, in late October, Vladimir Putin claimed that the shelling of civilian infrastructure was a response to Ukrainian attacks on Black Sea Fleet ships in Sevastopol, and even later, on 8 December, the Russian president said that Russian strikes on Ukraine's energy system were a "response" to a series of Ukrainian actions. In addition to the explosion on the Crimean bridge, he also highlighted the cutting off of water to Donetsk, which he called "genocide", and mentioned the "blowing up of the power line from the Kursk nuclear power plant".

Thus, almost until the end of the winter, Russia carried out missile attacks on Ukraine's energy system, always finding reasons and circumstances for doing so, most of which were meaningless. In fact, it was done firstly to prevent the advance of Ukrainian troops, secondly to cause as much material damage as possible, and thirdly to put psychological pressure on society and the country's leadership to force Ukraine to make concessions and enter into negotiations.

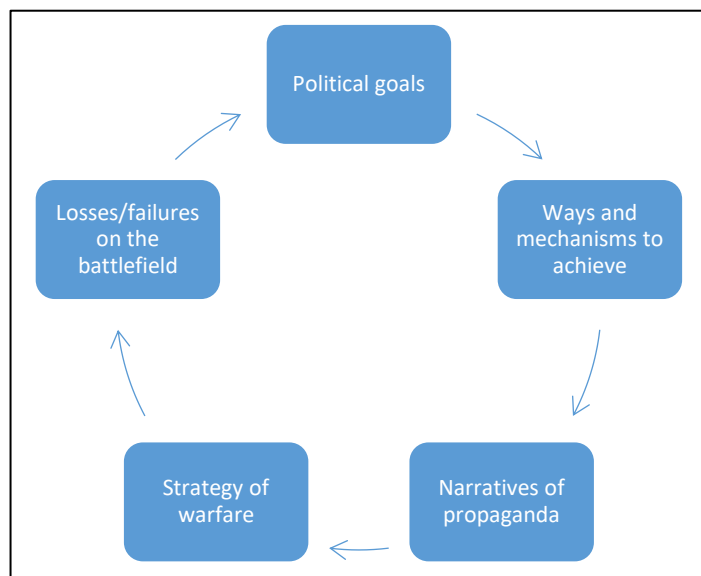
Russia's political aims in the war	Narratives aim to achieve goals
<p>24 February 2022.</p> <p>Russia's goals included expanding its sphere of influence, seizing the Ukrainian government and replacing it with a pro-Russian one.</p>	<p>Implementation of "denazification" and "demilitarisation", fight against Nazism and corruption, protection of the Ukrainian population supporting Russia..</p>
<p>25 February - 24 March 2022.</p> <p>A quick, victorious war, a demonstration of the strength and power of the Russian Armed Forces, and the connection of the Autonomous Republic of Crimea to Russia by land.</p>	<p>During this period, a constant propaganda technique was to remind people of the history and ideas of the Second World War, the contribution of the Soviet army to victory and the possibility of repeating the successes.</p>
<p>25 March 2022.</p> <p>Change of objectives to conquer and hold the territories of the DPR and LPR.</p>	<p>According to senior security officials, in the "second stage" Russia will focus on "liberating" the territories claimed by the so-called DPR and LPR. The main goal of the special operation is to provide aid to the people of the DPR and LPR.</p>
<p>April-May, August-September, November 2022.</p> <p>Intimidation of the Ukrainian government and society, blackmail and pressure on Ukraine and partner countries to start negotiations on Russia's terms.</p>	<p>Encouraging the use of chemical, biological and nuclear weapons by Ukraine, as well as the "dirty bomb" around the Zaporizhzhya nuclear power plant, Russia's shutting down of its power units, blocking the work of the IAEA mission, and the deployment of a Russian military contingent on the plant's territory.</p>
<p>From 06 to 09 September 2022.</p> <p>Strengthening the defence and improving the offensive capabilities of the Russian army in the Donetsk and Luhansk regions.</p>	<p>Withdrawal of the Russian army and abandonment of the territory of the Kharkiv region. Redeployment and increased presence of the Russian army in the Donetsk and Luhansk regions.</p>
<p>End of September 2022.</p> <p>Increase in the number of Russian military personnel. Damage and destruction of Ukraine's critical energy system.</p>	<p>The announcement of a decree on partial mobilisation on 21 September 2022. Attempts to destroy Ukraine's energy infrastructure using missiles and drones.</p>
<p>December 2022 - February 2023.</p> <p>Preparation for offensive actions in 2023, search for allies, attempts to force Ukraine to negotiate.</p>	<p>Mobilisation, production and purchase of weapons and military equipment. Concentrate efforts in the eastern direction.</p>
<p>7 January 2023.</p> <p>Russia's demonstration of the insignificance and utter uselessness of the Ukrainian Orthodox Church, with the</p>	<p>For the first time, the Ukrainian Orthodox Church held a Christmas service in the Assumption Cathedral of the Lavra. At the time, the Russian elite informed the media that only the military and the press were</p>

aim of religiously influencing all actors in the world community.	supposedly present at the liturgy. Meanwhile, "ordinary believers" continue to attend churches of the Moscow Patriarchate.
February-April 2023. The desire to hide their failures on the battlefield and to convince their people of constant "victories".	Inefficiency and obsolescence of weapons and military equipment provided to Ukraine by its allies. Claims of its malfunctioning, obsolescence and the fact that it has allegedly already been "written off". Constant stories about the elimination of Patriot launchers.
23-24 April 2023. Attempts to justify strikes on port infrastructure and grain storehouses.	Russia's main propaganda narratives included: 1. Ukraine is using the grain deal to attack Crimea; 2. Ukrainian grain is poisoned; 3. The grain deal is a commercial project of Ukraine.
7 October 2023. Psychological pressure on Ukraine, as well as the demonstration of information to Russian society about the alleged cessation of military and other assistance to Ukraine.	The world's media are focused on the Middle East. The publication of analyses on this subject, including statements that "the US is to blame for what is happening in Israel", "Ukraine is not being supported because the US is helping Israel", the manipulation of the migrant issue with which Russia has frightened the EU, and the conspiracy theory of "heavenly Jerusalem".
November 2023. Aggravation of public relations and promotion of mistrust among Ukrainian citizens and members of the international community towards the Ukrainian military and political government.	Russia is spreading reports of a possible conflict between the country's political and military leaders. Regularly broadcast reports of a confrontation between Valeriy Zaluzhnyi and Volodymyr Zelenskyi.
December 2023 to the present. War of attrition, preparations for massive missile strikes on Ukraine's energy infrastructure.	Informing the media about the Ukrainian side's failures on the battlefield, heavy losses of men and equipment, and Russia's build-up of missile weapons.

Table 1. Russia's political aims and narratives.

After analysing the above information, it becomes clear that there is a constant dependence of the state's political goals on the results of hostilities, which in turn are the ratio of losses of personnel and equipment in attempts to achieve the goals and the results achieved after a certain period of time. An analysis of the basic narratives of Russian propaganda shows that they change depending on the situation at the front, world events and events in Russia. In addition, there is a certain time lag between events and the emergence of narratives.

Changes in propaganda narratives have a similar nature of interdependence with hostilities and goals set by the political authorities of the state. This interdependence can be illustrated schematically as follows:



Picture 1. The interdependence between political goals, narratives and losses.

To this day, Russia's position and political goals are concentrated in eastern Ukraine; at the end of January 2023, Vladimir Putin stated that the purpose of the special operation was to protect people and Russia itself from threats arising in the adjacent historical Russian territories.

Failures on the contact line force changes in goals and strategies for achieving them, and changes in policy goals force the choice of different ways of achieving them. It is safe to say that any change in either goals or ways of achieving them firstly involves changes in dependent components, and secondly a certain period of time is required to create a reaction and implement these changes. At the moment, Russia has failed miserably in achieving its goals and has no positive consequences for itself. Analysts argue that the conflict in Ukraine is turning into a war of attrition. This scenario became relevant when Russia changed its strategy after failing to achieve its initial goals. A war of attrition implies a relatively long conflict and significant losses on both sides; by its very nature, according to the Russian leadership, the winner will be the one with the greater resources of manpower, weapons, equipment and ammunition. Ukraine rejects the possibility of negotiations with Russia, considering it unacceptable to give up the occupied territories. The country is ready to use both political and military means to restore its borders. Russia's refusal to voluntarily leave the territories defined by the Ukrainian constitution and recognised by the world leaves the country with the right to defend itself and to use force in accordance with international humanitarian law. In order to end the military conflict and prevent its recurrence in the future, one of the tasks for Ukraine and its partner countries is to analyse and predict the relationship between Russia's political goals and its military actions, the time required for reactions, propaganda narratives, changes and consequences, in order to create obstacles and make it impossible for Russia to achieve its goals in the war in a timely manner.

The paper utilised a research methodology that involved a chronological analysis of the war's objectives and the dependence of changing objectives on military results.

Additionally, the study examined the relationship between Russian propaganda narratives and the results of hostilities. The speeches made by the Russian Federation's leadership were also subjected to content analysis.

Literature

Antony J. Blinken: Russia's Strategic Failure and Ukraine's Secure Future. Speech. Secretary of state. Helsinki city hall. Helsinki, Finland, June 2, 2023.

Denysiuk A. V.: Politychnyi dialoh v suchasnyi umovakh: polityko-kulturnii aspekt. Vinnytskyi natsionalnyi tekhnichnyi universytet. Zbirnyk naukovykh prats. Politychna kultura ta ideolohiia. Vinnytsia – 2023. pp. 51–57.

Philippe Gros, Stéphane Delory, Vincent Turret. Stratégies russes et guerre en Ukraine: état des lieux. The Fondation pour la recherche stratégique, 2022.

Konstankevych I., Kostusiak N., Shulska N., Stanislav O., Yelova T., Kauza I.: Media Manipulation as a Tool of Information Warfare: Typology Signs, Language Markers, Fact Checking Methods. AD ALTA: Journal of Interdisciplinary Research, 2022. Vol. 12, Issue 2, Spec. Issue XXIX, p. 224–230.

Kyryliuk O., Shulska N., Zinchuk R., Demeshko I., Nesterenko T., Volchanska H., Fenko N.: Toolkit for the formation of narrative strategies of the Russian-Ukrainian war (using the 2022–2023 media language as an example). AD ALTA: Journal of Interdisciplinary Research, 2023. Vol. 13, Issue 1, Spec. Issue XXXIV, p. 163–171.

A. Lepikhov: Problemy realizatsii stratehii RF proty Ukrainy. Naukova statia. Natsionalnyi instytut stratehichnykh doslidzhen. Kyiv – 2022.

Yu. I. Levchenko; Ministerstvo osvity i nauky Ukrainy, Natsionalnyi pedahohichnyi universytet imeni M. P. Drahomanova, Naukova biblioteka. Vydavnytstvo NPU imeni M. P. Drahomanova, Kyiv – 2022, p. 149.

S. I. Pyrozhkov, N. V. Khamitov: Viina i myr v Ukraini: shliakhy do realnoi peremohy i rozvytku [Elektronnyi resurs]. Visnyk Natsionalnoi akademii nauk Ukrainy. – 2022. № 9. p. 38–49.

Reshetukha T. V., Kushnir O. V.: Rosiiski propahandystski naratyvy shchodo viiny v Ukraini v yevropeiskomu mediakontenti. Zbirnyk naukovykh prats. Naratyvy viiny u folklornykh, literaturnykh ta mediinykh tekstakh, 2023.

Riley Bailey, George Barros, Karolina Hird, Nicholas Carl, and Frederick W. Kagan (2022): Russian Offensive Campaign Assessment, December 3. Institute for The Study of War [in Ukrainian].

A. M. Romanyshyn, S. V. Cherevychnyi, O. P. Ostapchuk ta in. 100 brekhlyvykh rosiiskykh naratyviv pro rosiisko-ukrainsku viinu. Zbirnyk informatsiino-analitychnykh materialiv. – K.: NDT's HP ZS Ukrainy. Kyiv – 2023, p. 77.

Joshua Rovner: Putin's Folly: A Case Study of an Inept Strategist. War on the rocks, 2022.

Shevchenko M. M., Lepikhov A. V., Khrapach H. S.: Teoretychni pidkhody ta praktychna tsinnist prykladnykh doslidzhen mizhderzhavnoi konfliktnosti v interesakh natsionalnoi bezpeky: brytanskyi dosvid – uroky dlia Ukrainy // Zbirnyk

naukovykh prats Tsentru voienno-stratehichnykh doslidzhen Natsionalnoho universytetu oborony Ukrainy imeni Ivana Cherniakhovskoho. Kyiv – 2022. № 1 (74), pp. 12–21.

Shulska N., Kostusiak N., Mitlosh A., Pavlyuk I., Polyvach M., Mudryk A., Sushkova O.: Information and Psychological Operations (IPSO) as a Discovery of False Narratives in the Conditions of Military Conflict in the Media. *AD ALTA: Journal of Interdisciplinary Research*, 2023. Vol. 13, Issue 1, Spec. Issue XXXIV, p. 156–162.

Shulska N. M., Ostapchuk S. S., Naumenko L. M.: Vorozhi naratyvy v umovakh viiny v media: verbalni markery, informatsiina hihiiena ta sposoby protystoiannia. *Naukova stattia. Vcheni zapysky TNU imeni V. I. Vernadskoho. Serii: Filolohiia. Zhurnalistyka*. Kyiv – 2023.

Tim Sweijs, Mattia Bertolini: How wars end War terminations: insights for the Russia-Ukraine War. Hague Centre for Strategic Studies, May 2022.

Stepan Vidnianskyi: Rosiisko-ukrainska viina: heopolitychnyi kontekst. *Naukova stattia. Instytut istorii Ukrainy NAN Ukrainy*. Kyiv – 2022.

Ziuzia O. V., Abramov V. I.: Udoskonalena bazova model mizhderzhavnoho protyborstva z urakhuvanniam suchasnykh tendentsii rosiisko-ukrainskoi viiny. *Naukova stattia // Derzhavne upravlinnia: udoskonalennia ta rozvytok*. Kyiv – 2022. № 5.

Disinformation and Russia's war of aggression against Ukraine. Threats and governance responses. OESD policy responses, 03 November 2022.

Otsinka vplyvu viiny na liudei. Doslidzhennia IMPACT Initiatives ta Tsentru staloho myru ta demokratychnoho rozvytku, — za tekhnichnoi koordynatsii Prohramy rozvytku OON (PROON), shcho realizuietsia na prokhannia Ofisu Prezydenta ta Uriadu Ukrainy, 2023, p. 136.

Politychni naslidky viiny rosiiskoi federatsii proty Ukrainy ta shliakhy yikh podolannia. *Zbirnyk materialiv naukovo-praktychnoho seminaru*. Kyiv – 2023, p. 54.

Paradoxes of Russia's war against Ukraine: Can political science help? Scientific article. Yulia Kurnyshova, Taras Shevchenko National University, Kyiv and Andrey Makarychev, Associate Researcher, CIDOB.

Rosiisko-ukrainska viina. Ch. 1: Neholoshena viina (20 liutoho 2014 – 24 liutoho 2022) : rekomendatsiinyi pokazhchyk [Elektronne vydannia] / uklad.

EMERGING AND DISRUPTIVE TECHNOLOGIES TRANSFORM, BUT DO NOT LIFT, THE FOG OF WAR - EVIDENCE FROM RUSSIA'S WAR ON UKRAINE

Dominika Kunertova and Stephen Herzog

The presentation by Dominika Kunertova and Stephen Herzog in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://youtu.be/P8VA1bT8ADs> starting from 7:39:50.

Abstract

In this working paper, we ask how have new technologies affected the Clausewitzian fog of war? We leverage examples from Russia's ongoing full-scale invasion of Ukraine to address this research question. The evidence includes both "high-tech" systems like nuclear-capable hypersonic weapons and "low-tech" systems like cheap commercially available drones and affordable open-source intelligence (OSINT) technology. In the case of the former, we find that Russian threats and propaganda created myths surrounding weapons with unclear military applications. Regarding the latter, media and pundit claims were sensational as these systems changed combat dynamics without delivering revolutionary effects. Both cases point to pronounced gaps between expectations about performance and battlefield realities. Emerging weapon technologies have therefore failed to provide clarity about the balance of forces and conditions on the ground—two pathways to reducing the fog of war. In land warfare, history has long shown that new technologies are rarely determinative of victory or defeat. Making claims to the contrary only contributes to the fog of war and necessitates new strategies to counter the hype surrounding exaggerated expectations about weapons.

Introduction

When we read the call for proposals for the Finnish National Defence University's 2024 Russia Seminar, we were immediately struck with a question. During Russia's war on Ukraine, have new emerging technologies helped the fog of war dissipate, or have they made it thicker? Focusing on Russia and emerging and disruptive technologies (EDTs) is essential for understanding today's strategic context.¹ Russian President Vladimir Putin did, after all, indicate in 2017 his country's ambition to rule the world through leading developments in artificial intelligence (AI).² Likewise, in 2018, Putin announced "new exotic weapons" that suggest advances in military applications

¹ Stephen Herzog and Dominika Kunertova: "NATO and Emerging Technologies— The Alliance's Shifting Approach to Military Innovation," *Naval War College Review* (2024). Forthcoming.

² Russia Today, "Whoever Leads in AI Will Rule the World": Putin to Russian Children on Knowledge Day," Russia Today, September 1, 2017, <https://www.rt.com/news/401731-ai-rule-world-putin>.

of AI and the use of autonomous platforms.³ Furthermore, the Kremlin's investments in nuclear-capable hypersonic missiles were meant to provide capabilities to strike at extreme speeds and overcome existing missile defenses.⁴ Russia has indeed used several of these EDTs since the beginning of its full-scale invasion of Ukraine in February 2022. But despite Moscow's interest and investment in disruptive technologies, Russia has not won the war. It continues on, and even Kremlin battlefield successes come with mass casualties among Russian soldiers.

Ideas about new technologies that should theoretically make battlefield outcomes clearer do not just apply to the Russian side. Ukraine has spent considerable resources on whole-of-society efforts to produce small drones that have become ubiquitous in the conflict. This has triggered scores of media and analyst claims about new drone technologies and ways of warfare that revolutionize battlefields, have game-changing effects, and even fundamentally alter the nature of war.⁵ However, Kyiv is also remarkably far away from achieving anything resembling meaningful victory in the conflict.

In this working paper, we adopt the Russia Seminar's Clausewitzian framework to explore the relationship between new emerging technologies and warfare. We are therefore inspired by Clausewitz's "fog of war" concept. After sorting through a bevy of evidence on the role of EDTs in the war, we argue that overestimating the role of new technologies widens the expectation gap between their performance and battlefield realities. While there is a hypothetical world in which EDTs could provide clarity of combat outcomes, we find that this is emphatically not the case in Ukraine. Instead, such gaps between performance expectations and battlefield realities contribute considerably to the thickening of the fog of war. Exaggerated claims about the revolutionary nature of certain weapon systems only serve to exacerbate the problem.

Curiously, today's debates about new weapon technologies resemble some of the narratives from the first Gulf War (1990–1991) that implied a lifting of the fog of war. Then, the emphasis was on the advent of advanced networked technology and precision-guided weapons used by the U.S. military. These so-called "game-changing" weapons were emblematic of a revolution in military affairs (RMA) and were thought to remove friction and uncertainty—core elements of Clausewitz's conception of war. The predominant scholarly response was agreement that no new technology alone can provide a decisive advantage in war.⁶ Other voices did, however, make claims to

³ Neil MacFarquhar and David E. Sanger: "Putin's 'Invincible' Missile Is Aimed at U.S. Vulnerabilities," *New York Times*, March 1, 2018, <https://www.nytimes.com/2018/03/01/world/europe/russia-putin-speech.html>.

⁴ Justin Williamson and James J. Wirtz: "Hypersonic Or Just Hype? Assessing the Russian Hypersonic Weapons Program," *Comparative Strategy* 40, no. 5 (2021): 468–481.

⁵ Yaroslav Trofimov: "Drones Everywhere: How the Technological Revolution on Ukraine Battlefields Is Reshaping Modern Warfare," *Wall Street Journal*, September 28, 2023, <https://www.wsj.com/world/drones-everywhere-how-the-technological-revolution-on-ukraine-battlefields-is-reshaping-modern-warfare-bf5d531b>; Kristen D. Thompson: "How the Drone War in Ukraine Is Transforming Conflict," Council on Foreign Relations, January 16, 2024, <https://www.cfr.org/article/how-drone-war-ukraine-transforming-conflict>; and Max Hunder: "Insight: Inside Ukraine's Scramble for 'Game-Changer' Drone Fleet," Reuters, March 24, 2023, <https://www.reuters.com/world/europe/inside-ukraines-scramble-game-changer-drone-fleet-2023-03-24>.

⁶ See, e.g., Lawrence Freedman: *The Revolution in Strategic Affairs, Adelphi Papers*, no. 318 (Oxford: Oxford University Press for the International Institute for Strategic Studies, 1998): 70.

the contrary.⁷ This latter camp's arguments may actually contribute to the fog of war. In land warfare, the key determinants of victory are the combination of skills and training, the quantity of armaments, and the enemy's permissive defenses.⁸ Stated differently, technology alone will not allow Ukraine to make a breakthrough.⁹

Our working paper counters this strand of dangerous technological optimism that periodically returns in military history when new weapon systems gain popularity. Novel technology has rarely proven to be a solution to the uncertainties of war, and the ongoing war in Ukraine is no exception. We show this with evidence from the conflict, particularly regarding the role of four technology areas—drones, open-source intelligence (OSINT), AI, and hypersonics—in transforming the battlefields of Ukraine. In particular, EDTs have provided clarity about neither the balance of forces nor likely combat outcomes. Ultimately, we conclude with cautionary remarks on the continuing role of humans in war and lay out some of the risks entailed in the current fixations of techno-optimist thinking.

Clausewitz, War, and Technology

“War is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty. A sensitive and discriminating judgment is called for; a skilled intelligence to scent out the truth.”¹⁰

To Clausewitz, the nature of war is chaotic. War only abides by rules dictated by fog, friction, chance, and complexity. The well-known Clausewitzian metaphor of the “fog of war” describes the great amount of uncertainty experienced in military operations. Many different elements can contribute to such uncertainty. These include a lack of situational awareness on the battlefield, uncertainty about one's own capabilities, limited information about the adversary's capabilities, and minimal transparency about the enemy's intent. The resultant sorts of misunderstandings between adversaries have inspired seminal works by scholars theorizing about the causes of war and the sometimes surprising inability of states to cooperate.¹¹

The role of technology is to reduce this friction and uncertainty by enhancing a state's military power. This can occur through improved weapon systems, logistics, and intelligence. According to Clausewitz, technology is a tool for warfare, not a panacea for the many issues that arise in military campaigns. Technology is employed in Clausewitzian warfare to attack enemies physically and psychologically, as well as to

⁷ Bill Owens: *Lifting the Fog of War*, Baltimore, Johns Hopkins University Press, 2001.

⁸ Stephen Biddle: *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton NJ: Princeton University Press, 2004).

⁹ Stephen Biddle: “How Russia Stopped Ukraine's Momentum: A Deep Defense is Hard to Beat,” *Foreign Affairs*, January 29, 2024, <https://www.foreignaffairs.com/ukraine/how-russia-stopped-ukraines-momentum>.

¹⁰ Carl von Clausewitz: *On War*, ed. and trans. Michael Howard and Peter Paret, (Princeton NJ: Princeton University Press, 1976 [1832]): 101.

¹¹ Robert Jervis: “Cooperation Under the Security Dilemma,” *World Politics* 30, no. 2 (1978): 167–214; and James D. Fearon: “Rationalist Explanations for War,” *International Organization* 49, no. 3 (1995): 379–414.

exploit an adversary's vulnerability and bend the will of its people.¹² It exists within the confines of war rather than defining war.

We postulate that there are two ways that novel EDTs can reduce battlefield uncertainties and contribute to lifting the fog of war. First, in terms of military effects, new technology can improve mission effectiveness and the ability of forces to achieve their objectives. The aggregation of one state's military power with new weapons should therefore change the balance of forces, in turn improving predictions of victory or defeat. New advanced weapon systems could do this by enabling combatants to apply force with greater lethality, accuracy, speed, and/or range. Second, in terms of transparency of/on the battlefield, new technologies can enhance situational awareness. This means that technology can improve access to information both qualitatively and quantitatively. Technology not only accelerates data collection, but it also quickens its processing and dissemination. Today's battlefield commanders can base their decisions off of real-time intelligence, a situation that was rarely possible in Clausewitz's time.

We seek to understand if EDTs can help to lift the fog of war along these two dimensions. To do so, it is important to deploy "a skilled intelligence to scent out the truth" about the capabilities of new weapon technologies and the risks and benefits associated with their integration onto the battlefield. The subsequent sections of this working paper shift to assessing four technology areas frequently claimed to be revolutionizing warfare in Ukraine. They include both "high-tech" systems like nuclear-capable hypersonic weapons and "low-tech" systems like cheap commercially available drones and private sector NewSpace satellites. Furthermore, the case of military AI covers both targeting and decision-making processes. The variation in systems covered by our analysis enables us to reach some preliminary conclusions about emerging technologies and their implications for the fog of war in Ukraine.

Drones

Drones, or uncrewed aerial vehicles, are hardly a new technology. Over the past two decades, drones were primarily seen in the context of the Global War on Terror. That is, military drones were usually advanced large airborne platforms that ensured persistent surveillance and enabled states to carry out precision strikes. Medium-altitude, long endurance drones were a key component of remote warfare, allowing risk-averse political leaders to combat terrorism but avoid sending "boots on the ground."

There is a stark contrast, however, between drone war in Ukraine and drone war in past decades: In Ukraine, drones have boots.¹³ What we mean by this is that small drones in Ukraine are not taking troops away from the battlefield. Rather, they are changing the dynamics on the battlefield from lower airspace. There has been an unprecedented proliferation of small-sized drones by both sides in the war, leading to

¹² Colin S. Gray: *Weapons Don't Make War: Policy, Strategy, and Military Technology* (Lawrence, Kans.: University Press of Kansas, 1993): 7. See also: Kier A. Lieber: *War and the Engineers: The Primacy of Politics over Technology* (Ithaca, NY: Cornell University Press, 2005).

¹³ Dominika Kunertova: "Drones Have Boots: Learning from Russia's War in Ukraine," *Contemporary Security Policy* 44, no. 4 (2023): 576–591.

innovative developments in the technology and tactics of drone warfare.¹⁴ Drone scouts, bomblets, loitering munitions, and even suicide drones are present throughout the theater in Ukraine. These inexpensive commercial technologies have changed warfighting dynamics on the battlefield with improved cost-per-effect in combat and increased emphasis on verticality in land operations. Drones empower individual soldiers as far as real-time intelligence and the precision of artillery fire.¹⁵

Small drones are now serving land forces in high-intensity warfare. This includes systems assembled by technology guerillas, as well as directly repurposed hobbyist drones ordered from Amazon or AliExpress on the internet. In the past, drones were thought to be mostly useful in conflicts when one side maintains air superiority, so this marks a significant change. Soldiers have been able to deploy *tens of thousands* of user-friendly, low-cost small drones in Ukraine for spying and dropping hand grenades on targets. These drones play a role in psychological warfare operations and can have non-kinetic effects. Among such notable effects are propaganda, like recording videos of ambushes that can then be posted to social media websites.

Importantly, since the early months of its full-scale invasion, Moscow has been using drones to cause as much damage as possible to Ukraine's critical infrastructure. The so-called one-way attack/suicide/kamikaze drones behave like disposable ammunition for targeting the Ukrainian power grid, transportation network, and even shelters for the civilian population. They offer an unambiguously offensive capability that can loiter in the target zone prior to its impact. Aside from the damage they inflict, these drones are clearly weapons of fear.

Innovation on the battlefield led to the proliferation of First Person View (FPV) drones, the latest milestone among many impressive drone developments. FPV drones are essentially a commercial version of a military loitering munition produced on the cheap. These systems are thus built from off-the-shelf components and operated by a pilot on the ground who navigates the drone to crash into its target thanks to the video feed running through the operator's goggles.¹⁶ This human-guided munition can cost as little as \$400 USD, in contrast to a GPS-guided shell that may cost hundreds of thousand dollars. FPV drones are consequently thought to help close the firepower gap caused by artillery shortages because their precision and navigability can facilitate destructive effects comparable to artillery shells.¹⁷

The focus on small drones is not simply a product of crowdsourced funding. Ukraine has promised to create an "Army of Drones," with Kyiv's Minister for Digital Transformation, Mykhailo Fedorov, announcing the government's intention to build 1–2 million drones. And in February 2024, President Volodymyr Zelenskiy created the

¹⁴ Kerry Chávez and Ori Swed: "Emulating Underdogs: Tactical Drones in the Russia–Ukraine War," *Contemporary Security Policy* 44, no. 4 (2023): 592–605.

¹⁵ Dominika Kunertova: "The War in Ukraine Shows the Game-Changing Effect of Drones Depends on the Game," *Bulletin of the Atomic Scientists* 79, no. 2 (2024): 95–102.

¹⁶ Mykola Tkach, Dmytro Drynyov, Igor Kulinich, and Nataliia Mykytiuk: "Trends in the Global Arms Market, Development of the Combat Drone Market: Impact and Consequences for Ukraine," *Political Science and Security Studies Journal* 4, no. 3 (2023): 48.

¹⁷ David Hambling: "Could Small Drones Really Replace Artillery?," *Forbes*, August 23, 2023, <https://www.forbes.com/sites/davidhambling/2023/08/16/could-small-drones-really-replace-artillery>.

Unmanned Systems Force—dedicated to drone warfare.¹⁸ While Russia had previously prioritized manufacturing military-grade drones, it has almost caught up with Ukraine as far as its frequency of conducting FPV drone strikes.¹⁹

Drones have now gotten cheap, small, and commercial, easy to spread and operate, and produced on a scale akin to consumer electronics. This has led many observers to say that drones have game-changing effects. Is this technology able to help lift the Clausewitzian fog of war on the battlefield by providing better predictions of victory and defeat, and by offering improved intelligence? The answer appears to be neither when viewed holistically. In fact, sensational claims about drones pale when contrasted to the problems that accompany using these platforms in warfare. There are *at least* five reasons for this.

First, drones have no self-defenses and are vulnerable to weather and countermeasures. Drones act like consumer electronics in conditions with high-speed winds or heavy rains, and also in the cold, which can sap a drone's battery and therefore its range. These problems are particularly acute during the winter months. And even though some FPV drones have been fitted with counter-jamming devices, this add-on substantially increases the cost-per-drone and negatively affects their affordability and scalability.²⁰

Second, the success of the drone mission is highly dependent on the skills of its human operator. Among newly formed units whose commanders have been appointed due to their political connections, a hit rate of 10% to 15% is common. In expertly trained units, such as special forces or those from Ukraine's intelligence services, the hit rate can be as high as 70% or 80%. This is a massive difference.

Third, assembling and producing myriads of drone models naturally presents difficulties. These can include heterogeneous safety standards, adoption issues, interoperability hurdles, and problems encountered during repairs and the replacement of components. All of these obstacles can contribute to further scaling problems.²¹

Fourth, drones depend almost entirely on other technologies to operate successfully. Their effective navigation and communication may require access to the internet provided by small commercial satellites, interference-resistant radios, or infrared sensors for night missions. These resources may not always be available, and commercial actors may not always be willing to provide them to militaries.

And fifth, drones cannot take territory or destroy strongholds. They lack the firepower, and the staying power, of traditional boots on the ground. Stated differently,

¹⁸ Reuters, "Ukraine's Zelenskiy Orders Creation of Separate Military Force for Drones", February 6, 2024, <https://www.reuters.com/world/europe/ukraines-zelenskiy-orders-creation-separate-military-force-drones-2024-02-06>.

¹⁹ Roman Vysochansky: "Redefining the Battlefield: Drone Warfare Tactics in Ukraine," Project Ploughshares, February 27, 2024, <https://www.ploughshares.ca/publications/redefining-the-battlefield-drone-warfare-tactics-in-ukraine>.

²⁰ Stacie Pettyjohn: "Evolution Not Revolution: Drone Warfare in Russia's 2022 Invasion of Ukraine," Center for a New American Security, February 2024, <https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/CNAS-Report-Defense-Ukraine-Drones-Final.pdf>.

²¹ Seth G. Jones, Riley McCabe, and Alexander Palmer: "Ukrainian Innovation in a War of Attrition," Center for Strategic and International Studies, February 2023, https://csis-website-prod.s3.amazonaws.com/s3fs-public/2023-02/230227_Jones_Ukrainian_Innovation.pdf?VersionId=Vap.5tI65sIt0kH10bxSSgN5q1G0cDhS.

an army of drones cannot replace infantry and cavalry. Drones can, however, delay adversary offensives, destroy infrastructure, frustrate air defenses, and intimidate and demoralize the enemy's troops and civilian population. Their military effects are accordingly limited to tactical realms. Drones lower the costs of combat and thus increase the availability of means to conduct operations. But they do not deliver revolutionary effects because their advantage lasts only until cost-effective countermeasures are operationalized.

Technological adaptations on the battlefields in Ukraine are happening much faster in the case of drones than in the case of other weapon systems.²² The early headline-grabbing drones were large, sophisticated Turkish Bayraktar TB2 drones on the Ukrainian side, as well as Forpost and Orion military drones deployed by Russia. However, after some initial successes, it quickly became clear that these drones were easy prey for electronic warfare and lower-altitude air defense assets. Furthermore, the ubiquitous DJI Mavic drones turned into a “a hazardous encumbrance” due to Russia's use of the AeroScope drone detection system.²³

OSINT Technology

Open-source intelligence technologies enable gathering and analyzing information from publicly available sources. These include data/metadata from social media, the internet, and television. Most remarkably, OSINT now includes large constellations of small low earth orbit (LEO) satellites that provide commercial imagery and offer remote sensing capabilities (e.g., synthetic aperture radar, radio frequency). Few Russian military planners considered that they were invading a country with millions of personal data collection devices. Each Ukrainian citizen can use their own phone to produce reconnaissance data in the form of messages, videos, and geotagged photos.

Space has been crucial to the war for the Ukrainian side. Kyiv uses space-based assets—oftentimes of commercial origin—for communications; intelligence, surveillance, and reconnaissance; and space-based positioning, navigation, and timing. These activities are powered in large part by private sector developments that have led to massive increases in the number of satellites, quality of imagery resolution, and availability of imagery. For instance, space launches have increased by a factor of 25 over the past decade due to decreasing costs.²⁴ As the section after this details, there is also an ongoing major technological revolution in machine learning that helps analysts assess all of the available data. Manual identification of objects is no longer the necessary first step in geospatial intelligence (GEOINT) analysis.

The market for commercial satellite capabilities is rapidly expanding. Most famously, the Starlink satellites of American company SpaceX have provided high-speed internet access to Ukrainian troops. Thousands of Starlink terminals enabled military communication, including guiding drone strikes. Another company, HawkEye 360, has been providing the Ukrainians with access to its radio frequency monitoring satellites

²² Marc R. DeVore: “No End of a Lesson: Observations from the First High-Intensity Drone War,” *Defense & Security Analysis* 39, no. 2 (2023): 263–266.

²³ Radio Free Europe, “Drone Wars: Ukraine's Homegrown Response to Deadly Chinese Detection Tech,” July 14, 2022, <https://www.rferl.org/a/drone-detection-war-ukraine-china-russia/31943191.html>.

²⁴ United Nations Office for Outer Space Affairs, “Online Index of Objects Launched into Outer Space,” accessed March 3, 2024, https://www.unoosa.org/oosa/osoindex/index.aspx?f_id=.

to track Russian ground-based GPS jammers. And commercial satellite imagery from synthetic aperture radars provided by Maxar and ICEYE has been important for strategic communications and countering disinformation. Indeed, military commanders are becoming more receptive to OSINT, sometimes even preferring it to secret intelligence. This has led some media outlets to go so far as to proclaim that OSINT allows for “piercing of the fog of war.”²⁵

Dependence on commercial assets, however, can give private actors a veto over a military’s capabilities and operations. Since the start of the war, Ukraine has been dependent on commercial assets, owned mostly by American companies. While the commercial sector has become a key source of technology innovation, private sector partners can become a security liability. The nature of partnership does not allow for oversight and control by their customers: national governments and military commanders. Companies usually retain control over the use of their assets. For instance, a company’s executives can decide to restrict the availability of their product in a certain geographical area (geofencing), or opt to make its service available to the other side of a conflict as well. Recall the case of SpaceX not allowing Kyiv to use its Starlink satellites for military purposes over Crimea—especially for drone strikes.²⁶

Furthermore, commercial entities do not usually get involved in wars due to charitable rationales. Following the initial SpaceX donation of satellite internet service, it became clear that if the government of Ukraine could not afford to continue paying the bill, it could not use the service. This is why having allies is important: Some NATO countries have paid Starlink so that Ukraine could continue using its satellites to support military operations.²⁷

Space technology issues affect both sides in the war though. Russia has been reportedly having problems with connectivity and integration of space-based assets in its targeting, as well as malfunctioning satellite communication systems. It is plausible, however, that Russian troops may rely less on space for fighting on the ground than their Ukrainian foes.²⁸

In addition to the “who is paying” and “who is providing” dilemmas of commercial satellite imagery, who is processing data and making them available across the battlefield is yet another matter. Some of the imagery making its way into social media and news articles features dubious annotations or analysis, and may also be subject to deep fakes or manipulated geotagging. Yet again, these issues point to the significance of (un)skilled human GEOINT analysts. The technology itself is not changing the battlefield.

²⁵ *The Economist*, “Open-Source Intelligence Is Piercing the Fog of War in Ukraine,” January 13, 2023, <https://www.economist.com/interactive/international/2023/01/13/open-source-intelligence-is-piercing-the-fog-of-war-in-ukraine>.

²⁶ Joey Roulette: “SpaceX Curbed Ukraine’s Use of Starlink Internet for Drones -Company President,” Reuters, February 9, 2023, <https://www.reuters.com/business/aerospace-defense/spacex-curbed-ukraines-use-starlink-internet-drones-company-president-2023-02-09>.

²⁷ Micah Maidenberg and Matthew Luxmoore: “Pentagon Agrees to Pay SpaceX for Satellite Internet in Ukraine,” *Wall Street Journal*, June 1, 2023, <https://www.wsj.com/articles/pentagon-agrees-to-pay-spacex-for-satellite-internet-in-ukraine-2bdf3bf4>.

²⁸ Amanda Miller: “Boxed Into a Corner,” Russia Could Be a Counterspace Wild Card,” *Air & Space Forces Magazine*, March 24, 2022, <https://www.airandspaceforces.com/boxed-into-a-corner-russia-could-be-a-counterspace-wild-card>.

All of the above examples suggest the notion that OSINT may pierce the veil of the fog of war is generally incorrect. By contrast, we observe these technologies resulting in additional uncertainty, thickening rather than lifting the Clausewitzian fog of war in Ukraine.

Artificial Intelligence

Advances in the deployment of AI-enabled systems are present in two major ways in the Russo–Ukraine war. First, such systems are taking part in data analysis on both an operational and tactical decision-making level. Second, they are also operationalizing targeting data for strike operations.

The convergence of data availability and relatively inexpensive microchips and software have created fertile ground for a race to master AI-enabled autonomy at scale. Dramatic increases in data due to open-source personal devices, widespread high-speed internet connectivity, and commercial GEOINT only contributes to this trend. Integrating AI systems into military decision-making processes and weapon systems has led to the rise of algorithmic warfare.²⁹ This certainly appears to be thickening the fog of war in Ukraine.

The use of AI in decision-making processes has undoubtedly impacted the battle rhythm of the war. AI is most heavily used to analyze large amounts of satellite imagery and geolocate open-source data.³⁰ Kyiv has relied on various foreign tech companies in these pursuits. For instance, the Ukrainian government is using facial recognition software (Clearview) to identify invading Russian troops and Ukrainian collaborators, natural language processing software (Primer) to analyze unencrypted Russian radio transmissions, and machine learning (Scale AI) to evaluate satellite imagery of Ukraine. Cloud services and cyber protection umbrellas from Microsoft, Amazon, and Google have allowed Ukraine's government to transfer and store critical data.

The Ukrainians notably employ digital battle management software that facilitates and accelerates the integration of various data points and formats. These include photos, videos, and imagery that are used to produce intelligence reports based on pattern identification. They are using ArcGIS Delta on the operational level, and GIS ARTA on the tactical level, to create real-time battlefield maps that are crucial for tracking the war's developments. With these maps, Kyiv can monitor the movement of Russian troops and share target coordinates with its commanders on the ground. Most remarkably, Palantir's data and artificial intelligence software have helped Ukraine assemble data to provide a full battlefield picture, enabling most of its military targeting. This has turned the U.S. firm into "the AI arms dealer of the 21st century."³¹

The ambition of the Ukrainian government, especially of the Ministry for Digital Transformation, is to make the country a major player in global technological innovation markets. With many American and European tech companies opening offices

²⁹ Ingvild Bode, Hendrik Huelss, Anna Nadibaidze, Guangyu Qiao-Franco, and Tom F. A. Watts: "Algorithmic Warfare: Taking Stock of a Research Programme," *Global Society* 38, no. 1 (2024): 1–23.

³⁰ Robin Fontes and Jorrit Kamminga: "Ukraine A Living Lab for AI Warfare," *National Defense Magazine*, March 24, 2023, <https://www.nationaldefensemagazine.org/articles/2023/3/24/ukraine-a-living-lab-for-ai-warfare>.

³¹ Vera Bergengruen: "How Tech Giants Turned Ukraine Into an AI War Lab," *Time*, February 8, 2024, <https://time.com/6691662/ai-ukraine-war-palantir>.

in Kyiv, Ukraine's capital is quickly becoming a Mil-Tech Valley.³² At first glance, all of these developments might suggest that AI can help clear the fog of war on the battlefield. And some techno-optimists have adopted this line of reasoning, arguing that AI is the key to winning the war.³³ But more skeptical voices have warned against the increased power of the private tech companies that are turning the battlefield into a playground for military AI expansion.³⁴

Capabilities and services provided by foreign commercial players introduce more complexity into warfare that contributes to—rather than reduces—uncertainty. Corporations enter the battlespace with interests other than national security and the preservation of a state's sovereignty. These can include profit-driven sales incentives, efforts to perfect their product, and opportunities to improve the company's reputation. Quite apart from these Western firms, Russia is investing in AI systems and developing its own internet to avoid foreign interference and ensure its national technological sovereignty. But thanks to sanctions, the brain drain of innumerable Russian tech sector experts, and shrinking resources, major AI breakthroughs are unlikely to emanate from Moscow. This remains the case in spite of an August 2022 decision by the Kremlin to create a department within its Ministry of Defense to develop AI-enabled weapon systems.³⁵

Regarding the use of AI in weapons themselves, the available evidence points to ongoing autonomous sensor-based targeting. These functions include autonomous object recognition and terminal guidance. Drones countermeasures based on electronic warfare, which disrupt communications systems, navigation, and data links, led some drone developers to experiment with autonomy. Such capabilities were seen as a potentially effective defense against electronic jamming. Autonomous drones could reach their targets even in case of disruptions since they would be able to make decisions based on integrated onboard data collection and analysis.

Drones could complete the last phase of their attacks even while being subject to jamming because of autonomous object recognition. This object recognition already features in the American-made Switchblade 300. And terminal guidance is present in the Russian FVP drone Ovod and the Ukraine-made Scalpel drone.³⁶ Ukraine's machine learning-trained Saker Scout drones are even able to identify 64 different types

³² Bergengruen: "How Tech Giants Turned Ukraine Into an AI War Lab."

³³ See, e.g., Olga Tokariuk: "Ukraine's Secret Weapon – Artificial Intelligence," Center for European Policy Analysis, November 20, 2023, <https://cepa.org/article/ukraines-secret-weapon-artificial-intelligence>.

³⁴ Jonathan Horowitz: "One Click from Conflict: Some Legal Considerations Related to Technology Companies Providing Digital Services in Situations of Armed Conflict," *Chicago Journal of International Law* 24, no. 2 (2024): 305–337; Ingvild Bode and Tom Watts: "Loitering Munitions and Unpredictability: Autonomy in Weapon Systems and Challenges to Human Control," University of Southern Denmark, AutoNorms Project, June 7, 2023, <https://www.autonorms.eu/loitering-munitions-and-unpredictability-autonomy-in-weapon-systems-and-challenges-to-human-control>; and Comfort Ero, "Tech Companies Are Fighting for Ukraine. But Will They Help Save Lives in Other Global Conflicts?," International Crisis Group, June 9, 2023, <https://www.crisisgroup.org/europe-ukraine-tech-companies-are-fighting-ukraine-will-they-help-save-lives-other-global-conflicts>.

³⁵ Catherine Buchanic: "Russian Military to Develop Weapons Using Artificial Intelligence," *C4ISRnet*, August 17, 2022, <https://www.c4isrnet.com/artificial-intelligence/2022/08/17/russia-military-to-develop-weapons-using-artificial-intelligence>.

³⁶ *The Economist*, "How Cheap Drones Are Transforming Warfare in Ukraine," February 5, 2024, <https://www.economist.com/interactive/science-and-technology/2024/02/05/cheap-racing-drones-offer-precision-warfare-at-scale>.

of Russian targets on their own.³⁷ However, Ukrainian AI-enabled drones are not fully autonomous; they point out targets and pass the information to human-operated FPV attack drones that then carry out the strike.

While it is in vogue to suggest that autonomous weapons are, or close to, revolutionizing warfare, the reality might be more complex.³⁸ Training an AI-enabled weapon system is insufficient. These systems also require many iterations of live testing and evaluation in order to become reliable. Indeed, it seems that Russia prematurely fielded the Lancet-3 loitering munition, which promised autonomous target identification and engagement without human intervention, and had to issue a “product recall.”³⁹ Problems abound in the autonomy domain, which indicate that these AI technologies are far from changing the balance of forces.

Regardless, algorithmic warfare is the next stage of the network-centric warfare of the 1990s. AI is expected to help avoid information overload by enhancing the speed and quality of data analysis. AI-enabled data processing systems are thought to be capable of sifting through the storm of information noise from continuous real-time battlefield data. However, for Clausewitz, “accurate information is both an objective impossibility and a dangerously deceptive fantasy” because “we know more, but this makes us more, not less, uncertain.”⁴⁰ It is not difficult to imagine how easily AI algorithms can be fooled through decoys and concealment, or misled by rogue data that can lead to classification inaccuracies. Furthermore, generative AI systems can be used to spread disinformation and propaganda, such as Russia’s deep fake video of Zelenskyy purportedly calling for Ukraine’s surrender in 2022.

However, a more serious problem with AI lies in its algorithms. While the nature of war demands decisions based on abductive logic and adaptation to unexpected situations, machine learning in most AI-enabled military systems relies on inductive logic and pattern recognition. Scholars have recently argued that no amount of data and computing power can correct this limited utility of AI for command.⁴¹ Object recognition and situational awareness are fundamentally different concepts. AI-enabled conflicts will still be full of many types of environmental uncertainty and thus in need of a human take on the situation.⁴² AI is therefore a good soldier but a bad general, and it does not appear to be helping reduce the fog of war in Ukraine.

³⁷ David Hambling: “Ukraine’s AI Drones Seek and Attack Russian Forces Without Human Oversight,” *Forbes*, October 17, 2023, <https://www.forbes.com/sites/davidhambling/2023/10/17/ukraines-ai-drones-seek-and-attack-russian-forces-without-human-oversight>.

³⁸ See, e.g., Paul Sharre: “The Perilous Coming Age of AI Warfare,” *Foreign Affairs*, February 29, 2024, <https://www.foreignaffairs.com/ukraine/perilous-coming-age-ai-warfare>.

³⁹ Sydney J. Freedberg Jr.: “The Revolution That Wasn’t: How AI Drones Have Fizzled in Ukraine (So Far),” *Breaking Defense*, February 20, 2024, <https://breakingdefense.com/2024/02/the-revolution-that-wasnt-how-ai-drones-have-fizzled-in-ukraine-so-far>.

⁴⁰ Thomas Waldman: “‘Shadows of Uncertainty’: Clausewitz’s Timeless Analysis of Chance in War,” *Defence Studies* 10, no. 3 (2010): 349–350.

⁴¹ Cameron Hunter and Bleddyn E. Bowen: “We’ll Never Have a Model of An AI Major-General: Artificial Intelligence, Command Decisions, and Kitsch Visions of War,” *Journal of Strategic Studies* (2023), forthcoming, <https://doi.org/10.1080/01402390.2023.2241648>.

⁴² Avi Goldfarb and Jon R. Lindsay: “Prediction and Judgment: Why Artificial Intelligence Increases the Importance of Humans in War,” *International Security* 46, no. 3 (2021–2022): 7–50.

Hypersonic Weapons

The new generation of hypersonic weapons—gliders and missiles—combine extreme speed, maneuverability, and a low-altitude flight trajectory. This technology has not matured yet and therefore these emerging weapons are still in the making. Flying within the atmosphere at five times the speed of sound comes with a number of problems due to the laws of physics.⁴³ Additionally, hypersonic missile delivery vehicles that may one day carry nuclear warheads are not exactly a new EDT capability. Ballistic missiles, a technology first pioneered in the early 1940s, travel at hypersonic speeds.

Difficulties entailed in fielding hypersonics have not prevented their use. The Russian Ministry of Defense confidently announced the first battle use of its hypersonic Kinzhal weapon in Ukraine in March 2022.⁴⁴ However, this alleged wonder weapon turned out to be a “mere” ballistic missile—a modified version of the surface-launched Iskander-M tactical ballistic missile. It is true that being air-launched from a supersonic MiG-31 jet gives the missile a boost to reach higher speeds at an altitude that is unusual for a ballistic missile. Regardless, Russia’s terrifying missiles failed to hit high-value targets in Ukraine. A few months later, the Ukrainians intercepted seven of these “unstoppable” missiles using an old Patriot missile defense system.⁴⁵

The Russian Kinzhal is therefore a propaganda weapon. Using nuclear-capable, but conventionally-armed, hypersonic weapons may increase fears about the Kremlin’s willingness to cross the nuclear threshold.⁴⁶ But the added military value of this air-launched ballistic missile remains unclear, aside from thickening the fog of war. By designating and press releasing Kinzhal as a new class of hypersonic weapon, Moscow creates a psychological effect of intimidation. Furthermore, Russia signals to the West that it possesses and is willing to use weapons that are thought to overcome missile defenses on NATO’s eastern flank.

These exaggerated expectations do not square with the military utility of the Kinzhal. In reality, hypersonic delivery vehicles and other exotic systems hyped by Putin do very little to change the balance of forces and the dynamics of warfare. However, Russia is not a newcomer to the symbolic use of weapons for the intended purposes of deterrence and compellence. Such systems are more likely bargaining chips to trade for missile defenses and other U.S. and NATO systems feared by the Kremlin; they do not really convey any worrisome novel military capabilities.⁴⁷ They appear instead to be psychological weapons intended for signaling rather than actual use on the

⁴³ Dominika Kunertova: “Hypersonic Weapons: Fast, Furious...and Futile?,” *RUSI Newsbrief* 41, No. 8 (2021), <https://www.rusi.org/explore-our-research/publications/rusi-newsbrief/hypersonic-weapons-fast-furiousand-futile>.

⁴⁴ Paul Kirby: “Russia Claims First Use of Hypersonic Kinzhal Missile in Ukraine,” BBC, March 19, 2022, <https://www.bbc.com/news/world-europe-60806151>.

⁴⁵ Luke Harding and Dan Sabbagh: “Russia’s Most Potent Hypersonic Weapon Neutralised, Says Ukraine,” *The Guardian*, May 16, 2023, <https://www.theguardian.com/world/2023/may/16/ukraine-russia-targets-kyiv-with-massive-overnight-airstrike>.

⁴⁶ Rebecca Davis Gibbons and Stephen Herzog: “Nuclear Disarmament and Russia’s War on Ukraine: The Ascendance and Uncertain Future of the Treaty on the Prohibition of Nuclear Weapons,” in Rebecca Davis Gibbons, Stephen Herzog, Wilfred Wan, and Doreen Horschig: *The Altered Nuclear Order in the Wake of the Russia–Ukraine War* (Cambridge, Mass.: American Academy of Arts and Sciences, 2023), 1–36.

⁴⁷ Alexander K. Bollfrass and Stephen Herzog: “The War in Ukraine and Global Nuclear Order,” *Survival* 64, no. 4 (2022): 7–32.

battlefield. Media perceptions of new and seemingly sophisticated Russian weapon systems certainly need some debunking. The Russian propaganda machine may find an audience of journalists—eager for reads and clicks—who are ready to repeat the overblown narrative of such weapons as revolutionary and unstoppable. But a closer look reveals only unremarkable additional strike options at best, and unsafe weapons at worst.

Net Assessment

In this working paper, we discussed two possible paths by which EDTs can reduce uncertainty and therefore lift the fog of war. On the one hand, there are theoretical ways that new weapon technologies could increase the likelihood of military successes and increase transparency on the battlefield. On the other hand, we drew on evidence from Russia's war in Ukraine to show how new technologies can thicken the fog of war by increasing uncertainty. They may do so by introducing more complexity (commercial assets and private actors) and more ambiguity (unclear capabilities of new systems). We have identified four ways in which the integration of new EDTs warfare transform, but do not lift, the fog of war.

1. New technology creates new vulnerabilities the opponent can exploit⁴⁸

Thousands of small drones flying over the battlefield create deconfliction problems for militaries. The digital battlefield can mean not only increased military efficacy thanks to connectivity and real-time information streams, but it also produces an undesirable digital footprint that facilitates enemy targeting. Mobile phones are the new cigarette of the trenches.⁴⁹

In contrast to the previous decades dominated by the traditional military–industrial complex, new commercial entities are becoming more prominent.⁵⁰ Private actors now drive the bulk of investment into satellite surveillance, drone development, AI, software, and advanced manufacturing, leading to a rapid decrease in the cost of precision guidance technologies.⁵¹ However, the entry of commercial actors (especially foreign ones) into an ongoing war creates access issues regarding privately owned infrastructure and control over the provision of services. Another related issue is interoperability and military standards of dual-use drone technology. Furthermore, the quality of AI analytics on the battlefield is contingent upon the availability of big data that come from open sources. There is thus a need for a better framework for public–private open-source technological innovation in terms of data collection, integration, analysis, and operational targeting.⁵²

⁴⁸ See, e.g., Colin S. Gray: *War, Peace, and Victory: Strategy and Statecraft for the Next Century* (New York: Simon & Schuster, 1990).

⁴⁹ Alex Horton: “Two Years of War in Ukraine: What the Pentagon Has Learned,” *Washington Post*, February 22, 2024, <https://www.washingtonpost.com/national-security/2024/02/22/ukraine-war-pentagon-lessons-learned/>.

⁵⁰ Herzog and Kunertova: “NATO and Emerging Technologies.”

⁵¹ T. X. Hammes: “Game-Changers: Implications of the Russo–Ukraine War for the Future of Ground Warfare,” Atlantic Council, *Issue Brief*, April 2023, <https://www.atlanticcouncil.org/wp-content/uploads/2023/04/Game-Changers-or-Little-Change-Lessons-for-Land-War-in-Ukraine-.pdf>.

⁵² Audrey Kurth Cronin: “Open Source Technology and Public-Private Innovation Are the Key to Ukraine's Strategic Resilience,” August 23, 2023, <https://warontherocks.com/2023/08/open-source-technology-and-public-private-innovation-are-the-key-to-ukraines-strategic-resilience/>.

2. Surprise effects of novel weapon systems will eventually be negated by countermeasures⁵³

Small drones on the battlefield in Ukraine have transformed warfare not in terms of effects like winning wars or contributing to the success of a counteroffensive, but in terms of means. Drones have decreased the cost of precision-guided munitions and alleviated strains on production capacities given their relatively inexpensive costs. This has led to a situation wherein the defending side fires multi-million-dollar missiles to neutralize attacking drones that cost only a few hundred dollars. Protecting one's troops, population, and critical infrastructure may depend on it.

Yet, this measure–countermeasure adaptation cycle is not some sort of techno-miracle. Greater investments in electronic warfare have become a key part of counter-drone systems. Indeed, Russian forces have learned to integrate electronic warfare, missile systems, and connected sensors to frustrate and repel Ukraine's drone offensives. Further developments in directed energy weapons may rebalance asymmetry in conflict by decreasing the cost of countering such low-cost drone threats.⁵⁴ And while the proliferation of surveillance drones—and livestreaming of battlefields—has introduced unprecedented transparency, it has already led to adaptive measures in the form of the tactics of deception and dispersal. Clausewitz's fog of war has changed in the new era of EDTs, but it remains intact.

3. Humans still matter

Most new emerging technology requires people with new skills and roles. The expectation that robotic and autonomous systems would compensate for decreased troop numbers has proven to be false in Ukraine. Technology may remove people from performing dangerous, dull, or dirty tasks, but the operators, technicians, data analysts, communications specialists, software engineers, and force protection units remain present on, or nearby, the battlefield.⁵⁵

Drones are not organic extensions of human combatants. They may represent a capability gain, but they may also come with an attendant loss in force structure efficiency. Armed with grenades or as one-way attack munitions, drones have proven their tactical utility in high-intensity warfare. However, echoing the previous point, it is the relentless human-driven adaptability to an opponent's countermeasures that helps militaries to prevail. In the end, training, military organizational adaptation, and learning are proving crucial in effective adoption of new weapon technologies. It is also instructive to remember that in Ukraine, drones are aiding soldiers and contributing to land warfare, not replacing boots on the ground in a manner analogous to past counterterrorism operations.

⁵³ See, e.g., Brendan Rittenhouse Green and Austin Long: "Conceal or Reveal? Managing Clandestine Military Capabilities in Peacetime Competition," *International Security* 44, no. 3 (2019): 48–83; and David M. Allison, Stephen Herzog, Brendan Rittenhouse Green, and Austin Long: "Correspondence: Clandestine Capabilities and Technological Diffusion Risks," *International Security* 45, no. 2 (2020): 194–198.

⁵⁴ Stuart Dee and James Black: "Directed Energy Dilemmas: Industrial Implications of a Military-Technological Revolution," RAND Corporation, *TheRANDBlog*, February 20, 2024, <https://www.rand.org/pubs/commentary/2024/02/directed-energy-dilemmas-industrial-implications-of.html>.

⁵⁵ Jack Watling: "Automation Does Not Lead To Leaner Land Forces," *War On The Rocks*, February 7, 2024, <https://warontherocks.com/2024/02/automation-does-not-lead-to-leaner-land-forces/>.

4. New technologies and emerging weapon systems add complexity to decision-making

EDTs create numerous opportunities for actors to try and manipulate adversary perceptions of their weapons. The reputation of the system becomes a weapon in itself that is designed to intimidate the opponent. Clausewitz's maxim requiring "skilled intelligence to scent out the truth" therefore seems ever more relevant for developing a strategy to counter the threat from weapons that have not matured, alongside hyperbolic narratives regarding their capabilities. Sensational statements about new weapon technologies can obscure the actual problem. For instance, claims about drones revolutionizing the battlefield detract attention from the shortage of artillery shells at the front. This distractive hyping and the use of drones by both sides in the Russo–Ukraine war means that little is being done to decrease the uncertainty of the fog of war.

A better understanding of the comparative advantages of existing and new weapon technologies depends on accurate and verifiable scientific assessments. Similarly, it is imperative for analysts to pay attention to the human ability to convert technology into political effects. Drones do not perform best alone; they do so in tandem with artillery. When combined with digitized battle command-and-control and civil–military sensor networks, drones are indeed part of forces transforming the battlefield.⁵⁶

Conclusion

New emerging weapon technologies on both the high and low ends of the innovation spectrum have not lifted the fog of war in Ukraine. This working paper further points to two current techno-optimist fallacies that are present in the discussion of Russia's war of aggression against Ukraine.

First, technological superiority feeds overconfidence. Developing exotic weapon systems could have given Kremlin leadership a false sense of superiority in the days ahead of the invasion, and then Russian troops seriously underperformed on the battlefield.⁵⁷ This is also why Western expectations about Russia's new EDT-driven weapons have simply not corresponded with the realities on the battlefield.

Second, fixating on new weapons can divert attention away from other critically important factors that may contribute to conflict outcomes. These include: human factors such as courage and determination, and fighting for one's homeland; and domestic and international political factors like security alliances, strategic culture, and public opinion.⁵⁸

However, overestimating the impact of new technologies contributes to an outsized influence of a certain category of humans: tech companies. While these firms' know-how and investments into battlefield-relevant innovation have been remarkable—turning Ukraine into the world's technology research and development lab—apps and

⁵⁶ Clint Hinote and Mick Ryan: "Empowering the Edge: Uncrewed Systems and the Transformation of U.S. Warfighting Capacity," Special Competitive Studies Project, February 2024, <https://www.scsp.ai/wp-content/uploads/2024/02/SCSP-Drone-Paper-Hinote-Ryan.pdf>.

⁵⁷ Marina Favaro and Heather Williams: "False Sense of Supremacy: Emerging Technologies, the War in Ukraine, and the Risk of Nuclear Escalation," *Journal for Peace and Nuclear Disarmament* 6, no. 1 (2023): 28–46.

⁵⁸ Waldman, "Shadows of Uncertainty," 336–368.

repurposed hobbyist drones simply cannot not help Ukraine retake its territory or repulse the Russian occupiers. In the words of one U.S. defense official, “We’re not fighting in Ukraine with Silicon Valley right now, even though they’re going to try to take credit for it.”⁵⁹

Commercially-driven military technology innovation is moving toward algorithmic warfare on a digital battlefield. The proliferation of semi-autonomous drones, with goggled human operators in decline, and AI software fusing and analyzing data that flows across platforms and domains, both contribute to a gamified version of war. But these moves overshadow the role of humans and human qualities that influence decision-making, like intuition, judgment, and morale. So far, AI-enabled military systems have object recognition, not situational awareness. Just because AI can beat humans in playing chess or Go, with clearly defined rules and a stable environment, does not mean that AI algorithms will fundamentally redefine all the parameters of warfare.

At this point in history, the war in Ukraine shows us that it is not new technology that will lift the fog of war. Rather, if technology is to play a role in this endeavor, it will be due to the supreme skills of humans operating EDT-driven military systems. For Clausewitz, war is a human affair, one that is too important to be left to the machines. We find that said machines are actually helping to thicken the fog of war by producing further uncertainty about the balance of forces and conditions on the battlefield.

⁵⁹ Vera Bergengruen, “How Tech Giants Turned Ukraine Into an AI War Lab.”

RUSSIA'S DRONE WARFARE IN UKRAINE

Leonid Nersisyan and Samuel Bendett

The presentation by Leonid Nersisyan and Samuel Bendett in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://youtu.be/P8VA1bT8ADs> starting from 8:06:55.

Introduction

The utilization of unmanned aerial vehicles (UAVs) in the Russo-Ukrainian war has emerged as a defining characteristic of the ongoing war. The contemporary battlefield is inseparable from the continuous aerial observation facilitated by UAVs, which actively contribute to intelligence, surveillance, reconnaissance (ISR), artillery spotting, and engagement in combat or "kamikaze" missions. In this conflict, both opposing forces leverage knowledge derived from their own experiences and observations of previous conflicts, recognizing UAVs' pivotal role. The conflict landscape is significantly influenced by the extensive use of UAVs, with both Russia and Ukraine demonstrating a commitment to industrial production across various drone types. These numerous UAV modifications fulfill a spectrum of roles and responsibilities, underlining the integral role these unmanned aerial vehicles play in shaping the dynamics of the war. Russia started the war with fewer drone technologies available, but it shows an ongoing adaptation, closing the existing gaps. Researching the Russian UAV operations in Ukraine will help to understand the country's capacity to conduct modern warfare. It will highlight how the Russian Armed Forces can adapt during a protracted war.

The narrative highlights the extensive reliance of both Russian and Ukrainian military forces on UAVs, illustrating the transition from exclusively military-grade UAV technology to an unprecedented integration of cost-effective, abundant, and more expendable commercial and do-it-yourself (DIY) drones operating in large quantities. Throughout the frontlines, the efficacy and resilience of forces, systems, weapons, and logistical operations are intricately tied to the adept use of unmanned aerial vehicles.

The conflict witnessed a significant shift from costly standalone UAV platforms to more economical and numerous drones, emphasizing attritability and mass deployment. Commercial quadcopter-type UAVs play a crucial tactical role for both parties, employed in spotting targets for short-range tactical strikes, ground-based assaults, and artillery barrages. The effectiveness and survival of troops and vehicles depend on the adept use of small UAVs over enemy positions. Russia's implementation of Shahed loitering munitions intensifies pressure on the Ukrainian military, compelling constant expenditure of ammunition and resources by air defense in response to successive waves of these UAVs, resulting in a substantial detrimental impact. In some cases, Russia adapted to what Ukrainian troops used against them, in others, like with Lancet loitering munitions, Russians were able to introduce their capacity to the warfare.

Implication of military-class drones

Intelligence, Surveillance, and Reconnaissance UAVs

In the ongoing conflict in Ukraine, Intelligence, Surveillance, and Reconnaissance (ISR) drones have become indispensable for both Russian and Ukrainian forces, transforming how military operations are conducted. These UAVs are pivotal for a range of missions, including coordinating artillery fire, providing targeting guidance for other UAVs, and continuously monitoring the battlefield. Their integration into combat operations highlights a modern warfare dynamic where major operations are almost unthinkable without the real-time data these drones provide.

The Russian military heavily relies on its pre-war ISR drone arsenal, which includes models like Orlan-10, Orlan-30, Eleron-3, Takhion, Granat, Zastava, and ZALA variants¹. Previously deployed in Syria to support ground-based artillery and MLRS strikes against less sophisticated forces, this fleet was initially absent in the early stages of the Ukraine invasion². However, as the conflict intensified, the use of ISR drones such as the Orlan-10 and Eleron-3, which are abundant in the Russian forces, increased. These drones have been crucial in Russia's reconnaissance and strike operations, providing target identification, tracking, and artillery adjustments³. In the latter half of 2022, the deployment of the more advanced, longer-range Orlan-30 began⁴, enhancing Russian capabilities to target long-range artillery systems like the U.S.-provided M777, a critical target for Russia.

Despite the initial robustness of its drone fleet, Russia has faced significant losses due to Ukrainian countermeasures. It is estimated that a large portion of Russia's pre-war drone fleet of over 2,000 units has been utilized in Ukraine, with many being lost in combat. This attrition, along with the massive scale of the conflict and the hundreds of thousands of troops involved, has revealed a shortage of military-grade ISR drones capable of providing essential short-range tactical coverage up to 10 kilometers.

To bridge this capability gap, Russian and Ukrainian forces have increasingly turned to commercial quadcopters and DIY drones⁵. These are supported by unprecedented volunteer efforts that procure, build, and deliver these drones in large volumes. This shift not only addresses the immediate tactical needs but also represents a technological race between the societies of Ukraine and Russia to supply critical technologies and components directly to the warfighters. The high rate of UAV attrition underscores the ongoing demand for a continuous supply pipeline that merges military and civilian technological efforts, emphasizing the evolving nature of modern warfare, where innovation and adaptability play crucial roles.

¹ Jeffrey Edmonds and Samuel Bendett: "Russia's Use of Uncrewed Systems in Ukraine," *CNA*, March 3, 2023, <https://www.cna.org/reports/2023/05/russias-use-of-drones-in-ukraine>.

² Ibid.

³ Jack Watling and Nick Reynolds: Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine, <https://static.rusi.org/403-SR-Russian-Tactics-web-final.pdf>.

⁴ "ВСУ Захватили Самый Современный Дрон РФ 'Орлан-30': В Чем Его Особенности [UAF Seized the Most Modern RF Drone 'Orlan-30': What Are Its Features]," *ФОКВС*, August 6, 2022, <https://focus.ua/digital/524625-vsuh-zahvatili-samyi-sovremennyy-dron-rf-orlan-30-v-chem-ego-osobennosti>

⁵ "DIY" refers to "do-it-yourself" technologies that can be readily assembled from commercial components. In this case, it refers to FPV drones.

Medium-Altitude Long-Endurance UAVs

The ongoing conflict between Russia and Ukraine has seen an initial use of Medium-Altitude Long-Endurance (MALE) Unmanned Aerial Vehicles (UAVs), demonstrating their strategic implications in modern warfare. These drones have played crucial roles, but their effectiveness and survivability have been tested under the rigors of sophisticated air defense systems.

In the initial phases of the conflict, Ukraine employed MALE UAVs, notably the Bayraktar TB-2 drones⁶, primarily for offensive operations. These drones were initially effective; however, their susceptibility became apparent as Russia enhanced its air defense capabilities within its controlled territories, leading to a higher rate of these UAVs being shot down⁷.

On the Russian side, the deployment included three types of MALE UAVs: the domestically produced Orion⁸ and Forpost-R⁹ and the Iranian-supplied Mohajer-6¹⁰. The Orion drones were sparingly used for targeted strikes with KAB-20 laser-guided bombs during the early stages of the conflict. Still, they were soon relegated to fewer appearances after losing several units. This suggests a limitation in production capabilities and an acknowledgment of their vulnerability to Ukrainian defenses.

The Forpost-R, an indigenous version of an Israeli design acquired over a decade ago, has also seen limited action. Few instances of its combat use have been released, indicating its limited impact on the battlefield due to small operational numbers. Russian state media's silence on the production and deployment of the Orion and Forpost-R might reflect underlying challenges in sustaining manufacturing for these sophisticated UAVs. Insights from Russian analysts suggest that these drones might now be primarily supporting intelligence, surveillance, and reconnaissance (ISR) roles rather than direct combat¹¹.

The Iranian Mohajer-6 has been largely absent from public disclosures, with the only notable mention being Ukraine's recovery after being downed¹². The limited information underscores the general secrecy and possibly the ineffectiveness or limited use of this UAV in combat.

⁶ Baykar Technology | Bayraktar TB2, accessed August 13, 2023, <https://baykartech.com/en/uav/bayraktar-tb2/>.

⁷ Oliver Parken and Joseph Trevithick: "Ukrainian Fighter Pilots Call B.S. on Need for Gray Eagle Drones," *The Drive*, accessed June 15, 2023, <https://www.thedrive.com/the-war-zone/ukrainian-fighter-pilots-call-bullshit-on-need-for-mq-1c-gray-eagle-drones>.

⁸ John Pike: "Orion UAV / Inokhodets, 'Ambler,'" *Orion UAV*, accessed August 13, 2023, <https://www.globalsecurity.org/military/world/russia/orion.htm>.

⁹ "Reconnaissance Drone," *Military Today*, accessed August 13, 2023, <http://www.military-today.com/aircraft/forpost.htm>.

¹⁰ Emma Helfrich: "Iranian Mohajer-6 Drones Used By Russia Loaded With Western Parts," *The Drive*, accessed August 13, 2023, <https://www.thedrive.com/the-war-zone/iranian-mohajer-6-drones-used-by-russia-loaded-with-western-parts>.

¹¹ Сергей Птичкин: "Российские Беспилотники-Наблюдатели и Дроны-Камикадзе Показывают Успешную Работу в Тандеме в ходе Спецоперации," [Russian Surveillance Drones and Kamikaze Drones Demonstrate Successful Collaboration During Special Operation], *Российская газета*, accessed June 1, 2023, <https://rg.ru/2022/08/09/odni-nabliudaiut-drugie-atakuiut.html>.

¹² "Оперативний ЗСУ" [Operational ZSU], Telegram, accessed July 8, 2023, <https://t.me/operativnoZSU/45825>.

All drones mentioned, including the Bayraktar TB2, share similar vulnerabilities. They are easily detectable due to their large radar cross-sections, slow speed, and predictable flight paths. These characteristics make them prime targets for well-equipped air defenses. This vulnerability is only mitigated in scenarios where the enemy lacks effective air defense capabilities or after successful operations to suppress and destroy enemy air defenses (SEAD/DEAD), allowing drones to operate with less risk.

Despite their vulnerabilities, the trend toward utilizing such UAVs continues. Ukraine is advancing its drone development programs, focusing on heavier and possibly more robust UAV designs. Meanwhile, Russia emphasizes automation and unmanned systems in its future military procurement and development strategies, reflecting a continued commitment to integrating MALE UAVs into its armed forces¹³.

The global perspective on MALE UAVs is also evolving, influenced by their performance in the Ukraine conflict and other regional conflicts. Countries like Turkey, China, and Iran are actively developing and deploying large combat UAVs, suggesting a significant role for these systems in future international security dynamics. At the same time, the ongoing Western operations against Yemen-based Houthi movement underscore the vulnerability of even sophisticated MALE drones like the US-made MQ-9 Reaper, with several shot down by the Houthis' evolving air defense capabilities.¹⁴

In summary, while MALE UAVs have shown limitations in high-threat environments, their development and use will likely continue, shaped by technological advancements and strategic assessments of their roles in modern and future conflicts.

Implication of loitering munitions - Light Loitering Munitions

The Russian military has significantly incorporated the use of loitering munitions into its strategy, learning from their effectiveness in the Syrian conflict and the 2020 Nagorno-Karabakh War. These munitions have proven to be a critical asset in modern warfare, prompting the development and deployment of domestic models like the KUB and Lancet drones¹⁵.

The KUB, operational since February 2021, follows coordinates pre-set by its operator to reach its target, while the Lancet variants utilize a more sophisticated approach. These drones are guided by reconnaissance UAVs that pinpoint targets, with operators able to adjust their flight path in real time. The growing reliance on these drones, especially against Western-provided long-range artillery platforms, underscores their strategic importance to Russian military operations¹⁶.

During the second year of the war and onward, there was a marked increase in the deployment of the Lancet-3 variant, likely due to enhanced production capabilities.

¹³ "В 'Rosoboronэкспорте' Рассказали о Трендах Развития Мирового Рынка Вооружений [In 'Rosoboronexport' They Talked About Trends in the Development of the Global Arms Market]," *TACC*, accessed June 1, 2023, <https://tass.ru/armiya-i-opk/17810273>.

¹⁴ John Gambrell: "Yemen's Houthi rebels claim shooting down another US MQ-9 Reaper drone as footage shows wreckage," *APNews.com*, May 17, 2024, <https://apnews.com/article/yemen-houthi-us-drone-israel-hamas-war-b440499cd3e96851088a5dd765864f5b>.

¹⁵ KUB and Lancet are loitering munitions made by the Kalashnikov Enterprise (part of Rostec). They have a range of 40-50 km.

¹⁶ Jeffrey Edmonds and Samuel Bendett: "Russia's Use of Uncrewed Systems in Ukraine," *CNA*, March 3, 2023, <https://www.cna.org/reports/2023/05/russias-use-of-drones-in-ukraine>.

Data from the Russian Lostarmour website¹⁷ reveals that out of 1566 recorded uses of the Lancet-3, approximately 70% of the targets were either missed, damaged, or had an unknown outcome, while the remaining 30% were successfully destroyed. Initially, the Lancet targeted tanks and heavy armored vehicles but shifted focus to more effectively engage artillery and air defense systems, given its lower efficacy against heavily armored targets.

By 2024, the Lancet-3 has emerged as a preferred short-range loitering munition. With a range of up to 60km, it poses a significant threat to Ukrainian artillery and MLRS systems. A Ukrainian military report highlights the Lancet's advanced guidance systems, small size, quiet operation, and composite materials that make it difficult to detect by radar. However, the drone's slower speed (up to 100 km/h) and small warhead (up to five kilograms) limit its effectiveness against well-protected targets¹⁸.

The widespread deployment of these kamikaze drones has posed substantial challenges for Ukrainian forces. Lancet attacks, typically lasting 30-40 minutes, provide crucial support for Russian ground units at the tactical level. Yet, their use is reportedly confined to Russian Special Forces and mobile reconnaissance groups, which may restrict broader infantry utilization. Lancets are considered particularly dangerous and effective from 23:00 to 06:00 when visual identification and assessing the number of units in the air are most challenging¹⁹.

Ukrainian reports also indicate that Lancets are often deployed in conjunction with Orlan-10 and Orlan-30 reconnaissance UAVs and the Iranian-supplied Mohajer-6, enhancing their targeting capabilities. Russian media adds that ZALA drones are also part of this integrated approach, highlighting a coordinated use of multiple UAV types to maximize operational impact. The strategic deployment of these drones reflects a significant evolution in Russian military tactics, emphasizing the critical role of loitering munitions in contemporary conflicts.

Implication of loitering munitions - Heavy Loitering Munitions

The Iranian-made Shahed²⁰ loitering munitions have become a pivotal component in the Russian military's arsenal, bridging a critical capability gap between numerous short-range ISR drones and the absence of long-range combat drones. With operational ranges extending to at least 1000 km and costs ranging from \$20,000-\$50,000 each, the mass acquisition of these UAVs from Iran has enabled Russia to conduct nearly continuous strikes on Ukrainian civilian infrastructure and some military targets.

The Shahed-136 and -131 models, rebranded as Geran-2 and Geran-1 in Russian service, incorporate numerous commercial components that simplify their manufacture—an approach that has been crucial for Iran in circumventing decades-long US-led sanctions. Moscow and Tehran market these drones as domestically produced to obscure the direct military dealings between the two nations.

¹⁷ "Use of Lancet loitering munition in SVO zone," accessed May 8, 2024, <https://lostarmour.info/tags/lancet>.

¹⁸ "Colonelcassad." Telegram. accessed June 1, 2023, https://t.me/boris_rozhin/82583.

¹⁹ Ibid.

²⁰ "Loitering munition / Kamikaze-Suicide drone - Iran", July 15, 2023, https://www.armyrecognition.com/iran_unmanned_ground_aerial_vehicles_systems/shahed-136_loitering_munition_kamikaze-suicide_drone_iran_data.html.

Utilizing both Global Navigation Satellite Systems and Inertial Navigation Systems, the Shahed drones are primarily deployed against stationary targets. Despite their high attrition rates—up to 90%—they remain a preferred tool by Moscow to exert pressure on Ukrainian society and government. Modifications in the Geran variants include the integration of Russia's GLONASS for enhanced navigation, allowing the drones to loiter and select optimal attack patterns and configurations. Additionally, their warheads have been reconfigured for increased damage, reflecting an evolution from their initial design²¹.

All these drones operate under the Geran designation, indicating Russia's capability to assemble them in significant quantities from Iranian-supplied kits. The exact number of these drones in Russian service is unclear, but reports indicate that Russia can launch massive volleys of up to 50 drones simultaneously, with little concern for losses to Ukrainian air defenses.

The effectiveness of Shahed/Geran drones against military targets remains limited; however, their deployment compels Ukrainian defenders to dedicate substantial resources to detect and intercept these threats. This strategic use imposes considerable costs on Ukraine, forcing difficult decisions between protecting civilian infrastructure and military assets. Notably, tactics involving multiple Shahid drones attacking at night from various directions or loitering for extended periods in Ukrainian airspace are increasingly concerning for Ukrainian defense strategies. These tactics aim to exhaust Ukrainian ammunition supplies and potentially reveal their defensive positions for follow-up attacks.

As the conflict persists, Russia is anticipated to continue relying on Shahed/Geran drones as an economical alternative to traditional missiles. The ongoing collaboration between Moscow and Tehran, including plans to establish a production facility capable of manufacturing thousands of these UAVs, underscores the strategic importance of these drones. With their cost-effectiveness and extensive range capable of covering most of Ukraine, Shahid loitering munitions represent a significant aspect of Russian military strategy, potentially increasing in deployment as production scales up.

The Implication of Civilian Drones

ISR and Combat

The ongoing conflict in Ukraine has seen an unprecedented integration of civilian drones, particularly Chinese-made DJI and Autel variants, into military operations by all belligerents. These commercial quadcopters have become a new symbol of modern warfare, playing pivotal roles in intelligence, surveillance, reconnaissance (ISR), targeting, and direct combat missions²².

²¹ Paul Iddon: "Tailor-Made Shaheds: Iranian Drones Are Being Modified To Russian Specifications," *Forbes*, February 12, 2023, <https://www.forbes.com/sites/pauliddon/2023/02/12/tailor-made-shaheds-iranian-drones-are-being-modified-to-russian-specifications/?sh=65aafc4c4e91>.

²² Stewart Bell and Jeff Semple: "Exclusive: How a 15-Year-Old Ukrainian Drone Pilot Helped Destroy a Russian Army Column - National," *Global News*, June 7, 2022, <https://globalnews.ca/news/8893672/15-year-old-ukrainian-drone-pilot-russian-column>.

Ukraine was the first to begin using these drones from the onset of the Russian invasion. Commercial drones typically operate solo or in pairs up to 10 km from the front-line, with one UAV providing ISR data to another that executes munition drops. Both Russian and Ukrainian forces have also employed these drones in groups for tactical advantage. For instance, one drone may illuminate adversary defenses, provoke a response, and reveal enemy positions, which are then targeted by other drones carrying light bombs and grenades.

Soldiers on both sides have become adept at operating these drones in various combat situations, including buildings, trenches, and even moving vehicles, enhancing their situational awareness and operational capabilities²³. The use of these drones extends to night operations and complex assault scenarios, where they provide critical support to ground troops.

As the war has progressed into 2023, the initial lack of tactical drones has led Russian forces to rely heavily on commercial drones supplied by volunteer efforts. While essential for maintaining tactical-level situational awareness, these drones face a high attrition rate due to sophisticated air and electronic warfare defenses employed by both sides. This has sparked calls from Russian commentators and volunteers for a massive increase in domestic quadcopter production to equip military units down to the squad and platoon levels.

Major Russian defense industry players like Rostec and Almaz-Antey are now attempting to ramp up the production of military and civilian-type quadcopters. However, the success of these efforts remains uncertain due to a continued reliance on Chinese-made components and challenges in scaling domestic production.

Despite DJI's official policy against selling drones in Russia and Ukraine, DJI UAVs remain highly sought after by Russian and Ukrainian soldiers for their ease of maintenance and operation. Larger DJI models, like the Matrice, have been adapted to act as "bombers," capable of carrying and dropping heavier munitions due to their more powerful multicopter designs.

Both sides continually refine their drone tactics, developing manuals for their maintenance and operation and adjusting acquisition and repair strategies to counteract vulnerabilities, particularly in electronic warfare. Innovations include using inexpensive drones to scout for electronic warfare assets before deploying more valuable units²⁴. Other tactics involve using drones for aerial ramming²⁵, delivering tear gas²⁶, or conducting nighttime bombing to disrupt enemy forces.

Despite the extensive use of drones, determining their overall effectiveness remains challenging. There is a lack of data on failed missions, as both sides predominantly share footage of successful operations. According to a report by the UK-based Royal United Services Institute (RUSI), Ukraine could be losing up to 10,000 UAVs per

²³ Andrey Kots: "Они Изменили Представления о Войне' Кого Готовят в Донбассе," [They changed the perception of the war], *РИА Новости*, December 9, 2022, <https://ria.ru/20221209/drony-1837208016.html>.

²⁴ "Два майора" [Two Majors], Telegram, January 7, 2023, https://t.me/dva_majors/7536.

²⁵ "Game of Drones," Telegram, February 20, 2023. <https://t.me/droneswar/5958>.

²⁶ "Беспилотники (дроны, БПЛА, UAV) [Unmanned Aircraft (Drones, UAVs)], Telegram, February 17, 2023. https://t.me/uav_tech/12311.

month to Russian electronic warfare and air defense measures²⁷. This figure suggests that, despite their operational significance, civilian drones in strike missions may not be cost-effective under current conditions.

First-person view (FPV) drones

By 2024, first-person view (FPV) drones, typically small and fast, have become central in modern warfare for rapid tactical strikes against stationary and moving targets. Dubbed "kamikaze" drones, these are often assembled by soldiers and volunteers, carrying payloads like RPGs or mortar rounds and flying at speeds up to 100 km/h. These DIY drones are a cost-effective and expendable resource, ranging from \$500 to \$2000 to assemble, and have started to replace the slower, more costly DJI-type quadcopters for both combat and intelligence, surveillance, and reconnaissance (ISR) duties.

While FPV drones offer affordability and speed, they require skilled pilots compared to DJI drones, which can be learned in a few days. Mastery of FPV drones takes at least three weeks due to their speed and less susceptibility to electronic warfare and other countermeasures²⁸. The Ukrainian military was the first to exploit FPV drones effectively, using them to target Russian tanks and armored vehicles, which prompted the Russian forces to adopt similar tactics. By 2024, large numbers of FPV drones will be used by the Russian military²⁹. However, many commentators believe Ukraine still holds an edge due to its early and organized mobilization of resources for drone procurement and manufacture.

The efforts to supply and assemble these drones are primarily volunteer-driven. In Russia, these efforts are fragmented, leading to inconsistencies in drone availability among units. In contrast, Ukraine has managed a more centralized approach under the United24 drone acquisition initiative.

Both FPV and DJI-type drones have become an organic tactical capability, used ad-hoc by ground forces before the recent development of concepts for integrating drones into combined arms operations. Soldiers describe the FPV drone as capable of launching a grenade through a window from two kilometers away at high speed, fundamentally changing ground combat dynamics. Their low cost, ubiquity, and ease of use make them an ideal tactical system, likely influencing the future development of military-grade FPV loitering munitions designed to overcome the vulnerabilities of civilian models, such as susceptibility to electronic warfare and requiring less pilot expertise³⁰.

Attention has also been drawn to the role of Russian volunteer organizations in supplying drones and equipment. Differentiation between small-scale volunteer work and more significant initiatives is necessary, often with government ties. For example,

²⁷ Jack Watling and Nick Reynolds: Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine, <https://static.rusi.org/403-SR-Russian-Tactics-web-final.pdf>.

²⁸ Yan Bratskiy: "FPV Drone Operators Share Insights on Training in Air Defense Zone," *Zvezda*, May 2, 2023, <https://tvzvezda.ru/news/20235251-agXB4.html>.

²⁹ "Беспилотники (дроны, БПЛА, UAV) [Unmanned Aircraft (Drones, UAVs)], Telegram, February 17, 2023. https://t.me/uav_tech/12311.

³⁰ Yevgeniy Vagin: "В России впервые показали портативный складной дрон "Боец 75" [For the First Time in Russia, Portable Folding Drone 'Boets 75' Presented,] *TASS*, May 18, 2023, <https://tass.ru/armiya-i-opk/17778375>.

well-financed groups have systematically upgraded drones, including software modifications and adding munition-dropping capabilities³¹. These scaled-up efforts involve organizations like the Wagner Center and Tsar's Wolves, led by former Russian bureaucrat Dmitry Rogozin³², which have better funding and technical resources, enabling continuous drone supply.

Significant volunteer efforts in Russia include the Oko Design Bureau's development of the Privet-82 kamikaze drone, which boasts a 30 km range and recently passed MOD certification with plans for mass production³³. Another initiative, Project Archangel, aims to produce a cost-effective version of the Lancet drone, reportedly ten times cheaper and with a 25 km range³⁴, signaling a shift towards more affordable drone technology.

Conclusion

Unmanned Aerial Vehicles (UAVs) have played a pivotal role throughout the Ukraine conflict, influencing modern warfare with a significant shift towards using both military-grade and commercial drones for various tactical purposes. One of the notable aspects of this war has been Moscow's acquisition of Iranian Shahed drones, marking a strategic move to integrate foreign technology and address a capability gap in long-range drone operations.

The trend in this conflict is a move away from more expensive, standalone UAV platforms to cheaper, more numerous drones that can be deployed in large quantities. These more expendable drones have shown great tactical utility, and they are used for spotting targets for short-range tactical strikes, ground-based assaults, and conventional artillery barrages. The extensive use of Shahed loitering munitions by Russia has notably strained Ukrainian air defenses, necessitating substantial ammunition and resources to counteract the persistent drone waves.

Despite the significant impact of Medium Altitude Long Endurance (MALE) drones like the Bayraktar-TB2 in previous conflicts, their effectiveness has been limited in the Russo-Ukrainian war due to robust, layered air defense systems. Conversely, lighter, loitering munitions have proven highly effective, and difficult to detect and intercept due to their small size and low flight altitudes, indicating their potential for continued use in this and future conflicts.

Social media has played a crucial role in the drone war over Ukraine, serving to reinforce existing narratives, generate new ones, raise awareness of capabilities and vulnerabilities, and support warfighter efforts with volunteer-driven fundraising and technological endeavors. This aspect of the conflict has demonstrated rapid innovation in drone technology, heavily supported by Russian and Ukrainian societies.

³¹ Two interviews conducted by the author with anonymous sources involved in upgrading the DJI Mavic UAVs for Russian troops (September 2022).

³² “Хроника оператора БПЛА [Operator's Chronicle]” Telegram, accessed June 1, 2023, <https://t.me/xronikabpla/4430>.

³³ “Game of Drones”. Telegram. accessed June 11, 2023, <https://t.me/droneswar/7152>.

³⁴ “В России Создали Бюджетный Аналог Дрона-Камиказе ‘Ланцет’ с Дальностью Полета До 25 Км [Russia Creates Budget Alternative to Kamikaze Drone 'Lancet' with a Flight Range of Up to 25 km],” *TASS*, June 6, 2023, <https://tass.ru/armiya-i-opk/17935781>.

While Ukraine has benefitted from Western and Turkish support for advanced drone technologies, Russian drone development heavily relies on sustaining production amidst international sanctions and a troubled domestic economy. Despite challenges, Russia is continuously innovating and finding new solutions.

The drone war has seen a dynamic evolution, with both sides seeking new solutions to close capability gaps and adapt to emerging technologies. The swift adaptations in drone technology could be crucial for ground troops, who continue to bear the brunt of frontline combat. Introducing inexpensive, fast FPV drones has marked a significant evolution, showing that adaptability and rapid integration of new technologies are crucial.

By 2024, despite the innovative steps taken, the Russian drone industry still faces challenges in meeting the demand for cheap, expendable FPV-type drones. This situation highlights a broader issue of coordination and integration within the Russian military and defense sectors, which may need to adapt more rapidly to keep pace with the evolving nature of drone warfare.

As the war progresses, both Russian and Ukrainian forces continue to explore and integrate various classes of UAVs and drones, which may not only determine the immediate outcome of the conflict but also shape the future of uncrewed aerial technology globally. The ongoing developments in Ukraine provide a daily blueprint for modern drone warfare, pushing both militaries and the global defense industry to adapt and innovate in real time.

16

HOW WILL THE RUSSIAN MILITARY ADAPT AFTER THE WAR IN UKRAINE?

Clint Reach

The presentation by Clint Reach in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://youtu.be/P8VA1bT8ADs> starting from 9:14:44.

Abstract

Russia's war in Ukraine when put into the arc of Russian military history appears familiar. Clear parallels are found with the early phases of the Russo-Japanese War, WWI, the Russo-Finnish War, the Great Patriotic War, and the First Chechen War. Poor assumptions at the highest levels of political and military leadership have time and again led to gross negligence in military planning in key areas such as correlation of forces assessments, schemes of maneuver, logistics, and personnel readiness. This in turn, when combined with technological deficiencies, has produced sub-optimal outcomes in the initial period of war, to put it mildly.

At the same time, the Russian military in some cases has prevailed in war despite the inadequacies of the leadership and the military-industrial base. A successful solution has been to bide time, build up superior forces, and overwhelm the weaker adversary through mass and attrition. Versions of this occurred in 1940, 1943-45, and 1999-2000, suggesting that the Russian military is adaptable, albeit in what we might call "dull" or "unimaginative" ways. Drawing on both historical and contemporary events, I will offer some ideas on the next year of war in Ukraine and Russia's post-war adaptation.

WINNING BY ADAPTING: BATTLEFIELD ADAPTATION IN THE LONG RUSSO-UKRAINIAN WAR

Marc R. DeVore and Kristen Harkness

The presentation by Marc R. DeVore and Kristen Harkness in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://www.youtube.com/watch?v=nr4KG1mtKvc> starting from 8:20.

Introduction

Since the mid-1950s, conventional wars have been overwhelmingly brief and decisive. To give but a few prominent examples: the oft-studied 1973 Arab-Israeli War lasted a mere 19 days; the 1982 Falklands War occurred over the course of 72 days; the ground campaign of the 1991 Gulf War extended for only 100 hours; the 1998 Kargil War between India and Pakistan took 84 days; and the conventional phase of the 2003 invasion of Iraq ended after 42 days. Only the Iran-Iraq War (1980-88) and the Eritrean-Ethiopian War (1998-2000) stand as serious outliers to this historic trend—and those wars ended 35 and 23 years ago, respectively.

The brevity of contemporary conventional wars has both limited the ability of armed forces to learn and adapt, and reduced the importance of doing so to victory. Conventional wars have simply not lasted long enough for militaries to extract lessons learned from the battlefield, revise their tactics, and modify their technologies before the conflict ends. The empirical dearth of long conventional wars has, in turn, skewed our understanding of military adaptation. Theories and mechanisms of how militaries best learn have been developed almost entirely from analyses of historic conventional wars, particularly WWI and WWII,¹ and studies of prolonged counterinsurgencies.²

¹ See Robert T. Foley: ‘Dumb donkeys or cunning foxes? Learning in the British and German armies during the Great War’, *International Affairs*, 90:2 (2014), pp. 279–98; Robert T. Foley: ‘A case study in horizontal military innovation: The German Army, 1916–1918’, *Journal of Strategic Studies*, 35:6 (2012), pp. 799–827; Aimée Fox, *Learning to Fight: Military Innovation and Change in the British Army, 1914–1918* (Cambridge: Cambridge University Press, 2018); Michael A. Hunzeker: *Dying to Learn: War Time Lessons from the Western Front* (Ithaca: Cornell University Press, 2021); Michael A. Hunzeker and Kristen A. Harkness: ‘Detecting the need for change: How the British Army adapted to warfare on the Western Front and in the Southern Cameroons’, *European Journal of International Security*, 6:1 (2021), pp. 66–85; Nina Kollars: ‘War’s horizon: Soldier-led adaptation in Iraq and Vietnam’, *Journal of Strategic Studies*, 38:4 (2015), pp. 529–53; Nina A. Kollars, Richard R. Muller, and Andrew Santora: ‘Learning to fight and fighting to learn: Practitioners and the role of unit publications in VIII Fighter Command, 1943–1944’, *Journal of Strategic Studies*, 39:7 (2016), pp. 1044–67; Williamson Murray: *Military Adaptation in War: With Fear of Change* (Cambridge: Cambridge University Press, 2011).

² See Theo Farrell: ‘Improving in war: Military adaptation and the British in Helmand Province, Afghanistan, 2006–2009’, *Journal of Strategic Studies*, 33:4 (2010), pp. 567–94; Theo Farrell: ‘Military adaptation and organisational convergence in war: Insurgents and international forces in Afghanistan’, *Journal of Strategic Studies*, 45:5 (2022), pp. 718–42; Theo Farrell and Antonio Giustozzi: ‘The Taliban at war: Inside the Helmand insurgency, 2004–2011’, *International Affairs*, 89:4 (2013), pp. 845–71; Torunn Laugen Haaland: ‘The limits to learning in military operations: Bottom-up adaptation in the Norwegian Army in Northern Afghanistan, 2007–2012’, *Journal of Strategic Studies*, 39:7 (2016), pp. 999–1022; Kristen A. Harkness and Michael A. Hunzeker: ‘Military maladaptation: Counterinsurgency and the politics of failure’, *Journal of Strategic Studies*, 38:6

The current Russo-Ukrainian War, however, seriously challenges us to reexamine how militaries learn in high-intensity conventional warfare. This war has lasted nearly two years with no end in sight. Russia invaded with a full-scale conventional assault and then bogged down. The Ukrainians mounted relatively successful counter-offensives in the late summer of 2022 to recapture Kharkiv and Kherson but could not fully drive the Russians out. Both the Russian and Ukrainian offensives/counteroffensives in 2023 were slow moving and difficult with little exchange of territory. This suggests that offensive power may have become far more difficult to generate and that the brief, decisive era of conventional wars may be over. The ability to learn and adapt—and to do so faster than the adversary—is once again vital to combat effectiveness.

Throughout this lengthening war, Ukraine's military has repeatedly outperformed expert expectations. Facing what many regarded as inferior numbers, inferior weaponry, and inferior combat experience, Ukraine traded territory for time and, with NATO military aid, has been slowly but meaningfully pushing Russia back. This effort has involved a tremendous capacity to experiment, learn, and change—from innovating new technologies to altering force structures to developing new procurement systems. Better understanding how Ukrainian forces have become a relatively nimble and rapidly responsive learning organization will help tailor more effective aid, better predict the shape of forthcoming battles, and improve NATO armed forces for the future of conventional warfare.

We offer a first step toward this understanding by describing the range of adaptations we have encountered in the Ukrainian armed forces, important factors enabling those changes, and how they have occurred. We first define military adaptation and summarize existing theoretical mechanisms by which such learning occurs: whether originating from higher level command (top-down) or from small units in the field and disseminated up the chain (bottom-up) or along the front (horizontal). We then provide an initial mapping of prominent Ukrainian military adaptations showing the breadth and diversity of learning mechanisms. Data was collected from open-source material, largely media reporting in both English and Ukrainian. Given the complexity, secrecy, and ongoing state of the war ours is by its nature an incomplete mapping—but an important sample nonetheless. Three illustrative case studies comprise the mainstay of our empirics, representing each type of learning mechanism: the establishment of an independent drone unit in the Ukrainian Air Force (top-down); the use of tunnel defenses at the Azovstal Steel Factory in Mariupol (bottom-up); and the evolution of inexpensive first-person view drones from general reconnaissance to integrated targeting reconnaissance with artillery units to kamikaze missions (horizontal).

From this initial thick descriptive analysis, we conclude by highlighting three key findings worthy of further theorization and research: First, adaptations have history—they do not occur in a vacuum and they often depend on prior acts of learning and organizational change (here from combat during the Donbas War and the following period of lower intensity conflict with Russia). Second, and despite many claims in

(2015), pp. 777–800; Raphael Marcus: 'Military innovation and tactical adaptation in the Israel–Hezbollah Conflict: The institutionalization of lesson-learning in the IDF', *Journal of Strategic Studies*, 38:4 (2015), pp. 500–28; John A. Nagl: *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Chicago: University of Chicago Press, 2005); Olivier Schmitt: 'French military adaptation in the Afghan War: Looking outward or inward?', *Journal of Strategic Studies*, 40:4 (2017), pp. 577–99.

the military adaptation and innovation literature, there is no one way to learn. The Ukrainian military has achieved tactical and operational successes from ideas stemming from both the top and bottom of the command hierarchy. Finally, there is perhaps a unique new way of organizational learning emerging in Ukraine—driven by close collaborations with civil society organizations that can cut across the chain of command, rapidly spreading ideas and best practices.

Pathways of Military Learning

The early literature on military organizational learning was dominated by studies of innovation, which focused on technological revolutions and major shifts in doctrine.³ But it was quickly recognized that learning during war—in the midst of the fog of combat, information overload, and a constantly changing enemy—often involves recognizing performance gaps and implementing changes on a scale short of revolution. And that this type of learning is still hard and vitally important. Military adaptation then is usually defined in contrast to innovation, as incremental learning and more small-scale change.⁴ Yet, it would be odd for soldiers in combat not to learn—not to try new tactics and jerry-rig failing kit in order to survive. Indeed, frontline troops are almost always engaged in experimentation.⁵ Organizational adaptation transcends these personal and small-group experiences. The learning must filter, somehow, through the relevant units and become embedded.⁶

Military learning, both innovation and adaptation, has been posited to occur through three distinct pathways imagined as vectors: top-down, bottom-up, and horizontal (see Figure 1). Imagine this in the context of a rigidly hierarchical command structure: top-down learning flows down the hierarchy, bottom-up learning percolates up the chain of command, and horizontal learning moves laterally across units.⁷ Scholars have often associated adaptation with the latter two mechanisms. Adaptation has even explicitly been defined as bottom-up changes in tactics, techniques, and procedures,⁸ while studies of military innovation almost always advance top-down theories of learning (although many empirical examples exist of bottom-up innovation).⁹ We choose, on the other hand, not to definitionally exclude the possibility of top-down adaptations or bottom-up innovations. Given the fuzzy threshold for when an adaptation becomes an innovation, we describe the three vectored pathways below as equally applicable across the learning spectrum.

³ For a broad overview of the military innovation literature, see Adam Grissom, 'The Future of Military Innovation Studies', *Journal of Strategic Studies* 29/5 (Oct. 2006), pp. 905–34. Also see Deborah D. Avant, *Political Institutions and Military Change: Lessons from Peripheral Wars* (Ithaca, NY: Cornell UP 1994); Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany between the World Wars* (Ithaca, NY: Cornell UP 1984); Stephen Peter Rosen, *Winning the Next War* (Ithaca, NY: Cornell UP 1994); Kimberly Marten Zisk, *Engaging the Enemy: Organization Theory and Soviet Military Innovation, 1955–1991* (Princeton UP 1993).

⁴ Farrell, 'Improving in War', p. 569.

⁵ Kollars, 'War's Horizon'.

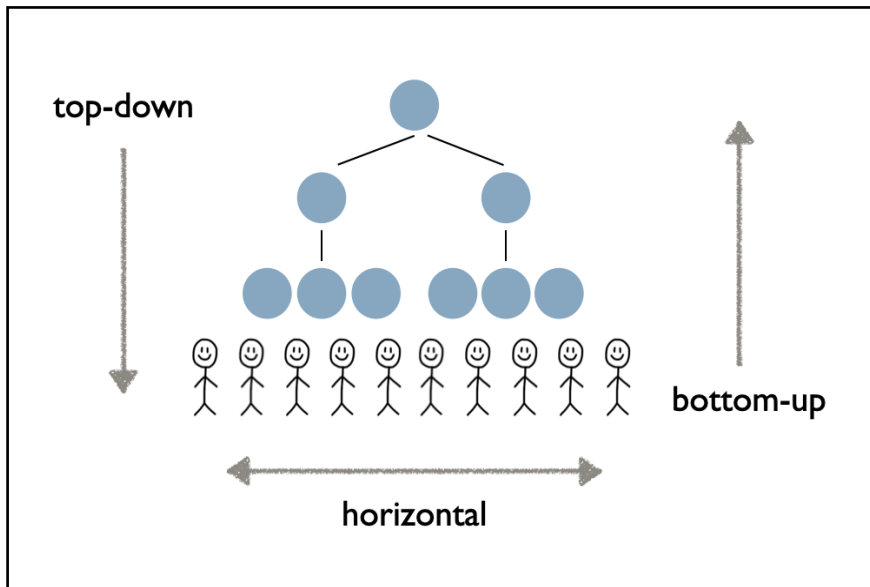
⁶ Hunzeker and Harkness, 'Detecting the need for change', pp. 69–70.

⁷ Kollars, 'War's Horizon', pp. 533–534.

⁸ Farrell, 'Improving in War', p. 569; Stuart Griffin, 'Military innovation studies: Multidisciplinary or lacking discipline?', *Journal of Strategic Studies*, 40:1–2 (2017), p. 200. See also Williamson Murray, *Military Adaptation in War*.

⁹ Grissom, 'The Future of Military Innovation Studies', pp. 920–24.

Top-down innovations and adaptations are those initiated and directed by the upper echelons of an organization's leadership. Senior commanders and civilian defense personnel have advantages in information and resources. They receive reports and intelligence from a wide variety of sources, enabling them to better centralize information and 'see' the broad picture, at least somewhat removed from the immediate fog of combat. They can also redirect significant resources toward resolving battlefield problems.¹⁰



Picture 1. Pathways of Military Learning.

The British and French development of tanks during WWI is a significant example of a top-down military innovation. Confronting the dominance of defensive technologies—machine guns, barbed wire, and trenches—on the Western Front, British and French leaders independently channeled resources into the development of tanks to spearhead offensives. Two high level policymakers led this process in the United Kingdom, including the Cabinet Minister, Winston Churchill, and the Secretary of the Committee for Imperial Defense, Maurice Hankey. With such high level support, the Director of Naval Construction was tasked in February 1915 with leading the process, which fielded the first operational tanks by September 1916.¹¹

Soviet learning in armored warfare during WWII was also a top-down driven process, but in the domain of organizational and operational change rather than technology. The Red Army went to war with massive mechanized corps, featuring over 1,000 tanks apiece supported by inadequate numbers of infantry. These cumbersome formations collapsed when faced with the German blitzkrieg. In response, the Soviet General Staff (or STAVKA) restructured its armored forces into smaller tank brigades. Although these proved easier to handle on the battlefield, they still lacked the armored force for major offensives. In the Spring of 1942, STAVKA implemented its third major reorganization of the armored forces in less than a year. This time, they

¹⁰ Grissom: 'The Future of Military Innovation Studies', pp. 919–920; Posen: *Winning the Next War*.

¹¹ J.F.C. Fuller: *Tanks in the Great War, 1914–18: The Development of Armoured Vehicles and Warfare* (Leonaur: 2020).

grouped tank brigades along with infantry brigades into larger corps (of 100 tanks) that were now both better balanced and large enough for offensive success.¹²

Bottom-up and *horizontal innovations and adaptations* are those originating in the middle to lower ranks of the military. Junior officers, small-unit commanders, and rank-and-file soldiers experience battle in a close-and-personal manner, seeing with their own eyes what works and what leads to unnecessary deaths. This experience can be harnessed to develop solutions to persistent problems. ‘Bottom-up’ learning occurs when those solutions are passed back up the command hierarchy, recognized as best practices, and diffused more broadly thus becoming widely embedded throughout the organization.¹³ ‘Horizontal’ learning, on the other hand, represents a different diffusion mechanism—with new ideas spreading from unit to unit by word of mouth, observation, and other similarly ranked soldier-to-soldier exchanges without leveraging the command hierarchy.¹⁴

Bottom-up learning, for example, occurred with Germany’s development of ‘infiltration’ tactics during WWI. Individual German units experimented widely with new ways of employing weaponry and dispersing their infantry to attack efficaciously. The German high command would identify and then spread successful practices both by codifying them in new manuals and establishing tactical training schools. What eventually became known as ‘infiltration’ or ‘stormtrooper’ tactics can be traced to two companies of combat engineers commanded by Captain Willy Rohr. Recognizing the futility of standard offensive infantry tactics during World War I, Rohr trained his soldiers intensively to combine grenades, flamethrowers and light machine guns in their attacks on French trenches during the 1915 Battle of Harmanwillerkopf. The German High Command recognized the efficacy of Rohr’s tactics and tasked him with setting up a training center to teach his tactics in December 1915. This centre received ever greater levels of support throughout 1916, as the Battle of Verdun highlighted the value of his training, and culminated in 1918 with Germany’s final offensives, which employed infiltration tactics on a massive scale to repeatedly rupture the Entente’s defenses.¹⁵

To give an example of horizontal learning, during the Vietnam War, US Army drivers transformed their vulnerable trucks into heavily armored and armed ‘gun trucks.’ Viet Cong insurgents frequently ambushed ‘soft skinned’ logistics vehicles rather than risk assaulting American combat formations. Individual American truck detachments and vehicle crews responded by scavenging armored plate from destroyed vehicles, layering sandbags on the floor of their cabs to protect against mines, and mounting machine guns on select vehicles. Eventually these adaptations were enacted on a vast scale, with best practices conveyed by word of mouth, greatly increasing logistical resilience.¹⁶

¹² David Glantz and Jonathan House: *When Titans Clashed: How the Red Army Stopped Hitler* (Lawrence: Kansas UP, 1995).

¹³ Hunzeker and Harkness: ‘Detecting the need for change’, pp. 69–70. For an overview of the different military learning pathways, see Fox: *Learning to Fight*, pp. 53–72.

¹⁴ Foley: ‘A case study in horizontal military innovation’, pp. 803–04.

¹⁵ Bruce Gudmundsson: *Stormtroop Tactics: Innovation in the German Army, 1914–1918* (Praeger: 1995).

¹⁶ Nina Kollars: ‘War’s Horizon: Soldier-Led Adaptation in Iraq and Vietnam,’ *Journal of Strategic Studies*, 38:4 (2015), 529–553.

Top-down, bottom-up, and horizontal processes of learning are thus analytically distinctive ways that militaries respond to the failures and unexpected problems they encounter during battle. Militaries at war strive to be learning organizations—to figure out how to win under extreme duress. To learn faster and better than the adversary provides strategic and tactical advantages.

The Range of Adaptation in the Ukrainian Military

Table I presents a sample of Ukrainian military adaptations linked to important achievements on the battlefield. For security reasons, we have focused on adaptations that occurred early in the war, are already well documented in the public sphere, and whose descriptions and analysis would not compromise current tactics and operations. The sample is thus neither representative nor complete.

Top Down	Bottom Up	Horizontal
Formation of long-range drone 383rd Regiment/Brigade	Azovstal Steel Factory tunnel defense in Mariupol	FPV drone surveillance and use in artillery targeting
Creation of combined arms brigades	Anti-tank teams using dirt-bikes and ATVs	Anti-armor tactics
Amalgamation of territorial and regular units	Creation of volunteer units around existing social groups	Techniques for arming FPV drones
Directive to prioritize targeting soft-skinned logistics vehicles	Units crowd-funding weapons	Best practices for employing drones
Creation of Freedom of Russia Legion and Russian Volunteer Corps (military intelligence)	Light infantry units improvising heavy artillery from captured Russian guns	

Table 1. Examples of Ukrainian Military Adaptation.

Yet, it does illustrate a critical fact: in this high intensity conventional fight for survival, the Ukrainian military learns, and learns repeatedly, through all three theorized mechanisms. For each case of adaptation listed below—which comprise the beginnings of a broader dataset building project—we have done our best to isolate the origin of the adaptive idea (e.g. which unit/soldiers and their position/rank in the hierarchy) and then how the idea and practices diffused. It can be especially difficult to distinguish between bottom-up and horizontal mechanisms of diffusion, making our classifications subject to revision as more information becomes available.

The following three sections provide a deeper thick description of one example from each type of learning: (1) the formation of the 383rd Regiment/Brigade within the Air Force that has spearheaded long-range drone warfare and promulgated a series of additional adaptations; (2) the spread across units of city siege defense tactics, centered on the tunnels of the Azovstal Steel Factory in Mariupol; and (3) the diffusion and tactical evolution—from surveillance to artillery targeting to kamikaze missions—of inexpensive First Person View (FPV) drones through social media, civil society organizations, and demonstration days that bring soldiers across units together.

Top-Down Adaption: Ukraine's Long-Range Drone Warriors

Ukraine's long-range drone capabilities have stunned both Russia and outside observers. Non-existent during the Donbas War of 2014-15, long-range drones have played a critical strategic role since February 2022—decimating Russian tank columns, contributing to the sinking of the Black Sea Fleet's flagship, and destroying irreplaceable bombers at distant air bases. These triumphs all stem from a succession of top-down military adaptations, beginning when an independent drone unit was established within the Air Force to compensate for conventional aircraft vulnerability to Russian air defenses. High-level political and military patronage have since enabled this unit to steadily upgrade its technology and tactics while also growing in size.

Russian air defenses swiftly imposed unsustainable losses upon Ukraine's under-resourced air force almost as soon as they began supporting separatists in the Donbas. Ukraine lost six of its primary armoured ground attack aircraft, the Su-25, in short order during July and August 2014.¹⁷ Losses such as these drove the General Staff to examine drones as an alternative to manned aircraft. In 2016, they then established a dedicated unmanned aerial vehicle (UAV) unit—the 383rd Independent UAV Regiment—within the air force.¹⁸

This unit was originally equipped with old Cold War-era drones returned to service: the Tu-141 and Tu-143.¹⁹ While these obsolescent Tupolev drones provided the 383rd Regiment with an initial reconnaissance capability, Ukraine's high command soon sought armed drones. Impressed by Turkey's domestically developed Bayraktar TB-2 drones—which often evaded or even destroyed Russian air defenses in Syria and Libya—in 2019 the Defence Ministry signed a deal to acquire 12 such drones as part of their military modernization program.²⁰

Ukraine's embrace of the Bayraktar—a much more sophisticated and costly drone than they had hitherto employed—depended heavily on top-level support. TB-2s were a substantial financial investment: they cost \$5-6 million apiece, required the construction of ground stations, and necessitated the training of pilots, payload operators, and mission commanders (initially contracted to Turkey).²¹ Indeed, the initial contract for a dozen drones, ground control stations, and training amounted to \$70 million.²²

Symptomatic of the Ukrainian Defence Ministry's commitment to the TB-2 was its 2019 negotiation of the 'Black Sea Shield' joint venture between Bayraktar and Ukrspecexport, paving the way for joint drone development in the long term. President Petro Poroshenko announced the drone's delivery and National Security Advisor Oleksandr Turchynov publicly touted its ability to precisely destroy targets.²³ The 44-

¹⁷ Babak Taghvee: *Guardians of Ukraine: The Ukrainian Air Force Since 1992* (Creasy: Manchester, 2020), 146–57.

¹⁸ Tom Cooper et al.: *War in Ukraine: Vol. 2, Russian Invasion, February 2022* (Warwick: Helion, 2023), 13.

¹⁹ *Ibid.*

²⁰ Adam Lowther & Mahbube Siddiki: 'Combat Drones in Ukraine,' *Air & Space Operations Review* (December 2022), 5–6.

²¹ 'Ukraine receives Bayraktar TB2 UAVs,' *Air Forces Monthly* (18 April 2019), available at: <https://www.keymilitary.com/article/ukraine-receives-bayraktar-tb2-uavs>.

²² Illia Ponomorenko: 'Bloomberg: Turkey ready to sell over 20 Bayraktar drones to Ukraine,' *Kyiv Independent* (5 December 2021).

²³ 'Ukraine receives Bayraktar TB2 UAVs.'

day so-called Karabakh War further highlighted the TB-2's potential when Azerbaijan used these drones to decimate Armenian artillery and logistics.

Facing escalating Russian military provocations and impressed by the long-range drone's performance, the Chief of the General Staff—Ukraine's top military commander, Lieutenant General Valerii Zaluzhnyi—pushed to deploy TB-2s to demonstrate Ukraine's resolve. In October 2021, Russian-backed separatists had begun firing artillery into Ukraine from positions close to the town of Hranitne. On October 26, Zaluzhnyi deployed the new Bayraktars to destroy the offending artillery piece. The accuracy of the strike avoided any collateral damage that Russia could exploit for propaganda purposes.²⁴ With this successful debut, Zaluzhnyi then publicly argued that Ukraine's military needed at least 24 Bayraktars and that a new contract might be coming in 2021 or 2022.²⁵

Investments in the 383rd Independent UAV Regiment and its Bayraktars then paid heavy dividends in the initial stages of Russia's full-scale invasion, launched on 24 February 2022. During the war's first days, Bayraktars successfully struck Russian vehicles in the Malyna district of the Zhytomyr region and the suburbs of Kherson. On 1 March, the 383rd then sent flights of Bayraktars swooping down on the Russian column advancing through the northeast city of Sumy. Ukrainian authorities claim that the drones destroyed 180 Russian vehicles—tanks, trucks, and cars—on that day alone.²⁶ Outside experts, relying on satellite imagery, have independently confirmed the destruction of at least 41 Russian armoured vehicles—including scarce fuel trucks, a cutting-edge prototype tanks, and other key vehicles—a smaller but still impressive figure.²⁷ Following these strikes, the Russian effort to seize Sumy lost its impetus, leading eventually to a strategic withdrawal from the area on 4 April.

Shocked by the Bayraktars' success, Russia's ground forces prioritized defending against them. They began using electronic warfare systems to jam their transmissions and deployed short-range air defences to shoot down the drones. Recognizing the growing threat their drones faced over land, the 383rd reoriented its efforts to the Black Sea where Russian electronic warfare capabilities remained scarce. The 383rd quickly developed new tactics, combining the TB-2s with other reconnaissance assets and anti-ship missile launchers, to locate large Russian war ships and destroy them. On 13 April, Ukraine sunk Russia's flagship cruiser the *Moskva* with critical assistance from a Bayraktar. By approaching at a low altitude, the Bayraktar distracted the cruiser's air defence radars and pinpointed its location. Exploiting this diversion, a missile crew launched the Neptune missile that ultimately the *Moskva*.²⁸

Without its flagship, Russia's Black Sea fleet then struggled to sustain control over Snake Island. On 2 May, Ukrainian Bayraktar's destroyed two Raptor landing boats

²⁴ Ponomorenko.

²⁵ Ibid.

²⁶ Yuri Svitlyk: 'Invasion of Ukraine: Bayraktar TB2 strike UAV review,' *Root Nation* (3 March 2022): at <https://root-nation.com/en/articles-en/weapons-en/en-bayraktar-tb2-drone-review/>.

²⁷ Stijn Mitzer and Joost Oliemans: 'A Monument Of Victory: The Bayraktar TB2 Kill List,' *Oryx* available at: <https://www.oryxspioenkop.com/2021/12/a-monument-of-victory-bayraktar-tb2.html>, (accessed 15 August 2023).

²⁸ David Hambling: 'Ukraine's Bayraktar Drone Helped Sink Russian Flagship,' *Forbes* (14 April 2022) available at: <https://www.forbes.com/sites/davidhambling/2022/04/14/ukraines-bayraktar-drones-helped-destroy-russian-flagship/>.

bound for the island.²⁹ On 6 May, they struck again, destroying Russia's anti-aircraft *Tor* missile system and enabling Ukraine to launch an air raid with manned aircraft. Over the next two days, the Bayraktar's continued to fly—hitting a replacement *Tor* launcher en route on its landing ship and destroying a helicopter carrying reinforcements to the island.³⁰ The 383rd's Bayraktar strikes between 2 and 8 May thus rendered the defense of Snake Island untenable, leading Russia to fully withdraw by late-June.³¹

Despite their initially decisive impact, Russian countermeasures gradually rendered the Bayraktar obsolescent. New air defenses and electronic warfare systems began inflicting prohibitive losses on Ukraine's Bayraktar force, leading to their withdrawal from key missions.³² However, the Ukrainian General Staff continued to pour resources into the 383rd, enabling it to adopt new platforms and tactics. By October 2022, they had abandoned the reusable Bayraktars altogether and instead transitioned to long-range one-way attack drones. The UJ-22, built by Ukraine's state-owned Ukoboronprom, made its debut on 7 October, attacking an airfield deep behind Russian lines, at Shaikovka.³³ In parallel with this effort, the 383rd Regiment's technicians modified their antiquated Tu-141 and Tu-143 reconnaissance drones for use as one-way attack drones. On 5 December, the Tupolevs attacked another air base deep within Russia, at Dyagilevo, where they damaged three supersonic Tu-22M3 bombers and inflicted substantial damage on the base.³⁴

The 383rd has since expanded and continues to adapt its tactics and technology to damage Russian forces deep behind the lines. In 2023, the General Staff expanded the 383rd from a regiment to a brigade, signaling that more personnel and resources would flow into the drone war. However, it has become increasingly difficult to attribute precise attacks to the regiment as other Ukrainian units—including military intelligence—have also adopted long-range attack drones. For what it's worth, Russia has criminally indicted the 383rd Brigade's commander, Colonel Serhiy Burdenyuk as at least partially responsible for Ukraine's '100 drone strikes on the Russian capital, annexed Crimea and regions bordering Ukraine, all of which were carried out between April 2022 and September 2023.'³⁵

Bottom-Up Adaption: The National Guardsmen and Tunnel Defenses in Mariupol

Russia's invading military units performed better in southern Ukraine than elsewhere, blitzing northwards from their Crimea sanctuary and southwest from the so-called

²⁹ H.I. Sutton: 'Incredible Success Of Ukraine's Bayraktar TB2: The Ghost Of Snake Island,' *Naval News* (18 May 2022).

³⁰ *Ibid.*

³¹ Isobel Koshiw: 'Ukraine pushes Russian forces from strategic Snake Island,' *The Guardian* (30 June 2022).

³² Ashish Dangwal, "Bayraktar TB2 Drones 'Out Of Action' From Ukraine War; Russia's Air Defense Or Diplomacy Behind Their Disappearance?" *Eur.AsianTimes* (4 December 2022), available at: <https://www.eurasiantimes.com/bayraktar-tb2-drones-out-of-action-from-ukraine-war-russias/>.

³³ 'One Tu-141 Strizh Damaged Three Tu-22M3 and a Kh-32, Russians Officially Admit' *Defence Express* (8 December 2022), https://en.defence-ua.com/news/one_tu_141_strizh_damaged_three_tu_22m3_and_a_kh_32_russians_officially_admit-7884.html.

³⁴ 'New details of attacks on Russian strategic aviation airfields revealed,' *Militarnyi* (6 September 2023), <https://mil.in.ua/en/news/new-details-of-attacks-on-russian-strategic-aviation-airfields-revealed/>.

³⁵ 'Russia Charges Top Ukrainian Military Officials With "Terrorism,"' *The Moscow Times* (3 October 2023), <https://www.themoscowtimes.com/2023/10/03/russia-charges-top-ukrainian-military-officials-with-terrorism-budanov-a82639>.

Donetsk Peoples' Republic (DNR). At first their offensive appeared unstoppable and seemed destined to conquer Mykolaiv and Odessa. But the tide was unexpectedly turned in Mariupol. Cut off and surrounded by the advancing Russian offensive, soldiers and mid-level officers of the Ukrainian 36th Marine Brigade and the Azov militia withdrew from most of the city's landscape and gradually re-concentrated within the Azovstal Steel Factory. There they improvised a sustained defense of the factory's unique geography and tunnels, training new soldiers and units as they arrived. Although Russian commanders anticipated a tough fight for Mariupol, they were not prepared for the three month siege they were ultimately obliged to undertake—a siege which pinned down between 12,000 and 20,000 Russian soldiers and stalled the entire southern front.³⁶

Initially, Russia's attack in and around Mariupol proceeded according to plan. On the war's first day, Russian air forces decapitated the city's air defense radars, allowing aircraft to attack with near impunity.³⁷ A hodgepodge collection of Ukrainian units had been hastily assembled to defend the city—including the 36th Naval Infantry Brigade, the Azov National Guard Regiment, and elements of the 12th Operations Brigade, 56th Motorized Brigade and 10th Assault Brigade.³⁸ They attempted to establish defensive lines in the villages outside of Mariupol. But, according to some reports, the Ukrainian commander with overall responsibility for this assembled force was away when fighting erupted and cut off by the Russian advance. Under heavy bombardment from the air and a ground attack from three directions, and ostensibly without coordinated leadership, the Ukrainian units were swiftly overwhelmed.³⁹

Russia's operational strategy was heavily shaped by its own bitter recent experiences with urban fighting—ranging from the battles for Grozny to the siege of Aleppo. Commanders first sought to overwhelm Ukrainian forces in the countryside, preferably avoiding any defense from within the city itself.⁴⁰ Should it come to urban warfare, the Russian military then planned to deploy overwhelming and indiscriminate firepower to coerce surrender. For their part, Ukrainian forces were ill prepared to fight from within their cities. Rather, they established fortified front lines in the countryside that were, at least in part, manned by territorial forces that had only been mobilized 48 hours prior to the invasion. Russia consequently had much initial success occupying major Ukrainian cities—such as Iuzivka, Kherson and Melitopol—without having to fight urban battles for them. Mariupol's defenses appeared destined to collapse just as swiftly.⁴¹

Against all expectations, mid- and lower-ranking National Guard commanders salvaged a rapidly deteriorating situation—improvising a formidable urban defense around the unique topography of the Azovstal Steel Factory. This bottom-up

³⁶ John Spencer and Liam Collins: "The Untold Story of the Ukrainian Helicopter Rescue Missions During the Mariupol Siege," *TIME* (15 February 2024).

³⁷ John Spencer and Arseniy Fedosiuk: 'MWI Podcast: Inside Azovstal,' *Modern War Institute at West Point* (14 July 2023), <https://mwi.westpoint.edu/mwi-podcast-inside-azovstal/>.

³⁸ Christopher Lawrence: *The Battle for Kyiv: The Fight for Ukraine's Capital* (Barnsley: Frontline Books, 2023), p. 151.

³⁹ John Spencer and Arseniy Fedosiuk.

⁴⁰ Kristin Ljungkvist: 'A New Horizon in Urban Warfare in Ukraine?' *Scandinavian Journal of Military Studies* 5/1 (2022), 91–98.

⁴¹ Amos Fox: 'The Russo-Ukrainian War and the Principles of Urban Operations,' *Small Wars Journal* (10 November 2022).

adaptation was facilitated by the deep local knowledge that members of the Azov National Guard Regiment possessed of the complex. A massive Soviet-era steel factory, Azovstal stretched over 12km² and featured a network of underground tunnels and shelters that had been built to protect the factory’s workers from air attacks. Crucially, these shelters could accommodate 40,000 personnel—enough capacity for large Ukrainian military units to find safety from Russian artillery and bombers. Better yet, Azovstal is surrounded on three sides by water, including a canal and the Sea of Azov, rendering it extremely difficult to attack. This fortress-like factory clearly had the potential to anchor Ukrainian defenses from within Mariupol. The regular army, however, lacked this local knowledge, failed to appreciate Azovstal’s benefits, and took no measures at the beginning of the war to establish defenses there.⁴²

Unlike regular army units headquartered outside of Mariupol, the Azov Regiment had a long affiliation with the city—and its members quickly grasped Azovstal’s potential. The regiment’s controversial origins lay in the immediate aftermath of the 2013 Euromaidan Revolution. Released from political prisons where they had been incarcerated by outgoing president Viktor Yanukovich, thirty ultra-nationalist militants quickly banded together and formed a paramilitary militia. Dubbed the *Chorny Korpus* or ‘Black Corps,’ the group attracted recruits from football hooligans affiliated with the Kharkiv Metalist Football Club. Although initially unaffiliated with Ukraine’s new pro-Western government, the *Chorny Korpus* helped quell pro-Russian separatist efforts to control Kharkiv in March/April 2014. Subsequently, the government subordinated the *Chorny Korpus*—now 300 combatants strong and having adopted the name ‘Azov Territorial Defence Battalion’—to the regional police administration covering Mariupol and Dnipropetrovsk.⁴³

The police dispatched the Azov Battalion to Mariupol, where pro-Russian militants had seized the city’s key administrative buildings.⁴⁴ By mid-June 2014, Azov fighters had successfully dislodged the insurgents. In November, Ukraine’s Interior Ministry then officially incorporated Azov into the newly established National Guard as an 800-man regiment.⁴⁵ Following the de-escalation of hostilities after the 2015 Second Minsk Protocol, National Guard regiments were withdrawn from the frontline. The Azov regiment was reassigned to two bases near Mariupol, in Yuriiivka and Urzuf.⁴⁶ In the following years, the regiment was ‘normalized’ and its ultra-nationalist leaders removed.⁴⁷ Now operating more-or-less as a typical National Guard unit, Azov drew its recruits from Mariupol, the largest nearby city. Given the local prominence of the Azovstal Steel Factory, employing over 10,000 people, many Azov soldiers had intimate knowledge of its characteristics.⁴⁸

As Ukraine’s defensive lines collapsed around Mariupol in the early days of March 2022, Azov regiment soldiers began gravitating to Azovstal and coalescing under the

⁴² Michael Schwartz: ‘Last Stand at Azovstal: Inside the Siege That Shaped the Ukraine War,’ *New York Times* (24 July 2022).

⁴³ Adrien Nonjon : *Le régiment Azov: Un nationalisme ukrainien en guerre* (Paris: CERF, 2023), pp.34–71.

⁴⁴ *Ibid*, p. 73.

⁴⁵ Askold Krushelnycky: ‘The Battle For Mariupol,’ *New Atlanticist* (16 June 2014).

⁴⁶ Mapping Militant Organizations. ‘Azov Movement.’ Stanford University. Last modified August 2022. <https://cisac.fsi.stanford.edu/mappingmilitants/profiles/azov-battalion>.

⁴⁷ Nonjon, pp. 81–85.

⁴⁸ Becky Sullivan and Joanna Kakissis: ‘How a massive steel plant became the center of Ukraine’s resistance in Mariupol,’ *NPR* (5 May 2022).

leadership of Captain Sviatoslav Palamar, who established a command post inside the factory. Not content to hunker down, Azov's junior officers and NCOs conducted raids into Mariupol, striking isolated Russian soldiers and foraging provisions.⁴⁹ Soon thereafter Azov's higher-level leadership—including its commander, Major Denys Prokopenko—relocated to Azovstal and ordered the regiment's personnel to continue developing defenses anchored on the complex's tunnels. They dug defensive trenches across Azovstal's approaches with communications trenches linking them to the tunnel network's entrances. Soldiers could then shelter, eat and sleep safely within Azovstal, rotating in shifts to the forward trench lines to fight off Russian attacks.⁵⁰

As the days passed, Ukraine's General Staff gradually recognized that the Azovstal defenses could prolong Mariupol's resistance well beyond what was initially considered possible. In addition to the comparative safety of the tunnels and shelters, Azovstal's size provided a haven where helicopters could land, delivering supplies and evacuating wounded soldiers. On 20 March, the military began bringing in special forces soldiers and delivering Stinger and Javelin missiles—fifteen helicopters and 45 aircrew attempted the perilous journey, with three shot down.⁵¹

Bolstered by these deliveries, the factory became a loadstone for the reconstitution of Ukrainian forces. Cut-off by the Russian advance, units had been surrendering one after another—including the 503rd Ukrainian Naval Infantry Battalion (4 April), the National Guard's 12th Operational Brigade (15 April), and the police contingent on Mariupol's beach (20 April). With the promise of shelter and adequate defenses, however, other units launched desperate attacks to breach Russian encirclements and reach Azovstal. Fragments of regular army units, police patrols, and tardily-mobilized territorial army reservists all found their way to the factory complex.⁵²

The most significant of these was the 36th Naval Infantry Brigade, an elite regular army force. Initially, the 36th Brigade had hunkered down in the Illich Steel and Iron Works—which unfortunately lacked the underground tunnels and shelters that made Azovstal so defensible. On the night of 11-12 April, unable to withstand Russian firepower and fearing being overrun, Colonel Volodymyr Baraniuk ordered a desperate breakout effort with the aim of cutting a path to Azovstal. In the end, 500 naval infantrymen made it to the factory while the remaining 1,024 became cornered and surrendered, including Baraniuk.⁵³ On 20 April, Azov Regiment and naval infantry fighters then launched a surprise offensive out of Azovstal to rescue 500 border guards and police surrounded in Mariupol's port.⁵⁴

⁴⁹ Schwirtz.

⁵⁰ Sylvain Ferreira and Nicolas Pontic : 'Mariupol, bataille urbaine en Ukraine,' *Ligne de Front, Hors-Série* (October-December 2023), pp. 94–95.

⁵¹ Daria Dmytriieva: 'Tough decisions were made: Commander of Special Forces disclosed details of special operations at Azovstal,' *RBC-UKRAINE*, 31 October 2023, available at: <https://new-sukraine.rbc.ua/news/tough-decisions-were-made-commander-of-special-1698745743.html>; Maxim Tucker, 'Inside Ukraine's "impossible" military intelligence raid on Azovstal,' *The Times* (15 March 2023).

⁵² Roman Petrenko: 'Marines and 'Azov' rescue 500 fighters from the port of Mariupol,' *Ukrainska Pravda* (20 April 2022).

⁵³ Olga Kyrylenko: 'Escaping the besieged city by foot: The untold story of a marine's escape from Mariupol,' *Ukrainska Pravda* (4 August 2022).

⁵⁴ Roman Petrenko: 'Marines and 'Azov' rescue 500 fighters from the port of Mariupol' *Ukrainska Pravda* (20 April 2022)

By late April, nearly 2,500 soldiers had coalesced in Azovstal.⁵⁵ The commander of the Azov regiment, Prokopenko, had meanwhile been promoted to the rank of lieutenant-colonel and given authority over Mariupol's remaining defenders.⁵⁶ Thus, as they joined the factory defenses, the potpourri of soldiers from very different units were amalgamated under the Azov regiment's command and taught the defensive tactics they had developed to exploit the complex's tunnels, shelters and trenches.⁵⁷

Faced with this entrenched defense, the Russian military had no choice but to engage in a prolonged siege. Azovstal could not simply be bypassed and left in the rear, where it would pose a continual threat to Russian lines of communication and logistics. But Russian efforts to assault and bomb Azovstal faltered against the factory's fortifications. Neither carpet bombing nor more focused airstrikes had much impact on the deep tunnels and shelters.⁵⁸ From their trenches, the Ukrainian defenders repulsed every Russian effort to storm the only viable approach to the factory from the north-east.⁵⁹

Only the exhaustion of their food and ammunition ultimately obliged Azovstal's 2,439 defenders to negotiate surrender. By that time, they had held out for 80 days against seemingly overwhelming force, inflicted roughly 6,000 casualties, and forced Russia to divert 14,000-20,000 troops to the siege—significantly contributing to the stabilization of the southern front.⁶⁰ Thus, bottom-up tactical adaptations by a non-professional unit—backed ultimately by the authority and resources of the General Staff—had a strategically critical impact on the war.

Horizontal Adaption: Tactical Revolutions in FPV Drones

Ukrainians forces' transformative use of inexpensive first-person view drones (FPVs) constitutes an excellent example of horizontal adaptation. While the seeds of drone experimentation were laid during the Dunbas War, it was after Russia's full-scale invasion that learning accelerated exponentially. Soldiers have shared their successful drone modifications and tactics through videos, social media channels, and via civil society intermediaries—rapidly disseminating lessons learned across units without relying on the military hierarchy. Since February 2022, this dynamic has generated five successive transformations in the use of FPVs: 1) generalization across ground units, 2) application to artillery targeting, 3) crude modifications for dropping explosives, 4) improvisation of larger “bomber” drones, and 5) mass employment of inexpensive dedicated ‘kamikaze’ drones.

The origins of Ukraine's FPV drone revolution lie inauspiciously in neglect. Both Ukraine's General Staff and defense industries had ignored the rise of drone technology. Then, during the 2014-15 Dunbas War, Ukrainian forces were taken off-guard

⁵⁵ Viktor Stoll: ‘Fortress on the Azov: Re-learning Strongpoint Defense of Urban Terrain in LSCO,’ *Wild Blue Yonder: Air University* (6 May 2022).

⁵⁶ @Polk_Azov, “Address by the Commander of the Azov Regiment, Lieutenant Colonel Denis Prokopenko, to the world community.” *Twitter*, 13 April 2022.

⁵⁷ Schwirtz.

⁵⁸ “Russian Tu-22M3 bombers strike Mariupol,” *UKRINFORM* (15 April 2022).

⁵⁹ Viktor Stoll: “Fortress on the Azov: Re-learning Strongpoint Defense of Urban Terrain in LSCO,” *Wild Blue Yonder: Air University* (6 May 2022).

⁶⁰ Ferreira and Pontic, p. 96; Jonathan Yerushalmy: ‘Mariupol before and after: updated Google maps reveal destruction in Ukraine city,’ *The Guardian* (28 April 2023).

when they found themselves hounded by constant Russian drone overflights while left bereft of any means to reconnoitre Russian positions themselves.⁶¹ On 11 July 2014, for example, Russia achieved a significant victory when their drone detected a column of Ukrainian forces advancing near the village of Zelenopillya, enabling Russian multiple rocket launchers to target the column. Within three minutes, Russian rockets killed at least 19 and wounded 93 Ukrainian soldiers, while inflicting grievous harm on the Ukrainians' vehicles.⁶²

Shocked by Russia's aggressive use of drones, individual Ukrainian units began demanding their own. They even appealed directly to civil society. However, as one key activist from that period reflected,

*Volunteer organizations..., the Ukrainian diaspora and Western governments provided a steady supply of drones for the army, but a combination of untrained soldiers, overly cautious officers and corrupt generals meant that in the early years of the war, some of these drones either never made it to the frontline or ended up in storage somewhere to make sure they didn't get broken.*⁶³

This failure to fulfill soldiers needs and expectations led them to ignore the chain-of-command and directly partner with voluntary organizations—who began crowdsourcing money, buying cheap commercial quadcopter drones, and donating them directly to front-line units. This was especially true of the volunteer brigades, which had spontaneously formed to combat Russian-backed separatists in Donbas, and were perhaps already accustomed to operating on their own initiative.⁶⁴

Soldiers then experimented in how best to employ and modify their new FPVs, passing suggestions and knowledge back to their civil-society partners. The Aerorozvidka organization exemplifies this dynamic. Founded in 2014 by IT specialists, a banker and a teacher, Aerorozvidka partnered directly with a frontline artillery unit and pooled their resources to procure a single fixed-wing drone with a 'GoPro' attached. While the drone provided useful information, the gunners wanted better imagery from a more stable platform. Responding to this feedback, Aerorozvidka developed the Falcon-2—a quadcopter based on modified commercial Polish and Lithuanian drones—which made its debut in 2015. Aerorozvidka then shared its lessons learned over social media, as did other crowdfunding organizations affiliated with different volunteer units, leading tactical drone efforts to converge on the quadcopter.⁶⁵

These dynamics continued in between the Second Minsk Agreement of 2015 and the full-scale Russian invasion of 2022. Ukrainian ground forces continued to source their drones from civil society organizations, without going through formal military procurement channels. Aerorozvidka continued collaborating with Ukrainian artillery units while also branching out to special forces. Come Back Alive—Ukraine's largest charitable foundation supporting the military—opened a drone 'branch' in 2021.

⁶¹ Mark Galeotti: *Armies of Russia's War in Ukraine* (Oxford: Osprey, 2019), pp. 38–41.

⁶² Lawrence, pp. 29–31.

⁶³ Olesya Khromeychuk: *The Death of a Soldier Told by His Sister: A Ukrainian Story* (Monoray: London, 2021), 86.

⁶⁴ Nicolas Lazaredes: 'Ukraine's DIY drone war: Self-taught soldiers facing up to Russian-backed war machine,' *Australian Broadcasting Corporation* (22 April 2015).

⁶⁵ *Ibid.*

Volunteer national guard and territorial units often relied on drone-enthusiast members and their privately-owned drones while also crowdsourcing unit drones.⁶⁶

The seeds thus having been sown, Russia's full scale invasion catalyzed a cascade of horizontal adaptations in drone tactics, facilitated by the informal networks connecting frontline units with civil society organizations. In the immediate onslaught, for example, a special forces unit coopted a team of Aerorozvidka drone experts and took them north on quad ATVs towards the Russian convoy approaching Kyiv. The drone operators provided surveillance data which the special forces used to mount ambushes and plant IEDs at key locations. After Hostomel airport had been captured by a Russian airmobile attack, Ukrainian drone operators provided firing coordinates to friendly artillery units, who then shelled Russian paratroopers.⁶⁷

In many cases, these new tactics were transmitted to other military units by sharing videos over social media. For example, Colonel Oleh Shevchuk, commander of Ukraine's 43rd Artillery Brigade, received Aerorozvidka videos showing the successful use of drones to guide artillery strikes.⁶⁸ Hoping to emulate these tactics, he sought out volunteer drone enthusiasts and borrowed privately-owned DJI Mavic drones to spot for his guns. In this way, the use of drones for artillery spotting swiftly diffused across the military—as did ever more refined techniques for doing so.⁶⁹ Indeed, during Russia's Donbas Offensive of mid-2022, up to 50% of Ukrainian drone sorties may have been dedicated to artillery spotting.⁷⁰

The next transformation in drone use arrived quickly on the heels of artillery spotting. Beginning in April 2022, different frontline brigades began experimenting with using inexpensive FPV drones to drop explosives on Russian troops. The initial explosive attachments were quite primitive but then rapidly advanced as drone teams shared knowledge through social media, YouTube videos, and video conferencing. One group, for example, discovered that by attaching 3D-printed tail fins to Soviet-era RKG-3 anti-tank grenades, the grenades would fall vertically when released by a drone—ensuring that their shaped-charges would penetrate enemy armoured vehicles.⁷¹ Another team perfected 3D-printed attachments and fins for dropping a miniscule German DM51 fragmentation grenade from one of the smallest and cheapest of the commercial quadcopters.⁷² Operators, meanwhile, honed and shared their tactics for destroying large vehicles with these improvised weapons, circulating videos

⁶⁶ Sebastien Roblin: "Pilot Explains How Ukraine's Crowdfunded 'Army Of Drones' Saves Lives," *Forbes* (2 May 2023).

⁶⁷ Julian Borger: "The drone operators who halted Russian convoy heading for Kyiv," *The Guardian* (28 March 2022).

⁶⁸ Michael Peck: "Ukrainian troops used "wedding drones" and Google Maps to batter Russian forces during the war's chaotic early days, commanders say," *Business Insider* (16 May 2023).

⁶⁹ Yaroslav Trofimov: "Ukraine's Drone Spotters on Front Lines Wage New Kind of War," *Wall Street Journal* (7 August 2022).

⁷⁰ Laurean-Georgel Oprean: "Artillery And Drone Action Issues In The War In Ukraine," *Scientific Bulletin* Vol. 28, No. 1(55), 2023.

⁷¹ "How Ukraine Uses Obsolete Soviet Grenades To Destroy Russian Tanks From Above," *Radio Free Europe / Radio Liberty* (5 May 2022), <https://www.rferl.org/a/ukraine-cheap-grenades-expensive-tanks/31835434.html>.

⁷² Natalia Yermak and Thomas Gibbons-Neff: "In a Ukraine workshop, the quest to build the perfect grenade," *New York Times* (8 January 2023).

about how to aim for vulnerabilities such as tanks' open hatches or their engine blocks.⁷³

Eventually, these experiments and collaborations led to great diversification in Ukraine's drone arsenal and the evolution of larger 'bomber' drones and one-way attack drones. In addition to the ubiquitous DJI quadcopters, drone workshops began repurposing larger hexacopter and octocopter drones to drop heavier ordnance. For example, one hexacopter crafted from an agricultural drone—the Baba Yaga—can drop a payload of either four 82mm mortar rounds or two larger 120mm rounds.⁷⁴ Once Russian electronic warfare and air defense forces adapted to defeat these reusable drones, Ukrainian drone operators adapted further by developing radically inexpensive one-way attack FPV quadcopters. These cost roughly \$500 apiece and Ukrainian producers are manufacturing roughly 50,000 per year.⁷⁵

The continuous development and horizontal spread of FPV drone technologies and tactics has occurred at breathtaking speed. Such has been the pace of development that by early 2023, Ukrainian units considered their own modified inexpensive FPV drones significantly more capable than more expensive NATO loitering munitions—such as the US-supplied AeroVironment Switchblades.⁷⁶ Ukrainian FPV drones have also done extensive damage, accounting for roughly half of Russian vehicle losses by October 2023.⁷⁷ Ukrainians involved in the drone war also recognize the advantages of horizontal learning and have sought to create more opportunities for knowledge exchange, hoping to further the pace of adaptation. Beginning in December 2022, civil society organizations have hosted 'Drone Demo Days' encouraging drone workshops and military operators to meet and share their experiences.⁷⁸

Conclusions

While preliminary and necessarily limited, this initial thick descriptive analysis of adaptation in the Ukrainian military highlights three important findings worthy of further research. First, and despite many stereotypes to the contrary, the Ukrainian military is adapting through all three mechanisms of learning. Better known for its bottom-up ingenuity and horizontal dissemination practices, there are nonetheless several important cases of important top-down changes to doctrine, organizational practices, technological investments, and even tactics. One of these is the establishment of an independent drone unit within the Ukrainian Air Force, the 383rd Regiment/Brigade. The 383rd has played a critical role in successfully deploying Bayraktars against advancing Russian columns during the initial invasion—and then

⁷³ Chric Panella: "Video from Ukraine shows exploding drones flying into open hatches on enemy armored vehicles, taking precision strikes to the next level," *Business Insider* (2 November 2023).

⁷⁴ 'Baba Yaga Drones Are Delivering Fear to Russian Occupiers in Ukraine,' *Technology.Org* (16 October 2023), <https://www.technology.org/2023/10/16/baba-yaga-drones-delivering-fear-to-russian-occupiers/>.

⁷⁵ Christopher McFadden: "Ukraine vows to produce 'a million drones' in 2024," *Interesting Engineering* (26 December 2023) <https://interestingengineering.com/military/ukraine-to-produce-a-million-drones>.

⁷⁶ 'Angry Drones of Ukraine Armed Forces: What types of kamikaze drones are most publicly mentioned—statistics and examples,' *Molfar-OSINT* <https://molfar.com/en/blog/angry-drones-yaki-droni-kamikadze-zsu-naychastishe-zgaduyutsya-v-media-statistika-i-prikladi#:~:text=Ukrainian%2Dmade%20drones.,turning%20them%20into%20kamikaze%20drones>.

⁷⁷ Philippe Langlois: 'Le drone FPV est-il la munition téléopérée du futur?' *DSI Hors Série* No. 93 (2024), pp. 34–37.

⁷⁸ "At Drone Demo Day, 73 development teams presented their work for the Armed Forces," *Ukraine Business News* (21 December 2022).

switching their theatre of operation to the Black Sea as Russian ground defenses adopted electronic warfare capabilities.

Second, adaptations do not occur in a vacuum. When researching the processes behind each of our three cases of adaption it became abundantly clear that each depended on prior institutionalized learning, often tracing back to the Dunbas War. If the Ukrainian government had disbanded militias after the Second Minsk Agreement rather than subordinated them to regional police administrations, then the Azov regiment would not have existed in 2022. And, most critically, would not have brought its local knowledge of the Azovstal Steel Factory to ward off defeat in Mariupol. Rather, adaptations build in past successes creating what often seem like virtuous cycles of learning—such as in the progressive revolution of FPV drone tactics.

Finally, as particularly highlighted in the FPV drone case, there is perhaps a unique new mechanism of adaptation emerging in Ukraine that refuses to conform to our existing theories of military adaptation. Rather than moving up or down the command hierarchy, or flowing laterally between frontline units and soldiers, close collaborations with civil society organizations are allowing ideas to cut across the chain of command. Rather than wait for traditional channels, both soldiers under fire and commanders at the rear can coordinate on best practices with the help of non-military personnel and non-traditional modes of communication. And this innovation may hold the potential to rapidly accelerate learning.

LEARNING LESSONS? INSTITUTIONAL STRUCTURES AND PROCESSES WITHIN THE RUSSIAN MILITARY

Tracey German

The presentation by Tracey German in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=nr4KG1mtKvc> starting from 1:43:50.

Abstract

The Russian armed forces have consistently demonstrated an ability to learn and adapt under fire – be that in Chechnya, Syria or Ukraine –, but they have also shown an apparent inability to remember these lessons, emphasising the importance of institutional memory: without mechanisms to remember what has worked and why, any organisation is liable to repeat failures and rediscover success over and over. While there is a fine balance between remembering lessons learnt during previous operations and ‘fighting the last war’, time and again the Russian military appears to have disregarded lessons learnt during previous operations. This is surprising, as the country has invested considerable financial resource and intellectual horsepower into detailed analysis of previous conflicts, the impact of technological, political and societal change, and military theory.

This presentation will examine the formal and informal learning structures and processes within the Russian military in order to shed light on whether there is a systematic approach to learning and adaptation. Using an analytical framework based on the characteristics of a learning organisation (Dyson 2019; Freeman & Calton 2021), it will examine the role of the Russian General Staff, including its think-tank the Center for Military-Strategic Studies, and the Academy of Military Science, as well as more informal structures, in facilitating effective adaptation, innovation and emulation. Key questions under examination include: is there an effective, formalised process within the Russian military for learning lessons from operational experience? - If there is a lessons-learnt system, does it reach beyond the tactical realm? - How are lessons that have been identified dealt with? What mechanisms are in place to ensure institutional memory?

This research takes a qualitative approach and relies primarily on open-source, Russian language material, including military journals, formal policy documents and news report. In particular, this research will use open source publications such as *Voennaya Mysl'*, *Voенно-промышленный кур'ер* (VPK), *Vestnik Akademii voennyikh nauk* and *Nezavisimoye voенное obozrenie* (NVO), as well as service journals such as *Armeiskii Sbornik*. Analysis of these publications, which are intended for an internal Russian audience, will provide new insights into how lessons are learnt from operational experience, both their own and that of others.

ASSESSING THE LOGIC OF RUSSIA'S MILITARY REFORM AND EFFECTIVENESS: PRELIMINARY INSIGHTS FROM WAR IN UKRAINE

Dumitru Minzarari

The presentation by Dumitru Minzarari in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=nr4KG1mtKvc> starting from 2:07:45.

Introduction

Russia's 2022 overt military invasion of Ukraine – in a clear escalatory move from its 2014 covert invasion – has triggered significant debates among policy analysts and military professionals on Russian military effectiveness. These voices, while not speaking in unison, have largely emphasized that Russia grossly underperformed, and that the West overestimated the real Russian military ability. For instance, the 2022 invasion of Ukraine was labeled as Putin's strategic error¹. In a brutal examination, another analysis pointed out that Russia engaged in peacetime cheating from a military-capabilities-building point of view, and that the war in Ukraine had exposed the systemic weaknesses of the Russian military². Explanations such as corruption, weak military initiative, undertrained officer corps, and poor military adaptation ability, among others, have been presented as factors having affected Russia's performance.

This analysis argues that such criticism, while bringing its value to the understanding of the Russian military power and strategic intent, is somewhat exaggerated. Instead, it suggests that Russia's failure at the initial stage of the war in Ukraine is less related to Russia's military capability and effectiveness. In fact, leading Western military experts also believed that the Russian invasion in February 2022 would be successful. Former US Joint Chiefs Chair, General Mark Milley reportedly thought that Russia would take over Kyiv within 72 hours of its invasion.³ Similar assessments were voiced by German top brass on national television in the first days of Russian invasion.

This suggests that from a military point of view Russia objectively had the military advantage, and its invasion plans were built on realistic assumptions. Corruption and other endemic issues of the Russian military did play their role as force minimizers in Russian failure at the beginning of the invasion. However, this paper suggests that it

¹ Nigel Gould-Davis, "Putin's Strategic Failure," *Survival* 64:2 (2022), pp. 7-16.

² Robert Dalsjo, Michael Jonsson and Johan Norberg, "A Brutal Examination: Russian Military Capability in Light of the Ukraine War," *Survival* 64:3 (2022), pp. 7-28.

³ Jacqui Heinrich and Adam Sabes, "Gen. Milley Says Kyiv Could Fall Within 72 Hours if Russia Decides to Invade Ukraine: Sources," *Fox News*, 5 February 2022. See also Jim Sciutto and Katie Bo Williams, "US Concerned Kyiv Could Fall to Russia Within Days, Sources Familiar with Intel Say," *CNN Politics*, 25 February 2022.

was the force employment factor,⁴ driven by a minimalist Russia's assessment of Ukrainian military forces, which carries the heaviest role in Russian military failure at the initial stages of war.

Therefore, the Russian military should not be judged as a paper tiger. The implications of this analysis are that the poor performance of the Russian troops at the beginning of the 2022 invasion of Ukraine is driven by factors exogenous to the military organization, originating in the Russian political realm. In itself, the Russian military remains a capable fighting force, with a strong officer corps, considerable military adaptation capacity, solid foundation and practice of operational planning and arts, and an effective military reconstitution ability. Despite the fact that it was the political dimension that largely contributed to the Russian military failure in 2022, it is also the political dimension that drives a strong reconstitution capacity of the Russian military.

Methodological approach

The often-contradictory assessment of Russian foreign and security policy actions – either being effective or a failure – is largely driven by assessing them through a perspective that builds on Western standards, values and limitations. For instance, the Western military has a much lower tolerance for personnel losses in war than Russia. Observing high losses in Russian military personnel could lead to claims that Russia has a diminished (political) resolve to continue fighting, and perhaps has lost the initiative.

A common feature in these debates is that observers use sound logical premises and credible cost calculations, based on improper political preferences and risk propensity. They do not account accurately for the political preferences of the Russian political leadership. These assessments have not fully considered factors that apparently drive Russia's use of military force and the role of armed coercion in advancing its foreign policy goals. That mirror-imaging that policymakers and analysts frequently fall trap to is a common cognitive bias, projecting own mind-set upon the analysed actor.⁵

For instance, in the case of an authoritarian regime that views people as an abundant and cheap resource, this kind of approach may provide an erroneous basis for cost analysis. It is not wrong in principle – as people is a finite resource and cannot be replenished indefinitely. But Russia has a higher tolerance for such losses, and thus a higher threshold for preference change. It is not restricted by domestic audience costs to the same extent as democratic regimes, and the coercive nature of the Russian regime allows it to absorb more casualties and conduct military mobilization with much less penalties comparing to democratic regimes.

How do we increase the accuracy of deriving Russia's political preferences, and consequently strategic intent? This paper proposes to address this analytic issue by examining the developments in its military and security policies. It basically implies that one may gain accurate insights into consequent and (long-term) future military and

⁴ For one of the best explanations of how force employment is a more accurate predictor of military victory than force preponderance, see Stephen Biddle: *Military Power: Explaining Victory and Defeat in Modern Battle*, (Princeton: Princeton University Press, 2004).

⁵ See Richard J. Heuer: "Psychology of Intelligence Analysis," *CIA Center for the Study of Intelligence*, 1999, p. 70–71.

security actions by isolating the intent that is materialized through related costly defence and security investments and developments. One way to look at the proposed analytic framework is to consider that a real risk, as materialisation of intent, is only possible if backed up by proper capabilities.

However, this is overly simplistic, as the applied policy analysis in this case faces two major challenges. First, it is not simple to discover the nature of the real intent as implied in official statements, or strategic documents, which is the most frequent approach in current policy analysis. For instance, Russian political elites invoking the threat of NATO may reveal insecurity about the threat of potential attacks against Russia's territory and have a purely defensive scope; or they may simply be (falsely) invoking a legitimate and benign justification for military build-up in order to prepare its military as an effective coercive tool of foreign policy. Secondly, even if a country has aggressive intent, it may not necessarily initiate aggressive policies – perhaps due to its leaders being risk-averse, due to insufficient capabilities, or not being ready to shoulder the related costs.

To identify the nature of foreign policy intent, this research explores the logic of political preference formation and elicitation. It then aims to clarify when an aggressive intent is more likely to materialize, by further applying the analytic tool of signalling. The combination of these two analytic tools is expected to reduce the bias about Russia's current and future foreign policy intent, since it decreases the arbitrariness that frequently dominates in the assessment and understanding of Russia. Based on signalling theory,⁶ this paper relies on Russian military reform as a costly, and thus credible signalling device for revealing Russia's preferences. It implies that the Russian military reform serves as a good source of understanding of Russia's strategic intent, and revealing what Russia's view of an effective military structure able to advance that intent is, given the military buildup priorities and funding.

Military reform as strategic preference revelation

Developing an armed force during peacetime is very costly and it is done at the expense of economic development – following the classical guns versus butter trade-off. Existing research points out to the likelihood of preferring investments into the military domain at the expense of economic welfare, when the expected gains from the use of military force are high, and there is acceptance of conflict-related risk.⁷ Unsurprisingly, there is increasing evidence indicating that Russia perceives the military tool as a decisive factor in its foreign policy.⁸ The more persistent the investment in the military is, given a worsening economic situation, the stronger this investment is signalling Russia's prioritization of the military tool in its foreign policy.

Similarly, the exact content of military reform, including the prioritization of various military branches, the weapon systems, types of training and military development, can also reveal the protagonist's intent about the types of conflicts it intends to fight.

⁶ For this and an excellent summary of this topic, see Gartzke et al.: "Signaling in Foreign Policy," *Oxford Research Encyclopedia of Politics*, 2017.

⁷ Robert Powell: "Guns, Butter, and Anarchy," *American Political Science Review*, Vol.87, No.1 (Mar., 1993), pp. 115–132.

⁸ This article reveals a sign of this tendency, indicating that foreign ministry became a tool of the military: Alexander Baunov (2022): "Russian Diplomats are Now Reduced to Propagandists," *Financial Times*, 11 August.

The Russian experience in Ukraine, following its 2022 invasion, correlates well with the military investments and reforms Russia has conducted since early 2000s.

Observation suggests that Russian defence and security developments were guided by a centrifugal power-building logic, which is based on a very pragmatic and solid territorial rationale. This rationale implies that Russia should consolidate first its ability to preserve political control and stability at home; then be able to deter attacks against its territory and infrastructure or successfully repel them; third, be able to resist against coercive⁹ threats (including of nuclear nature) that might aim to force Kremlin change its policy; and fourth be able to conduct expeditionary operations in the near abroad (former Soviet countries) to either establish facts on the ground or credibly threaten military action that would result in target country's change of policy. In other words, the idea is that to be effective abroad, the Kremlin should first establish its total control domestically and crash any potential opposition at home. The following sections examine Russia's strategic thinking, military investments, deployments, along with domestic militarization and reveal how they support or advance the listed military priorities.

Strategy and doctrine

Assessing the security and military strategic documents as well as their related signals – the resource allocation to implement them – is a critical step in identifying Russia's evolving perception of the strategic environment, and the intent to respond to it. It is a first step in the effort to better understand how a specific military force build-up can inform us about Russia's future intended actions. It is also a departure from the interpretative evaluation of Russia's military and security developments that is predominant in policy analysis.¹⁰ The paper reveals that the Russian strategic planning has “anticipated” accurately many of the consequent Russian efforts to build its military capabilities. Russia's perceptions (interpretations) of the strategic environment that it operates in also proved to be a good indicator of its defence modernization and building efforts, and the intent behind them.

In 2009 the Russian leadership gave up the “concept”-based format of the national strategic document and instead produced for the first time a *Strategy on National Security (SNS) of the Russian Federation until 2020*.¹¹ The Strategy declared that a new global

⁹ I use “coercive” in line with strategic studies literature: I mean to both *deter* Russia from taking certain actions as well as *compel* it to do actions it is unwilling otherwise to do. A critical contribution to developing the theoretical foundation of strategic coercion was made by Thomas C. Schelling: *Arms and Influence*, (New Haven, CT: Yale University Press, 2008, reprint of the original 1966 edition). For an excellent explanation of coercion and its elements for policy practitioners see Tami Davis Biddle: “Coercion Theory: A Basic Introduction for Practitioners,” *Texas National Security Review*, Vol.3, No.3 (Spring 2020), pp.94-109, <https://tnsr.org/2020/02/coercion-theory-a-basic-introduction-for-practitioners>, accessed on 15 January 2021.

¹⁰ An informative analysis on assessing adversaries' intentions in international politics is Keren Yarhi-Milo: “In the Eye of the Beholder: How Leaders and Intelligence Communities Assess the Intentions of Adversaries,” *International Security*, Vol.38, No.1 (Summer 2013), pp. 7–51. Yarhi-Milo shows that policymakers often base their interpretations on their own theories, expectations, and needs, sometimes ignoring costly signals and paying more attention to information that, though less costly, is more vivid (i.e., personalized and emotionally involving). Although she focusses on how leaders assess foreign intentions, she also examines the literature on how intentions can be identified from behavior; it is that latter aspect of interest to this paper.

¹¹ A copy of this document can be accessed on the web-site of the PIR-Center, <http://www.pir-center.org/media/content/files/9/13510115440.pdf>, accessed on 28 January 2021.

environment was emerging, marked by a competition over the values and models of political development. It viewed as a growing tendency the efforts to solve regional problems and crises without the participation of non-regional actors. Among others, Russia viewed as key challenges to its national security the unilateral actions of the use of military force in solving existing crises, as well as the increasing global confrontation in the information domain. It argued that a challenge to international security is the weakness of the existing global and regional architecture, due to its predominant dependence on NATO, as well as the imperfection of existing instruments and mechanisms of international law. Many of these ideas were reflected in the earlier speech of President Vladimir Putin at the 2007 Munich Conference on Security Policy.¹² This reference suggests the genuine connection between Russia's ruling elites' perceptions on defence and security and its national strategic documents, making the latter an informative and useful signalling device rather than a political convention or artefact.

The 2009 Strategy solidified the tendency of switching from non-military strategic preferences of national development – economic, social, health, science – towards the prioritization of a military-centred national policy and the militarization of the Russian society.

The Russia's 2015 National Security Strategy¹³ represents an escalation in both Russia's elites' perceptions of the international environment and their preferences for responding to these. The document accused the United States and its allies opposing Russia's efforts to integrate the post-Soviet area, alleging this was done by creating sources of tensions. It accused the US and EU of supporting the “anti-constitutional coup” in Ukraine, which, according to the Russian authors, sparked the armed conflict in that country.

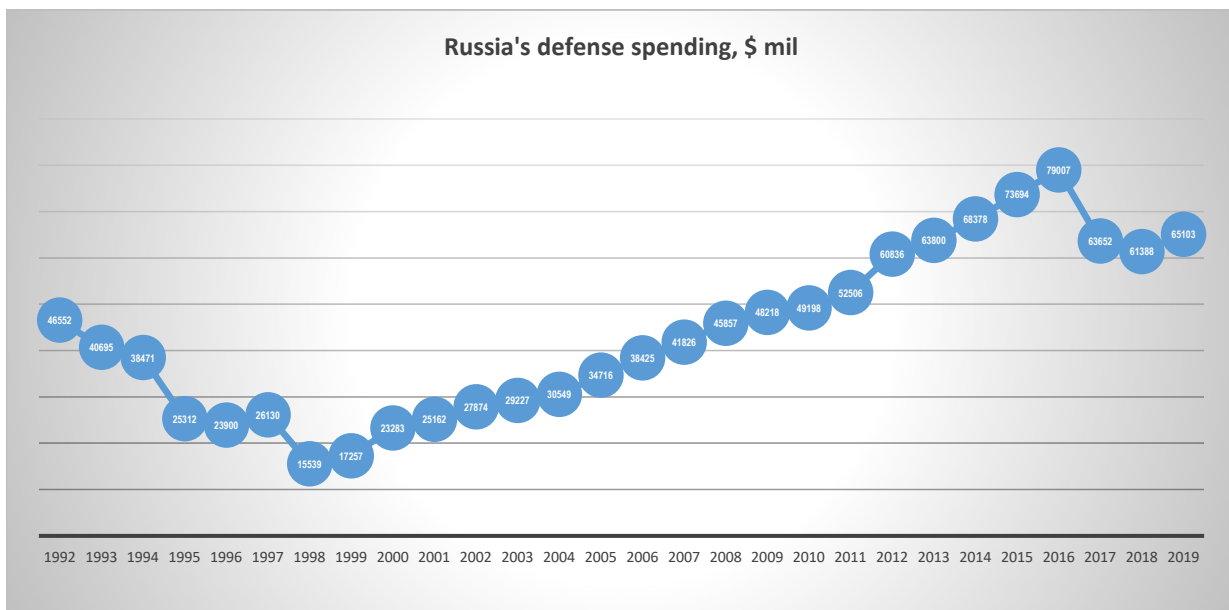
Russia's state armaments programs

Having suggested at the beginning of this section the few end states that are most preferred by the Russian military planners and policymakers, and reflecting on strategic documents driving them, it is useful to also look at the defence and security development actions, as the related evidence. A good starting point is to examine the Russian government's so-called state armaments program (SAP), or how it is often referred in the Western literature – modernization and procurement programs.

¹² The Administration of the Russian President, <http://en.kremlin.ru/events/president/transcripts/24034>, accessed on 29 January 2021.

¹³ The Administration of the Russian president, <http://static.kremlin.ru/media/acts/files/0001201512310038.pdf>, accessed on 5 August 2022.

The first SAP was launched in 1996, covering the period of 1996-2005. Another SAP was launched in 2002, providing funding for arms procurement over the period until 2010. While the Russian military requested RUB 7.5 trn (\$242 bln, 2002 exchange rate), the government only provided RUB 2.5 trn (\$80.6 bln). These programs were reportedly assessed as very ineffective and failing to deliver all the armament requested by the military.¹⁴ It has been reported that the newly-appointed defence minister Serdyukov once showed his frustration to his generals, saying “I don’t understand why we spend on defence more than India, but our output is twice smaller”.¹⁵ In fact, analysts suggested that Serdyukov was specifically selected to lead the Russian military due to the Kremlin’s irritation about the bottomless appetite of the Ministry of Defence, while it continuously failed to show improvements.¹⁶ This reveals the strong preoccupation of the Russian ruling elite with defence modernization even before the 2008 war against Georgia.



Picture 1. Russia’s defence spending (\$mil), 1992-2019. Source: SIPRI.

Moreover, it is typically a specific policy objective that drives the necessity of improved suitable tools (the need to launch a war leads to arming), not the sudden realization that a tool is poorly developed (poor arming led to failed war, which led to the decision to re-arm). Arming is not a goal in itself, as it makes sense only with reference to the policy outcomes it could produce. To show this, let’s look at a simple example. Russia’s leaders were faced with multiple failures in important domestic policies – consider the allegedly high-priority national projects¹⁷ – but these did not lead to comparably-massive attempts to fix the problem. Therefore, it is more likely that a stronger driver for Russia’s consequent investments into its military tool were due to

¹⁴ “Gosusarstvennye Programmy Vooruzheniya Rossii. Dosje,” *TASS.ru*, 26 February 2018, <https://tass.ru/info/4987920>, accessed on 10 March 2021.

¹⁵ Golts 2017, pp. 120–121

¹⁶ *Ibid.*, p. 119.

¹⁷ See Maria Engqvist: “Why Russia’s National Projects Went Out in the Cold,” RUFBS Briefing No.51, FOI, April 2021.

the realization by the Russian leadership, following the 2008 war, that armed coercion was a much more effective foreign policy tool than diplomatic talks.

In fact, Sergey Karaganov of the Council on Foreign and Defence Policy – a think tank affiliated with the Russian government – argued that it was the increase of its military capabilities that allowed Russia to apply two powerful strikes to the West: the annexation of Crimea and Russian military involvement in Syria. These two, in Karaganov’s understanding, played a key role in undermining the Western influence in global politics, economy and cultural domains.¹⁸

Besides, the military modernization efforts were visible shortly before the 2008 war. In 2006 the Russian government provided another RUB 4.94 trn (\$185 bln) for arms procurement over the period of 2007-2015. The intention of the SAP-2015 was to procure a range of military hardware, across the Russian defence and security sectors, with the following distribution of procurement and maintenance of military equipment and armaments: Strategic Nuclear Forces and Space Forces – over 20%, Army – over 40%, Navy – about 15% and Air Force – about 20% of the related funding. Even though it may seem like Army receives priority, this is only the case following the start of Russia’s 2014 covert war against Ukraine. To see this, the following clarifications are very important. The rate of modern type of armaments in Russian strategic nuclear forces as part of its total equipment, along the estimations of SAP-2015, was supposed to achieve 60-80%, which was the highest in the Russian military. In other services this rate was estimated to be around 30-50% in that funding cycle.¹⁹ The major systems that were procured included intercontinental ballistic missiles Topol-M (SS-27 Sickle), the air defence missile system S-400 (SA-21 Growler), mobile short-range ballistic missile systems Iskander (SS-26 Stone), and modern types of aircrafts, tanks, armed vehicles and self-propelled artillery. It is clear that the Russian military’s priority was to advance the Army’s air defence and precision strike capabilities, which is consistent with the listed five priorities of the Russian military development.

This is not surprising, since the Russian military analysts and professionals have been arguing along these lines already in 1990s, after observing and learning from the US military operations in Yugoslavia and Iraq. The focus was on high-precision, air-mobile, long-range weapons, which Russians labelled “non-contact warfare”.²⁰ In addition to these, Russian military professionals suggested the defence priorities of their country should be the reliance on nuclear weapons and the employment of nuclear deterrence of an external aggression.²¹ This combination of nuclear weapons, conventional long-range precision strike, and strategic air defence was viewed as essential by the Russian military.²²

¹⁸ Sergey Karaganov: “Voennyi Faktor kak Osnova Geopolitiki,” *Russia in Global Affairs*, 4 May 2020, <https://globalaffairs.ru/articles/voennyj-faktor-osnova-geopolitiki>, accessed on 10 March 2021.

¹⁹ “Gosudarstvennaya Programma Vooruzheniya: Chetyre Trilliona Rubley do 2015 Goda,” *Natsional’naya Oborona*, 2 May 2008, http://www.programs-gov.ru/news/2008_17.php, accessed on 3 March 2021.

²⁰ Vasilij Zhiharskiy: “Beskontaknye Voiny,” *Nezavisimoe Voennoe Obozrenie*, 29 September 2000, https://nvo.ng.ru/wars/2000-09-29/2_war.html, accessed on 20 January 2021.

²¹ Yuri Baluevskii (ed.): *Voennaja Bezopasnost’ Rossijskoi Federatsii v XXI Veke*, Moscow: Center for Military-Strategic Studies of the General Staff of the Russian Federation, 2004, p. 24.

²² Clint Reach, Vikram Kilambi, and Mark Cozad: “Russian Assessments and Applications of the Correlation of Forces and Means,” *RAND Research Report*, RR-4235-OSD, 2020, p. 118.

However, the SAP-2015 had also underperformed, for a number of reasons. Many of the planned armament systems were not delivered and the next SAP was also meant to compensate that. For instance, during 2007-2011, only one brigade of Iskander ballistic missile system out of five planned was delivered.²³ Just four of the planned 18 S-400 regiments were received by the Russian military during this period, which indicates a shortage of 112 launch systems. The Navy received only 2 out of the planned 24 ships, the Air Force obtained only 22 out of the intended 116 aircrafts, and only 60 out of the expected 156 helicopters.

It is no wonder that in 2010 the Russian government reviewed the program, and launched the SAP-2020, for the period from 2011 to 2020. Some RUB 19 trn (\$597 bln) were provided to fund this initiative. About half of these money was intended to go to the Navy and Air Force (25% and 24% respectively), to fund the procurement of eight nuclear-powered ballistic missile submarines of the Borey class, eight Yasen-class nuclear-powered cruise missile submarines, and over 50 surface ships that include 15 frigates and 35 corvettes.²⁴ Air Force planned to get some 600 aircrafts, including Su-35 and Su-34. Over 1000 helicopters have been planned for purchase. The Army received 15% of the budget and planned to get 2300 tanks, 2,000 artillery systems, 10 Iskander brigades, 56 regiments of S-400 air defence systems and 38 regiments of the S-500 system. However, due to economic hardship and sanctions, by 2018 only 55% of the envisaged RUB 19 trn were spent.²⁵ In fact, already back in 2013 the Russian military planned to postpone the procurement of some major weapon systems for the period after 2020, in particular due to the delays in deployment of the Borey-class submarines.²⁶ Only half of the planned submarines were delivered by 2020.²⁷

The challenges were many, but the main point is that the planning for procurement did accurately reveal the preferences for the listed ranking of priorities, as reflected in Russia's strategic documents. In 2021, the Russian military officials reported that the rate of modern equipment in the strategic nuclear forces reached 83%, in the Air and Space Forces – 75%, in the Navy it reached over 63%, while in the Army – 50%.²⁸ While there is very likely that some of these figures were exaggerated and included not new but modernized equipment, the numbers still tell a story about the intended logic of the modernization of the services of the Russian military. SAP-2020 continued to strengthen the Russian nuclear deterrence and the ability to withstand coercive actions by developing air defence, air superiority, and long-range strike capabilities. If Russia can be coerced to stop some of its foreign military operations, then it's foreign

²³ An SS-26 brigade reportedly consists of 16 mobile launch systems, each carrying two missiles, capable of using a nuclear warhead. Russian official sources claim that a salvo from a brigade (32 missiles) could obliterate a division-size unit. See Izvestia, "Raketnoe Ob'edinenie: Brigadam 'Iskanderov' Uvelichili Ognevuju Moschi," 16 December 2019, <https://iz.ru/952462/aleksei-ramm-bogdan-stepovoi/raketnoe-obedinenie-brigadam-iskanderov-uvelichili-ognevuiu-moshch>, accessed on 10 March 2021.

²⁴ TASS.ru, 2018.

²⁵ Pavel Luzin: "Gosudarstvennaya Programma Vooruzheniy – 2027," Riddle, 18 April 2018, <https://www.ridl.io/ru/gosudarstvennaya-programma-vooruzheni>, accessed on 10 March 2021.

²⁶ Kommersant, "Gosprogramma Vooruzheniy Ostaetsya na Sverhsrochnuju," 23 May 2013, <https://www.kommersant.ru/doc/2194742>, accessed on 5 January 2021.

²⁷ Izvestiya, "Na Plavu: Poluchit li Rossiyskiy Flot Atomnye Podlodki," 26 June 2019, <https://iz.ru/892758/ilia-kramnik/na-plavu-poluchit-li-rossiiskii-flot-atomnye-podlodki>, accessed on 20 February 2021.

²⁸ "Predvaritel'nye Itogi GPV-2020," Radioelektronnye Tekhnologii, No.1, 2020, <https://dfnc.ru/c106-tekhnika/predvaritelnye-itogi-gpv-2020>, accessed on 12 March 2021.

policy autonomy would be compromised. I argue that Russia expected some of its intended military actions might face resistance from the West and prepared to reduce it. Thus, this also revealed an initial stage of the preparation for regional conflicts.²⁹ To be more accurate, General Nikolay Makarov, the Chief of the Russia's General Staff suggested that the potential conflicts Russia faced were in the proximity of the Russian borders in the Commonwealth of Independent States countries.³⁰

The new SAP-2027, aimed for the 2018-2027, have confirmed this shift. Partially, this could be explained by the fact that the top priority of protecting Russia's ability to withstand strategic coercion has been materialized to a significant extent. The war against Ukraine, and the 2015 campaign in Syria indicated Russia that the West did not dare to confront Russia directly. Furthermore, these also suggested that boots on the ground are still necessary if the goal is to control terrain, or to create new favourable status quos. The latest military modernization program aims, apparently, at military domination on the European continent. In addition to significant investments in Army and Air Force, this is suggested by the focus on anti-access and area denial (A2/AD) capabilities.³¹ The official framing of the RUB 19 trn (\$288 bln, 2018 exchange rate) is that it will be used to address priorities such as nuclear deterrence, high-precision conventional weapons and the delivery of arms and equipment for conventional forces.³² The distribution of funding is declared to be balanced across the services, which would suggest that Army is advantaged, since its weapon systems are cheaper than for the rest of the services. Experts suggest that the military plans to prioritize the procurement of advanced tactical command and control systems, and the individual infantry combat system "Ratnik", adapted for the Russian airborne forces.³³

The poor performance of the Russian military during its February 2022 invasion against Ukraine drew significant criticism of Russia's military reform efforts. The Russia's underperformance earlier this year has a few objective explanations. First, the investments into new and modern infantry weapons have been prioritized only lately, during the last funding cycles. This means that insufficient modern weaponry has been provided to the troops and that the new equipment has not been fully and effectively incorporated into a new Russian military operations concept and training. For instance, the ongoing war in Ukraine as well as the Russia's reactions to drone attacks against its forces abroad indicate that Russia is only currently conceptualizing the use of unmanned air vehicles in warfare, as well as protection against them. Furthermore, military investments into land forces have apparently not prioritized enough the troops training component, and it did not transfer into effective combat capabilities. The quality of individual training of the Russian soldiers is lacking. Therefore, the increased number of military exercises Russia conducted did not transfer into higher quality combat performance of its land forces. It appears that the large

²⁹ Yuriy Fedotov: "Gosudarstvenaya Programma Vooruzhenii-2020: Vlast' i Promyshlennost'," *Index Bezopasnosti*, Vol.19, No.4 (107), 2013, p. 43.

³⁰ Quoted in RAND Research Report, RR-4235-OSD, p. 118.

³¹ Luzin, 2018.

³² Kommersant, "U Trillionov Esti Dva Soyuznika – Armiya i Flot," 18 December 2017, https://www.kommersant.ru/doc/3500710?from=doc_vrez, accessed on 20 February 2021.

³³ Kommersant, "19 Trillionov Prininajut na Vooruzhenie," 15 November 2017, <https://www.kommersant.ru/doc/3467573>, accessed on 12 February 2021.

number of strategic exercises were mostly used as a strategic signalling device, attempting to coerce or deter the West.

Preliminary conclusions

The prioritization of Russian military reform investments seems closely correlated with the performance of various branches of Russian Armed Forces. The Army was the most underfunded military branch, and it started to get relatively more funding after 2015, following Russian challenges in Ukraine. Given this, it is not surprising that, with the exception of its elite units, the Russian infantry underperformed, when facing an opponent that was ready to fight.

Despite its initial failures, the Russian military has drawn important lessons from its military experience in Ukraine. Observers have identified that since its start of invasion in Ukraine in February 2022, the Russian military has adjusted its operational stance and objectives at least three times, employing different approaches to warfighting. The Russian military failed at achieving its main military objective – political decapitation of Ukraine – but was decisive and organized in conducting massive withdrawals of troops, regrouping and repositioning. Consequently, the Russian military switched to strategic bombing, targeting critical infrastructure and other civilian targets, to coerce the political leadership in Kyiv (and its Western allies). In parallel, Russia transitioned to a defence-in-depth strategy, effectively hindering the Ukraine's counter-offensive momentum. Along with its conventional military actions on the frontline, the Russian military launched an effective – albeit brutal – counter-insurgent strategy in occupied territories, involving extreme violence against civilians and massive displacement of population from Russia-controlled Ukraine's territories, in what seems to be a strategic choice of Russian military leadership.

The 2022 overt invasion of Ukraine has revealed better both the Russia's military weak and strong sides. In addition to confirming the adaptability and learning capacity of the Russian military planners, the war experience suggests potential venues for the forthcoming Russian military reforms and modernizations. Russia is set to continue to build a stronger ground troops component of its armed forces, focusing on motorized infantry, marines, and airborne forces. This implies Russia's intent to continue aggressive military actions in its neighborhood, its expectations of a longer war in Ukraine, or both.

The evolution of Russian military and security thinking, as reflected in its official strategic documents, combined with the Russian leadership's view on modern war tends to reflect a degree of continuity. It provides a level of detail, betraying the elevated antagonism of Russia towards the West and its determination to acquire capabilities to establish strategic facts on the ground, which could reduce the influence and ability of the West to affect the post-Soviet area. Militarily, it puts emphasis on developing and maintaining a nuclear potential sufficient to deter its opponents, but also on creating a conventional military capability to be used for strategic containment.

The Russian strategic posture, therefore, seem consistent with the intent to discourage major powers from interfering in Russian areas of interest by threatening the use of nuclear weapons; to use mobile armed forces to impose its will in regions of interests, in particular in post-Soviet area; and to develop sufficient heavy firepower conventional capabilities to inflict costs against countries attacking its borders. Overall,

Russia seems to have a strategic posture that prioritizes coercive measures generally and its military tool of foreign policy, in particular.

The expected increasing reliance of Russia on military coercion in its foreign policy demands an adaptation in EU's current perceptions of Russia and its institutional responses. That shift towards coercion was exactly due to the fact that Russia failed to convince the EU accept its designs on issues of regional dominance and Russia's domestic stability. Russia thus reverted to the strategy of creating facts on the ground that it favours, and then negotiate from the position of force. Its decision to overtly invade Ukraine in February 2022 is an example of this policy preference. A most effective response in preventing Russia from changing the status quo that is favourable to the EU, is by creating obstacles and costs towards Russia's military operations. An example of an effective proactive response is the deployment by NATO of the Enhanced Forward Presence in the Baltic States and Poland. These deployments serve as physical barriers, that are extremely costly to remove, as this would trigger a direct war with the West, which Russia is not ready to wage.

RUSSIAN CONCEPTS ON CIVIL-MILITARY RELATIONS AND MILITARY CULTURE

Elisa Movtayeva

The presentation by Elisa Movtayeva in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=77CC9BdPIps&list=TLPQMTIwNTI-wMjTxxF0nHeXGGA&index=2> starting from 14:40.

Introduction

Russian military's poor success during the invasion of Ukraine was a surprise to researchers. This has led to a discussion about the need to improve the analyses to avoid the same mistakes again.¹ To gain a better understanding of the issue, we will explore how scientific research in Russia has explained the relationship between the Russian military and society.

Civil-military relations are never in a state of final good order. It is a constant process of interaction between the armed forces and civil society to search for the right balance. At the same time, maintaining control over the army to provide security is one of the most important tasks of the state.² Despite this, the army always has the potential to overthrow its civilian control. One of the main questions that remain is how to guard the guards.³

In the Russian context, the civilian part is the weakest one. The power of leading the military is tightened to centralized civilian leadership – the president.⁴ The military is divided into several factions that compete for the favor of the president.⁵ Russian civil-military relations are deep in its strategic culture and are influenced by its imperialist and Soviet legacies. It also has a long tradition of positioning itself as a great power.⁶

¹ Renz, B. (2023): Western Estimates of Russian Military Capabilities and the Invasion of Ukraine. Problems of post-communism, DOI: 10.1080/10758216.2023.2253359.

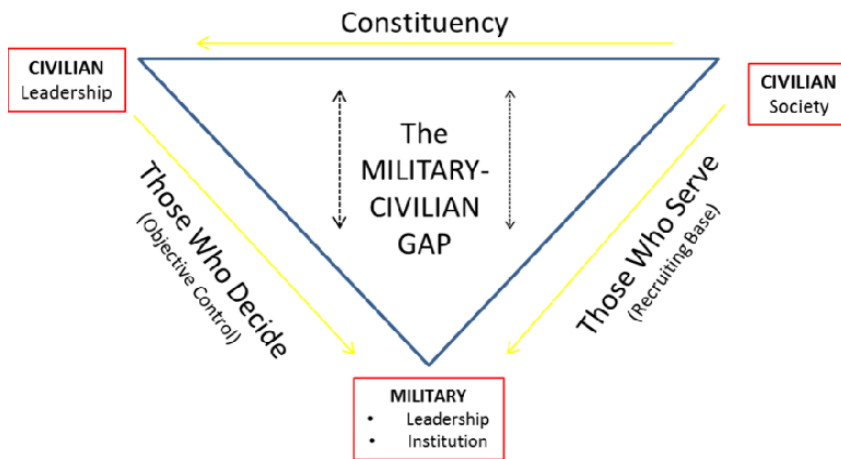
² Blank, J. S., Gomart, T. (2011): *Civil-military relations in Medvedev's Russia* – report. Strategic Studies Institute, U.S. Army War College, pp. 77–78.

³ Gaub, F., (2016): Civil-military relations in the MENA: between fragility and resilience. European Union Institute for Security Studies (EUISS) <https://www.jstor.org/stable/resrep06944.5>.

⁴ Renz, B. (2018): *Russia's military revival*. Polity Press.

⁵ Shamiev, K. (2023): Suspensions, Detentions, and Mutinies: The Growing Gulf in Russia's Civil-Military Relations <https://carnegieendowment.org/politika/90266>.

⁶ Blank, J. S., Gomart, T. (2011): *Civil-military relations in Medvedev's Russia* – report. Strategic Studies Institute, U.S. Army War College, pp. 77–78.



Picture 1. Impact of Diversity on the Civil-Military Relationship by Charles M. Evans.

The article uses concept analysis to outline the meanings of civil-military relations and military culture in Russian academic discussions.⁷ When analyzing Russian academic texts, precise word usage is crucial in extracting information.

The historical development of different approaches

In 1957, Samuel Huntington wrote a classic book on civil-military relations in the United States. He noted that the social landscape had been changed and that civil-military relations needed to be aligned with social democratic values while ensuring national security.⁸ He was one of the first scholars to analyze Soviet civil-military relations as well as other transitional states. From his perspective, the Soviet model of controlling the army meant that there was no autonomy for the military, and this represented a model of subjective control. During the Stalin era, the Red Army was politically controlled and unable to develop its professionalism.⁹

From the end of the Second World War until the 1990s, many authoritarian states underwent a transition to democracy. The change had a broad impact on civil-military relations. Authoritarian regimes have transitioned towards democratic objective civilian control. Following the fall of the USSR, Russia also embarked on its transitional era. Samuel Huntington saw good potential for establishing modern objective democratic civil-military relations in Russia in the 1990s, but the process turned inverse after the 2000s.¹⁰ There is a certain irony, that the ideas that support centralized state power take backward influence from thoughts expressed by Samuel Huntington in his book “Clash of Civilizations” published in 1998.¹¹

⁷ Puusa, A. (2008): Käsiteanalyysi tutkimusmenetelmänä. *Premissi* 4, 2008.

⁸ Huntington S. (1957): *The Soldiers and the State*. Cambridge: Belknap Press of Harvard.

⁹ Castillo, J. J. (2014): *Endurance and war, the national sources of military cohesion*. Stanford University Press, pp. 142–144.

¹⁰ Huntington, S. P. (1995): *Reforming civil-military relations*. Diamond, L., Plattner, M. F., (1996): *Civil-Military Relations and Democracy*, The Johns Hopkins University Press and the National Endowment for Democracy, pp. 3–11.

¹¹ Huntington, S. P. (1998): *The clash of civilizations and the remaking of world order*. Touchstone.

Civil-military concepts

There is an English CMR abbreviation that can be used for the civil-military relationship. The term is well-settled in Western scientific discourse and covers the interaction between society and the military. The thought of this interaction is developed in a democratic environment, so in the Russian context we must keep in mind, that it is used in transitional circumstances. Modern Russia in 2024 is nearer to an authoritarian state. Civil-military relations in democracies and authoritarian states are completely different.¹² By analyzing Russian scientific discussion, we will notice how this shift happened in scientific discourse among Russian scholars.

In Russian language, the term *grazhdansko-voennye otnosheniya* referring to civil-military relations, is used in Russian texts at least in two ways. Besides its classic version, there is also *voenno-grazhdanskije otnosheniya*, which means military-civil relations. It is mostly about the interaction between the army and society. *Voенно-grazhdanskije otnosheniya* - military-civil relations is however the most popular expression, but it puts the military and the army in the first place. In the end of the 2020s, a more established version exists with the abbreviation GVO, which stands for *Grazhdansko-voennye otnosheniya*.¹³

Many Russian scholars who study civil-military relations tend to rely on traditional theorists such as Samuel Huntington and Morris Janowitz. These theorists discuss the importance of democratic civilian control and the professionalization of the army. As a result, Russian scholars must explore the meaning of civil society in the Russian context. The term used to describe civil society is *grazhdanskoe obshestvo* - GO – civil society. A civil society is a topic of broad discussion among Russian scholars, yet they all agree that it does not exist. Civil society cannot be created by the legislature or from above. It required centuries of development and the establishment of institutions that did not exist in Russia. Changes would also have needed to occur in the people themselves, which may have taken several generations. Civil society would also require distributions of power, independent parliament, local authorities enjoying the trust of the locals, and independent mass media. At least this was the required minimum needed according to Russian sociologist Juri Levada.¹⁴

The idea of civilian control is extensively introduced in Russian civil-military articles. It includes some strategic things like a high level of military professionalism, the subordination of the military to civilian political leaders, and the acceptance of political leaders of professionalism and autonomy for the military, when these issues are completed, the result is that the army stays away from politics.¹⁵ From Samuel Huntington's point of view Russian civilian control in the 1990s was in better shape than it was in the Soviet Union. That was so, because of civilian influence on the army, better

¹² Danilova, N. (2015): *The Politics of War Commemoration in the UK and Russia*. Palgrave Macmillan.

¹³ Belozarov, V.K. (2017): *The Development of The Practice and The Theory of Civil-Military Relations in Post-Soviet Russia*. *Outlines of global transformations: politics, economics, law*. Center for Crisis Society Studies vol. 10(3).

¹⁴ For example, cf. Ковалев (2016), Дзялошинский (2001), Певень (2009), Ольшевский (2015).

¹⁵ For example, cf. Нечаев (2013), Ковалев (2016), Belozarov (2017), Danilova (2007).

transparency, and Duma's supervision. There were also public debates over security and military issues.¹⁶

Russian military transformations have in turn also brought some new expressions to Western academic world. One of such examples is the word "siloviki" - security officials whose power has grown since the 2000s. The term is not formally strict, but it describes that they have a right to use weapons.¹⁷

Civil-military studies in Russia

The initial Russian studies on civil-military relations were critical of American capitalist ideas. The scientific interest behind these studies was justified by the need to understand social changes occurring in the West. In these early works, Western civil-military concepts were depicted as modern bourgeois ideologies of American society, and it was assumed that American civil-military relations had failed.¹⁸

In the 1990s, Serebrjanniov and Derjugin introduced the concept of civil-military relations in the field of military sociology. They emphasized the importance of civil control in its classic form. Civil control is considered necessary because no democracy can exist without the support of the military, which must be regulated. The issue was particularly critical during the shift from totalitarianism to democracy.¹⁹ Russian literature on civil-military relations was however limited when the first studies started in the 1990s.²⁰ Russian scholars began researching civil-military relations and military culture simultaneously. Their common aim was to restore the status of the army, but in the case of civil-military studies also to learn new democratic concepts.

The Soviet period is a crucial subject in civil-military studies, as it provides valuable lessons from past mistakes. During the Soviet era, civil-military relations were not discussed as the government believed that the civil-military relations were stable, and the army was under the control of the party. Additionally, the Soviet system did not allow any room for an active and equal society or individual experts to emerge. Soviet society was heavily militarized, not just due to high military spending, but also because half of the population worked in the armed forces or cooperated with them. Military thinking dominated all aspects of society, and the whole society was modeled as an army seeking victory. Militancy was the foundation of official political ideology, which was reflected in the language used by propaganda, such as "party soldier," "struggle for the harvest," "labor front," and "unity of the army and the people." Although the

¹⁶ Huntington, S. P. (1995): *Reforming civil-military relations*; Diamond, L., Plattner, M. F., (1996): *Civil-Military Relations and Democracy*, The Johns Hopkins University Press, and the National Endowment for Democracy, p. 8.

¹⁷ Galeotti M. (2009): *The politics of security in modern Russia*. Ashgate, p. 54.

¹⁸ Сидоренко А. (1988): *Критический анализ американских социологических концепций "военно-гражданских отношений"* Автореферат диссертации на соискание ученой степени кандидата философских наук.

¹⁹ Серебрянников В.В., Дерюгин, Ю.И.: *Социология армии*. Москва, 1996; Большая российская энциклопедия. Институт социально-политических исследований РАН, p. 183.

²⁰ Renz, B. (2004): Excerpt from chapter 2 of PhD Thesis, Bettina Renz, 'Civil-military relations in post-Soviet Russia: the case of "military politicians"', The University of Birmingham, September 2004, p. 1.

centralized army system helped to solve some difficult social problems, theoretical questions about the role of the army remained unsolved.²¹

During the final years of the USSR, the issue of reorganizing civil-military relations arose as the old social organizational models were collapsing. The possibility of losing control over the armed forces, who possessed nuclear weapons, was a danger. There was a potential that the army could become an independent political force. In response, researchers began to search for new scientific solutions, and government and military institutions started to adapt to changing circumstances. Positive changes were made, such as the position of the minister of defense being legislated over the General Staff. The army became more open to society, and some expert activities and civil institutions related to security and defense matters were developed.²²

Research and academic discussion in the 2000s

In May 2004, during his first presidential term, Vladimir Putin expressed the need to establish civil control over the armed forces, and people were expecting changes in this regard. However, over the next ten years, despite these words, no actual changes were made.²³ The debates about civil-military relations continued. Scholars continued analyzing the mistakes made in the USSR and more Western works were introduced. Elena Trikiло, Ekaterina Stepanova, Ovrakh, Kolesnichenko ja Peven' discuss the matter by using the term *voenno-grazhdanskie* – military-civil relations.²⁴ This expression emphasizes the military component.

In the year 2000, some researchers were focused on restoring the army's readiness to carry out its defense duties and were looking for ways to find a balance between the army and society. Others discussed the Russian operations that were focused on humanitarian and peacekeeping efforts, while some compared Russian civil-military relations to those of the United States. The need for more transparency when dealing with the military budget, opening security questions to larger publicity, and increasing scientific participation were also important issues. The lack of openness in these matters was considered damaging to the public image.²⁵

Despite civil-military debates having taken place and a consensus being reached on their importance, no changes seem to have been made. In the latest academic discussions, researchers express disappointment about society's apathy and mistrust towards the government and administration, while nostalgia still lingers. Among the old

²¹ Ольшевский В.Г. (2015): Государство - армия - общество: к адекватному пониманию гражданско-военных отношений. Теория и практика современной науки, pp. 222–223.

²² BelozeroV, V.K. (2017): The Development of The Practice and The Theory of Civil-Military Relations in Post-Soviet Russia. Outlines of global transformations: politics, economics, law. Center for Crisis Society Studies vol. 10(3), p. 1.

²³ Пыж В.В. (2013): Гражданский контроль над армией - неперемное условие функционирования демократического общества. Международный научно-исследовательский журнал, 2013, p. 96.

²⁴ For example, cf. Трикило Е. (2002): Военно-гражданские отношения в условиях демократии: социально-философский анализ 2002. Автореферат диссертации на соискание ученой степени кандидата философских наук.; Степанова Е. (2001): Военно-гражданские отношения в операциях невоенного типа — М.: «Права человека»; Оврах Г.П., (2007); Колесниченко К. Ю. (2007): Военно-гражданские отношения в России и США; Певень Л.В. (2008): Методологические вопросы исследования военно-гражданских отношений.

²⁵ Оврах Г. П. (2007); Колесниченко К. Ю. (2007): Военно-гражданские отношения в России и США, pp. 7–9.

unsolved problems, national security and stable civil-military relations continue to be the most important questions. Researchers agree that Russia has failed to establish the subjective control that was described by Huntington.²⁶ The process of democratization of civil-military relations in Russia reached its final stage by the middle of the first decade. However, since then, interest in civil-military relations has decreased and research in this field has slowed down. Despite this, Russia still faces many theoretical and practical challenges related to civil-military relations that need to be addressed.²⁷ According to the latest civil-military analysis, there is an increasing allocation between the armed forces and the rest of society. With the upcoming presidential elections in the spring of 2024, the armed forces are not concerned with the election, while the civil political authorities are focused on calming the society and are not interested in military affairs. Unfortunately, there is no apparent solution to this dispute.²⁸

Concept of Military Culture

The relationship between the military and society in Russia is studied through the lens of military culture, known as *Voennaja kultura obshestva* (VKO). This concept encompasses a broader range of military culture issues. By examining military culture, we can gain insight into how wars have impacted people's lives in Russia. Many texts on military culture, particularly newer ones, highlight traditional conservative values that have become relevant to modern cultural policy since 2024. Civilization approaches are also prominent in culturally oriented materials, with Samuel P. Huntington's civilization theory being a popular example.²⁹ During the Soviet era, the military culture was not studied as an individual topic. However, after the 1990s, there was a growing need to investigate the impact of wars from a cultural perspective. Consequently, a new concept of military culture was introduced into the scientific discourse.³⁰

Valery Greben'kov is a well-known expert on military culture. Most writers refer to his early works and use his definitions of military culture. According to his definition, military culture is made up of special parts of society's consciousness and culture that are linked to military-political institutions and processes. It encompasses the principles that guide military policy values and the armed forces, as well as the norms that ensure unity and interaction among institutions and organizations. These elements unify and integrate the entire military sector. Military culture also includes the military traditions of generations and other norms, ideas, concepts, and beliefs related to the defense system in general.³¹ Military culture, like political, economic, and legal culture,

²⁶ Пыж В.В. (2013): Гражданский контроль над армией - неперемное условие функционирования демократического общества. *Международный научно-исследовательский журнал*.

²⁷ Belozerov, V. K. (2017): *The Development of The Practice and The Theory of Civil-Military Relations in Post-Soviet Russia*. *Outlines of global transformations: politics, economics, law*. Center for Crisis Society Studies vol. 10(3), p. 1.

²⁸ Shamiev, K. (2023): Suspensions, Detentions, and Mutinies: The Growing Gulf in Russia's Civil-Military Relations, <https://carnegieendowment.org/politika/90266>; Екатерина Шульман об атаке дронов и мобилизации [video], Youtube, <https://www.youtube.com/watch?v=GwK3lHmZmjg>, [DW на русском].

²⁹ Kivinen, M. & Humphreys, B. (2021): *Russian Modernization a New Paradigm*. Routledge, p. 174.

³⁰ Данильченко, С.А. & Грипина, Е.С. (2022): К вопросу о понятии «военная культура». *Дискуссионная трибуна. Военная мысль*, No 2, 2022, p. 147.

³¹ Гребеньков, В. Н. (2009): *Методологический потенциал концепта Военная культура общества в исторических и политических исследованиях. Методологические проблемы гуманитарных*

has its unique characteristics and contradictions. It is important to harmonize these differences. Greben'kov has set a goal to unify the concept of military culture. He appreciates the University of Military Sciences and their experts in military culture matters. The university publishes regular works like "Rossijskij voennyj sbornik" – Russian military collection" that illustrate the history of military thinking and aims to bring the legacy of Russian military to the consciousness of the masses. These publications deal with military-theoretical questions and problems related to the army and its place in society.³²

Civil-military analysis is concerned with analyzing the interaction between society and the military to achieve harmony. Military cultural analysis focuses on the broader sociological impact of wars on society. This perspective is more historical and often examines the long-term effects of conflicts. For instance, the works of Elena Senyavskaya and Serebryannikov explore the long-term impact of wars.³³

The term "military culture" is a complex concept that requires a precise definition. Russian scholars have discussed its meaning and have proposed that it consists of two parts. The first part is specific to the army, while the second one encompasses the broader consciousness of society. According to Greben'kov, military culture is most visible during times of war but fades into the background during peacetime. Danil'chenko and Grishina argue that memorials and other events related to social remembrance are a constant part of people's everyday lives. They also suggest that having a status in the armed forces does not necessarily indicate loyalty to military culture. They advise against dividing words to avoid creating new problems in understanding them.

The remembrance and representation of history is a crucial theme in military-cultural approaches. Grebenkov emphasizes that the government and society have an important responsibility in reconstructing and strengthening history. This is why the study of military culture is essential. From his perspective, Russian military culture is highly regarded because it has successfully defeated all invaders.³⁴

Many military culturalists study Soviet history, but they often have their perspective. They are not only interested in learning from past mistakes in establishing military-society relationships but also want to demonstrate how wars have gradually militarized Russia since the 20th century. The characteristics of a fighter have become common among citizens, and there have been both positive and negative effects. Senyavskaja introduced a psychological term, "*chelovek vojujushij*" which describes a person as a fighting man. The impact of wars extends beyond the military organizations and affects society during preparation, war, and long after it ends.³⁵

исследований. Вестник Балтийского федерального университета им. И. Канта. Серия: Гуманитарные и общественные науки.

³² Данильченко, С.А. & Гришина, Е.С. (2022): К вопросу о понятии «военная культура».

Дискуссионная трибуна. Военная мысль No 2, 2022.

³³ Сereбрянников В. В. (1999): Войны России: социально-политический анализ; Сенявская Е.С. (1997): Человек на войне. Историко-психологические очерки. М.; Институт российской истории РАН, 1997.

³⁴ Данильченко, С.А & Гришина, Е.С. (2022): К вопросу о понятии «военная культура». Дискуссионная трибуна. Военная мысль No 2, 2022, p. 147.

³⁵ Гребеньков, В. Н. (2009): Методологический потенциал концепта Военная культура общества в исторических и политических исследованиях. Методологические проблемы гуманитарных

The differences in Russian civil-military and military cultural approaches

A question about civil-military relations remains crucial to Russian national security. Discourse and research on civil-military issues in Russia have decreased towards the end of the 2020s. The classic theories aimed to establish a connection between the armed forces and social society, with power being distributed in a balanced manner. A key component of this was the emergence of civil society in the early 1990s, but unfortunately, this possibility did not materialize.³⁶ Academic discussions on the military culture in Russia align with the country's broader cultural narrative. In the late 2020s, Russia shifted towards conservatism due to the weakening of old ideological projects and the failure to establish democratically led systems. This new conservatism is a complex process that involves emphasizing national cultural identity and confronting globalization and liberalism.³⁷

The military cultural analysis examines the impact of wars on Russian history and society from a broader historical perspective. It also illustrates how military culture still exists in various areas of everyday life. In terms of civil-military relations, the 1990s were a time of social crisis as the old regime and structures collapsed. However, this period also had the potential for establishing something new, such as civil society and a harmonious civil-military relationship. Therefore, in classic civil-military thinking, this was a time of new opportunities.

The crisis that took place in the 1990s is often discussed in terms of military culture. However, particular attention is given to the changes that occurred in the state military culture during this period. These changes have had a profound impact on Russian society, but in recent years there have been efforts to strengthen national culture. From a military cultural perspective, the centralization of state power has been viewed as a positive development. Military cultural experts aim to make the concept more universal to strengthen the national identity and reduce foreign influences. By emphasizing patriotism, writers with a military cultural focus seek to instill military values in people. There is a special emphasis on patriotic education in various forms.³⁸

In the 2000s, there were discussions about restructuring the army to adopt a professional model and reduce the number of conscripts.³⁹ This was thought to increase the professionalism of the army. The appointment of civil defense ministers was seen to actualize civil-military theories. However, these steps slowed down in the mid-

исследований. Вестник Балтийского федерального университета им. И. Канта. Серия: Гуманитарные и общественные науки.

³⁶ For example, cf. Belozеров, V.K. (2017): *The Development of The Practice and The Theory of Civil- Military Relations in Post-Soviet Russia*. Outlines of global transformations: politics, economics, law. Center for Crisis Society Studies vol. 10(3); Шамиев, К. (2023): Как и зачем реформировать гражданско-военные отношения, Реформы 2023.; Балашов А.И. (2014): Армия как социальный индикатор, Мир России.

³⁷ Kivinen, M. & Humphreys, B. (2021): *Russian Modernization a New Paradigm*, Routledge.

³⁸ For example, cf. Гребеньков, В.Н. (2009): *Методологический потенциал концепта Военная культура общества в исторических и политических исследованиях. Методологические проблемы гуманитарных исследований*. Вестник Балтийского федерального университета им. И. Канта. Серия: Гуманитарные и общественные науки; Данильченко, С.А & Гришина, Е.С. (2022): К вопросу о понятии «военная культура». Дискуссионная трибуна. Военная мысль № 2, 2022; Коротенко А.В. (2014):

Трансформации военной культуры современной российской армии: культурологический анализ.; Романова Е.Н. (2008): *Военная культура и ее основные характеристики*.

³⁹ Eichler, M. (2011): *Militarizing Men Gender, Conscriptation, and War in Post-Soviet Russia*, Stanford University press, p. 12.

2010s.⁴⁰ In military circles, there is criticism of the arrival of capitalist principles. The army is expected to remain separate from the general capitalist development. It is believed that the soldiers' ideological values should revolve around their willingness to defend the interests of society selflessly, even at the expense of their health and lives. Pursuing self-interest is against the values that a soldier should uphold, and the idea of a paid professional army is viewed as unpatriotic.⁴¹

One of the main goals of civil-military thinking was to create a professional army with its autonomy. From a military cultural perspective, the bond between the army and society lies in patriotism, history, and a sense of duty. In this view, citizens are expected to be loyal to the army, and the existence of a true civil society is considered secondary. The common interest is the main priority, so censorship is often seen as necessary.⁴²

Experts in civil-military relations have discussed how to implement Samuel Huntington's theories on democratic control. However, some military scholars, such as Andrey Korotenko, prefer Huntington's ideas on civilization theories. Korotenko believes that Russian military cultural identity is at risk due to modernization and consumerism. Former socialist states, especially, are vulnerable because they have lost their traditional socialist values. He argues that the existence of the military is threatened in a modern consumer society, and ensuring the status of military culture is a challenging task. The army is expected to become part of the service industry, providing security services to the state.⁴³ There is an intention to emphasize national cultural identity and confront Western-oriented globalization in the broader cultural context of Russia.

Over the past two decades, the Russian military has undergone significant changes in its civil-military and military cultural approaches. After the collapse of the USSR, there were attempts to introduce more democratic ideas, but these reforms failed to achieve their intended goals. As a result, interest in adopting new ways of managing the armed forces diminished, creating space for the resurgence of nationalistic ways of thinking. This old-new approach relies on a conservative understanding of history and old Soviet values. However, conservative thinking does not seem to offer solutions to old problems, and the unfavorable war in Ukraine is strengthening tensions between the military and society.

⁴⁰ Belozerov, V.K. (2017): The Development of The Practice and The Theory of Civil-Military Relations in Post-Soviet Russia. *Outlines of global transformations: politics, economics, law. Center for Crisis Society Studies* vol. 10(3).

⁴¹ Данильченко, С.А & Гришина, Е.С. (2022): К вопросу о понятии «военная культура». *Дискуссионная трибуна. Военная мысль* No 2, 2022.

⁴² Ibid.

⁴³ Коротенко А.В. (2014): Трансформации военной культуры современной российской армии: культурологический анализ.

PATRIOTIC AND NATIONALIST ORIENTATIONS IN RUSSIAN SOCIETY

Ieva Berzina

The presentation by Ieva Berzina in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=77CC9BdPIps&list=TLPQMTIwNTI-wMjTxxF0nHeXGGA&index=2> starting from 58:10.

Abstract

Patriotism and nationalism are two related but distinct forms of national attachment. The academic literature tends to draw a line between love of one's country, which emphasizes democratic values and respect for other nations in contrast to stressing superiority over other countries (Adorno et al., 1969, p. 107; Blank & Schmidt, 2003; Davidov, 2009; Druckman, 1994; Feshbach, 1987; Kosterman & Feshbach, 1989; Schatz et al., 1999). Both extremes of national attachment are present within each concept. This presentation differentiates patriotism as a love of one's country, which respects other countries' national identity and sovereignty. In contrast, nationalism is defined as a sense of superiority over other nations, which allows military aggression against them. In general, the rhetoric of Russian officials is in line with such differentiation of concepts because it characterizes the concept of nationalism as extremely harmful while emphasizing the patriotic upheaval of Russian society. For example, Putin has said that "nationalism is hatred of other peoples, and patriotism is love for one's Motherland" (Kremlin, 2016).

However, the Russo-Georgian war, the illegal annexation of Crimea, and the hybrid and full-scale warfare launched against Ukraine indicate Russia's aggressiveness towards neighboring countries, leading to an assumption that Russian officials substitute the concepts – what they describe as Russian patriotism, in fact, is an aggressive form of nationalism. From the point of view of the security of the neighboring countries, it is essential to understand to what extent nationalism is characteristic not only of the Russian elite but also of the society, which would be an indicator of the demand for an aggressive foreign policy in the long term.

The presentation will address a research question – to what extent is Russian society patriotic or nationalist according to the proposed theoretical differentiation of the concepts? The research question will be answered by studying the secondary data. The author will analyze the data of the International Social Survey Programme (ISSP) National Identity surveys conducted in 1995, 2003, and 2013 and other data and studies on Russian nationalism (Dubin, 2014; Kolstø & Blakkisrud, 2016; Kuzio, 2022; Laruelle, 2008, 2018; Miller, 2007; Pain, 2009; 2015; Petuhov & Barash, 2014; Tishkov, 2007; Tuminez, 2000). The data will allow us to estimate patriotic and nationalist orientations of Russian society from the longitudinal and comparative perspective before the increase of repressions, making it difficult to conduct reliable sociological surveys in Russia.

Literature

Adorno, T. W, Frenkel-Brunswik, E., Levinson, D. J. & Sanford, R. N. (1969): *The Authoritarian Personality* (New York, Norton).

Blank, T. & Schmidt, P. (2003): 'National Identity in a United Germany: Nationalism or Patriotism? An Empirical Test with Representative Data', *Political Psychology*, 24, 2.

Davidov, E. (2009): 'Measurement Equivalence of Nationalism and Constructive Patriotism in the ISSP: 34 Countries in a Comparative Perspective', *Political Analysis*, 17, 1.

Druckman, D. (1994): 'Nationalism, Patriotism, and Group Loyalty: A Social Psychological Perspective', *Mershon International Studies Review*, 38, 1.

Dubin, B. (2014): «Chuziye» natsionalizmi i «svoi» ksenofobii vcherashnih I segodnyaschih rossiyan [“Alien” nationalisms and “our own” xenophobias of yesterday and today's Russians]. *Pro et Contra*, January – April.

Feshbach, S. (1987): 'Individual aggression, national attachment, and the search for peace: Psychological perspectives', *Aggressive Behavior*, 13.

Kolstø, P. & Blakkisrud, H. (2016): *The New Russian Nationalism: Imperialism, Ethnicity and Authoritarianism*. Edinburgh: Edinburgh University Press, Ltd.

Kosterman, R., & Feshbach, S. (1989) 'Toward a Measure of Patriotic and Nationalistic Attitudes', *Political Psychology*, 10, 2.

Kremlin. (2016): Mediaforum regionalnih I mestnih SMI “Pravda I spravedlivost” [Media forum of regional and local media “Truth and Justice”]. Available: <http://kremlin.ru/events/president/news/51685>

Kuzio, T. (2022): *Russian Nationalism and the Russian-Ukrainian War: Autocracy-Orthodoxy-Nationality*. Oxon: Routledge.

Laruelle, M. (Ed.) (2008): *Russkiy nacionalizm: socialniy i kulturniy kontekst* [Russian Nationalism: Social and Cultural Context]. Moskva: Novoye Literaturnoye Obozreniye.

Laruelle, M. (2018): *Russian Nationalism: Imaginaries, Doctrines, and Political Battlefields*. Oxon: Routledge.

Miller, A. (2007): Naciya kak ramka politicheskoi zhizni [Nation as a frame of political life]. *Pro et Contra*, May-June.

Pain, E. (2009): Russia Between Empire and Nation. *Russian Politics & Law*, 47:2, 60-86, DOI: 10.2753/RUP1061-1940470203

Pain, E. (2015): Imperskii nacionalizm: vznikoveniye, evoliuciya I politicheskiye perspektivi v Rossii [Imperial nationalism: emergence, evolution and political perspectives in Russia]. *Obschestvenniye nauki i sovremennost*, 2.

Petuhov, V.V. & Barash, R. E. (2014): Russkiye i “Russkiy mir”: istoricheskiy kontekst i sovremennoye prochteniye [Russians and “Russian World”: Historical context and Contemporary Interpretation]. *Polis, Politicheskoye Issledovaniya*, 6.

Schatz, R.T., Staub, E. & Lavine, H. (1999): 'On the Varieties of National Attachment: Blind Versus Constructive Patriotism', *Political Psychology*, 20.

Tishkov, V. (2007): Chto est Rossiya I rossikiy narod [What is Russia and Russian Nation]. *Pro et Contra*, May-June.

Tuminez, A.S. (2000): *Russian Nationalism Since 1856*. Maryland: Rowman & Littlefield Publishers, Ltd.

WICKED PROBLEMS: POLICY STUDIES PERSPECTIVE ON RUSSIA'S MILITARY PERFORMANCE

Kirill Shamiev

The presentation by Kirill Shamiev in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://www.youtube.com/watch?v=nr4KG1mtKvc&t=434s> starting from 3:15:30.

Abstract

The full-scale invasion of Ukraine by the Russian armed forces had a profound impact on the perception of the Russian military. Despite formidable technical capabilities, Russia's military performance was perceived as lacking in strategic, operational, and tactical aspects that prevented Moscow from achieving overwhelming dominance in Ukraine. Surprising many analysts, the Russian military failed to adequately prepare for the invasion and exploit its comparative advantages over the Ukrainian armed forces. However, as the conflict progressed, the Russian military demonstrated varying degrees of tactical, operational, and strategic adaptability, indicating an ongoing institutional learning process. Barring a change in Russian leadership, Moscow will likely seek to rebuild and upgrade its military capabilities in line with its official war-mongering narratives and skyrocketing defense expenditures.

In this presentation¹, I focus on exploring the intangible factors that Moscow could address to significantly influence Russia's military modernization during a ceasefire or after the war with Ukraine. By drawing on the literature on 23 years of defense policymaking in Putin's Russia, incorporating insights from my previous PhD research interviews, and analyzing data on Russia's current military problems, I identify the most and least likely areas for improvement in the Russian military. This qualitative study examines the institutional and political steps the Kremlin will likely take to repair its damaged but still dangerous military. By addressing these factors, the study seeks to shed light on the potential paths to improving Russia's military capabilities in a post- or frozen conflict environment and to inform Western defense policymaking toward Russia.

Literature

Barabanov, Mikhail: *Russia's New Army*. Edited by Mikhail Barabanov. 1st edition. Moscow: Centre for Analysis of Strategies and Technology, Moscow, 2011.

Barany, Zoltan: *Democratic Breakdown and the Decline of the Russian Military*. Princeton University Press, 2009.

¹ Kirill Shamiev's presentation in the Russia seminar 2024 was the first version of the final article: The report: <https://ecfr.eu/publication/brass-tacks-why-russias-military-fails-to-reform/>.

Gazukin, Pavel: "Russian Armed Forces in the Post-Soviet Period. Problems of Reforming and Military Building: 1992-2001." *The Journal of Political Theory, Political Philosophy and Sociology of Politics Politeia* 20, no. 2 (2001): 44–71. <https://doi.org/10.30570/2078-5089-2001-20-2-44-71>.

Golts, Aleksandr: *Military Reform and Militarism in Russia*. Acta Universitatis Upsalensis, 2017.

Khramchikhin, Alexander: "«Parallel Army» as the Catalyst of the Military Reform." *The Journal of Political Theory, Political Philosophy and Sociology of Politics Politeia* 20, no. 2 (2001): 141–43. <https://doi.org/10.30570/2078-5089-2001-20-2-141-143>.

Shamiev, Kirill: "Against a Bitter Pill: The Role of Interest Groups in Armed Forces Reform in Russia." *Armed Forces & Society* 47, no. 2 (2019). <https://doi.org/10.1177/0095327X19852648>.

Trenin, Dmitry: "Decade of Unlearned Lessons. Civil-Military Relationship in the 90s Years and the Prospects for a New Phase of Military Reform." *The Journal of Political Theory, Political Philosophy and Sociology of Politics Politeia* 20, no. 2 (2001): 72–81. <https://doi.org/10.30570/2078-5089-2001-20-2-72-81>.

Tsymbal, Vitaly: "Economic Aspects of the Military Reform in Modern Russia." *The Journal of Political Theory, Political Philosophy and Sociology of Politics Politeia* 20, no. 2 (2001): 82–88. <https://doi.org/10.30570/2078-5089-2001-20-2-82-88>.

Renz, Bettina: "Russian Military Capabilities after 20 Years of Reform." *Survival* 56, no. 3 (May 4, 2014): 61–84. <https://doi.org/10.1080/00396338.2014.920145>.

Vendil Pallin, Carolina: *Russian Military Reform: A Failed Exercise in Defence Decision Making*. 1. Edition. Routledge, 2008.

———. "Russian Military Reform." *The RUSI Journal* 155, no. 1 (February 1, 2010): 58–62. <https://doi.org/10.1080/03071841003683476>.

RUSSIAN MILITARY ADAPTATIONS IN THE UKRAINE CONFLICT (2022-?): DEALING WITH THE COMPLEXITY OF MODERN WARFARE

Marina Miron and Rod Thornton

The presentation by Marina Miron and Rod Thornton in the Russia Seminar 2024 can be found on the FNDU YouTube-channel: <https://www.youtube.com/watch?v=nr4KG1mtKvc> starting from 3:45:45.

Introduction

With the growing threat of major inter-state warfare over the past decade or so, the militaries of several NATO states, most notably the United States and the United Kingdom, have been developing a new operational concept; namely, multi-domain operations (MDO).¹ This is a concept that is now also fully evident at the NATO level.² The basic idea behind the notion of MDO is to enhance the conduct of warfighting by improving the coordination of operational activities across all domains – air, land, sea, space and cyber.³ Such coordination can go so far as to generate synergies which will, theoretically, translate into greater battlefield effect – notably, where NATO is concerned, against the increasingly sophisticated and powerful militaries of the peer-state or near-peer state adversaries of Russia, China and Iran.⁴ However, in trying to generate the effect that the MDO concept promises, it is generally accepted that operational-level ‘modern warfare’ (the term used in this paper) has become a more *complex* enterprise. What happens on actual battlefields (the concentration of this paper) is deemed now to be more of a holistic, interactive endeavour than it has ever been. New thinking, new frameworks, new structures and new equipment are seen as necessary in order to ensure that this complexity is shaped to NATO forces best advantage.

In particular, effective MDO require new technologies. It is their introduction to and embedding within existing operational modalities that is perhaps the major factor

¹ See, for instance, United States Training and Doctrine Center, ‘TRADOC Pamphlet 525-3-1, The U.S. Army in MultiDomain Operations 2028’, 6 December 2018, <https://adminpubs.tradoc.army.mil/pamphlets/TP525-3-1.pdf>; Development, Concepts and Doctrine Centre, *Multi-Domain Integration Joint Concept Note 1/20*, United Kingdom Ministry of Defence, 2020, https://assets.publishing.service.gov.uk/media/6579c11a254aaa000d050c6e/20201112-ARCHIVE_JCN_1_20_MDI_Official.pdf; Maj. Gen. Herzi Halevi: ‘Multi-Domain Defense: Maj. Gen. Herzi Halevi’, *Dado Center Journal*, 1 October 2020, <https://www.idf.il/en/mini-sites/dado-center/vol-28-30-military-superiority-and-the-momentum-multi-year-plan/multi-domain-defense-maj-gen-herzi-halevi/>.

² See, NATO, ‘Multi-Domain Operations in NATO – Explained’, *NATO*, 5 October 2023, <https://www.act.nato.int/article/mdo-in-nato-explained/>.

³ Jack Watling: ‘European Allies in US Multi-Domain Operations’, *Royal United Services Institute*, 23 September 2019. <https://www.rusi.org/explore-our-research/publications/occasional-papers/european-allies-us-multi-domain-operations>; Davis Ellison and Tim Weijs: ‘Empty Promises? A Year Inside the World of Multi-Domain Operations’, *War on the Rocks*, 22 January 2024. <https://warontherocks.com/2024/01/empty-promises-a-year-inside-the-world-of-multi-domain-operations/>.

⁴ US TRADOC, ‘TRADOC Pamphlet 525-3-1’, p. vi-vii.

driving complexity. Obviously, new weapons systems are prevalent here; ones that are allowing for the more efficient degrading/destruction of targets over ever greater distances and with ever greater precision. That said, probably the major element in the increasing complexity is in how new ways of acquiring and applying information are utilised.⁵ Information technologies are now being introduced that feed into and enhance battlefield C4ISR capabilities. These not only allow for the enhanced command and control (C2) of force elements but also, and importantly, a shortening of the sensor-shooter link or ‘kill chain’ – a key factor in any effective MDO.

NATO militaries (particularly those of the U.S. and UK), even though intent on refining the MDO concept, have not as yet had the chance to put their ideas to the test in a major combat situation. The Russian military, however, certainly has. It has been putting into actual practice its own version of what in western militaries are referred to as MDO.⁶ In Russian military parlance such a concept is referred to as *mnogosfernye operatsii* (lit. multi-sphere operations). For this military, of course, the complexity of modern warfare has been very much in evidence during its major combined-arms invasion of Ukraine that began on 24 February 2022.

This paper is concerned with examining specific aspects of this ‘special military operation’ to see where the Russian military might be said to have made its most significant operational-level adaptations in light of its prior preparation for such an MDO. The paper will concentrate on what may be seen as the core element of *battlefield* complexity within any MDO – namely, C4ISR and the associated sensor-to-shooter link. It is seen to be the case that the better *integrated* the various elements that feed into these important facets of MDO then the greater the degree of efficiency produced and that of complexity concomitantly reduced. Complexity acts as a drag on efficiency. This paper, given constraints of space, largely concentrates on issues within the Land domain and indicates the degree to which the Russian military has tried, both before and during the war in Ukraine, to create a better integration of systems that enhance C4ISR and sensor-to-shooter capabilities.

In terms of structure, the paper begins with a review of the Russian military’s attempts to improve its *mnogosfernye operatsii* over recent years. It then goes on to briefly look at how the improvements were operationalised and then reviews how adaptation occurred as the 2022 war in Ukraine progressed. The principal question to be answered here is, to what degree was this military a ‘learning organisation’? This research predominantly makes use of primary sources in Russian and Ukrainian, supplemented by English language ones.

Preparing for multi-domain operations

As with their NATO counterparts, in recent years Russian analysts both within the military and those related to it have been wrestling with the issue of enhancing the integration of the various systems that act to produce battlefield effect. The Russian observers see, basically, that greater degrees of integration can, of course, reduce

⁵ Harri Raisio, Alisa Puustinen & Jaakko Jäntti: “‘The Security Environment has Always Been Complex!’: the Views of Finnish Military Officers on Complexity”, *Defence Studies*, 20:4 (2020), p. 392, <https://doi.org/10.1080/14702436.2020.1807337>.

⁶ See, for instance, Valerii Gerasimov: ‘Genshtab Planiruyet Uday’, *Voenno-Promyshlennyi Kur’er* 9:772 (March 2019).

complexity. As Vorobyev and Kiselev put it, modern warfare is ‘no longer a battle of two or three types of troops on each side, but a fairly large-scale armed clash of multi-branch and multifunctional combat systems covering ground, sea, air, space and aetheral space.’⁷ How these ‘systems’ function to their best advantage in a coordinated – if not, indeed, synergistic – fashion is noted as being at the heart of what might be seen as combat advantage. The Chief of the General Staff, General Valerii Gerasimov sees, indeed, the various systems working together as one overall system – the ultimate, if largely aspirational, aim of MDO thinking. For Gerasimov, the goal is the creation of a ‘unified system of integrated forces and means of reconnaissance, destruction and command and control of troops and weapons’ based fundamentally on new information and communication technologies.⁸

In seeking to achieve the goals of integration set out, there has, in recent years, been much intellectual capital expended, much investment made, and much training conducted by the Russian military. This is especially so since 2008 and the war with Georgia. It was this war that set in train a significant military modernisation process. At the heart of this process may be seen to be two particular dynamics. The first is a move away from the use of massed firepower to achieve tactical advantage and rely more on precision-strikes; or what the Russian refer to as the ‘reconnaissance-fire complex’ (*razvedyvatel’no-ognevoi kompleks* - or ROK). The second dynamic, and very much linked to the first, is to improve the C4ISR and network-centric warfare (*setetsentricheskaya voina*) capabilities of the Russian armed forces.⁹ This is in order not just to improve the ROK but also to improve overall combat effectiveness. ‘Integration’ was seen to be key here.¹⁰ There was a definitive striving for Gerasimov’s ‘unified system’.¹¹

In large part, the ultimate aim was for the Russian military to adopt the processes, structures, and technologies that the U.S. armed forces were employing in their own MDO activities. But direct mimesis, though, and as all Russian analysts understood, would be difficult. Developing and then procuring similar technologies to those that the U.S. military had available was going to take a long time; as was embedding the cultural attributes in Russian service personnel (such as initiative-taking) that were evident in U.S. and NATO personnel and which were pivotal to the efficient functioning of any highly integrated C4ISR network.¹² Human decision-making was still a large part of the C4ISR process (although Russian analysts have been looking to AI to take a role here).¹³ Nonetheless, despite the hindrances, improvements have

⁷ I. N. Vorobyev and I. A. Kiselev: ‘Sovremennaya Taktika: Analiz Tendentsiy i Razvitiya’, *Voennaya Mysl’* 12 (2017), <https://www.avnrf.ru/index.php/publikatsii-otdelenij-avn/nauchnykh-otdelenij/voennogo-iskusstva/232-sovremennaya-taktika-sistemologicheskij-analiz-ee-sostoyaniya-i-tendentsij-razvitiya>

⁸ Valeri Gerasimov: ‘Vektory Razvitiya VoЕННОi Strategii’, *Krasnaya Zvezda*, 4 March 2019, <https://csef.ru/ru/oborona-i-bezopasnost/348/vektory-razvitiya-voennoj-strategii-8829>.

⁹ Roger McDermott: ‘Tracing Russia’s Path to Network-Centric Military Capability’, *The Jamestown Foundation*, 4 December 2020, <https://jamestown.org/program/tracing-russias-path-to-network-centric-military-capability/#:~:text=Since%20Moscow%20initiated%20genuine%20reform,deeper%20and%20more%20meaningful%20military>.

¹⁰ *Ibid.*

¹¹ Col. (ret) S. G. Chekinov and Lt. Gen. (ret) S. A. Bogdanov: ‘Evolutsii Sushchnosti i Soderzhaniya Ponyatiya Voyny v XXI Stoletii’, *Voennaya Mysl’* 2 (2017).

¹² Roger McDermott: ‘The Revolution in Russian Military Decision-Making’, *The Jamestown Foundation*, 12 March 2021, <https://jamestown.org/program/the-revolution-in-russian-military-decision-making/#:~:text=At%20the%20heart%20of%20this,tactical%20levels%20of%20combat%20operations>.

¹³ See, for instance, D. V. Galkin, P. A. Kolyandra, and A. V. Stepanov: ‘Sostoyaniye i Perspektivy Ispol’zovaniya Iskusstvennogo Intellekta v Voennom Dele’, *Voennaya Mysl’* 1 (2021), pp. 113–124; TASS,

become evident. Large-scale exercises from roughly 2010 onwards began to introduce and test improved Russian C4ISR capabilities and these did go some way to creating better integration within the domains – especially that of Land – and between them.¹⁴ In terms of the Land domain, there are three particular facets that have a vital bearing on battlefield effect: the reconnaissance-fire complex, drone aircraft and electronic warfare (EW). In terms of development, it is on these three that this paper will concentrate.

Reconnaissance-fire complex (ROK)

This complex dates from the Soviet era and is a means of creating a link between technologies that gather intelligence data and then for onward delivery to fire-control centres and beyond to the artillery units. It is designed to shorten the sensor-to-shooter time. It fundamentally relies on C4ISR capabilities. Improving these has been one of the main goals of the whole modernisation push in recent years: ‘Moscow [has] placed C4ISR capability and the introduction of network-centric approaches to warfare at the epicentre of its Armed Forces modernisation drive since 2008’.¹⁵ The complex has latterly been enhanced by the introduction of the Strelets system of battlefield management. This is a man-portable piece of technology that can link reconnaissance, command and control and artillery assets.¹⁶ Another recent addition has been the incorporation into the arrangement of Orlan-30 drones as a principal reconnaissance asset.¹⁷ In time, it is perceived that AI will perform a significant role within the ROK and remove any delay cause by human decision-making.¹⁸

Drone aircraft (RPAS)

The 2008 war with Georgia highlighted for the Russian military the need for drones in modern warfare. It lacked them.¹⁹ There then thus began been significant investment in developing uncrewed aerial vehicles (UAVs) and uncrewed combat aerial vehicles (UCAVs). Collectively, and in contemporary parlance, these are referred to as remotely piloted aircraft systems (RPAS). Whether acting as ‘sensors’ – surveilling or gathering intelligence – as communications links, or even as actual ‘shooters’, RPAS have been seen as vital to Russian enhancement of not just to the quality of its C4ISR

‘Shoygu: Sistemy Upravleniya I Svyazi VS RF Usovershenstvuyut s Primeneniyem Teknologiyi IP’, *TASS*, 10 January 2023, <https://tass.ru/armiya-i-opk/16766161>.

¹⁴ Roger N. McDermott and Tor Bukkvoll: ‘Russia in the Precision Strike Regime – Military Theory, Procurement and Operational Impact’, Norwegian Defence Research Establishment (FFI), 1 August 2017, <https://www.ffi.no/en/publications-archive/russia-in-the-precision-strike-regime-military-theory-procurement-and-operational-impact#:~:text=Three%20points%20are%20of-ten%20raised,states%20are%20highly%20vulnerable%20because>

¹⁵ Roger McDermott: ‘The Revolution in Russian Military Decision-Making’, *The Jamestown Foundation*, 12 March 2021, <https://jamestown.org/program/the-revolution-in-russian-military-decision-making/#:~:text=At%20the%20heart%20of%20this,tactical%20levels%20of%20combat%20operations>.

¹⁶ Lester Grau and Charles Bartles: ‘The Russian Reconnaissance Fire Complex Comes of Age’, Changing Character of War Centre, Oxford, May 2018, <https://static1.squarespace.com/static/55faab67e4b0914105347194/t/5b17fd67562fa70b3ae0dd24/1528298869210/The+Russian+Reconnaissance+Fire+Complex+Comes+of+Age.pdf>.

¹⁷ Jack Watling and Nick Reynolds: ‘Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine’, *Royal United Services Institute*, 19 May 2023, <https://www.rusi.org/explore-our-research/publications/special-resources/meatgrinder-russian-tactics-second-year-its-invasion-ukraine>.

¹⁸ Geyrekhanova: “‘Neobkhodimo Sovershenstvovat’ Sistemu Upravleniya I Svyazi”’.

¹⁹ Michael Kofman: ‘The August War, Ten Years On: A Retrospective on the Russo-Georgian War’, *War on the Rocks*, 17 August 2018, <https://warontherocks.com/2018/08/the-august-war-ten-years-on-a-retrospective-on-the-russo-georgian-war/>.

capabilities but also to its ability to deliver ordnance onto targets most efficiently.²⁰ There has been therefore, considerable development of RPAS for the armed forces since 2008.²¹

Electronic warfare

A focus on the use of EW is of particular importance to the Russian military. When looking at Russian sources related to this issue of enhancing *mnogosfernnye operatsii*, a distinct emphasis is apparent that is lacking in NATO thinking about MDO. This is that the Russian military is seeking to disrupt and degrade NATO's MDO just as much as it is seeking to enhance its own. C4ISR capabilities rely on the fact that the various links between the relevant systems are not interfered with. The drive for enhanced C4ISR thus has to factor in that the links need to be protected from the nefarious activities of the adversary. As such, there will be a competition evident: adversaries will compete to protect their own links whilst also attempting to disrupt, degrade and destroy the C4ISR links of the opponent. This competition is a major factor in modern warfare. But given that NATO C4ISR is decreed to be so much better than that available to the Russian military – and hence that NATO can engage in MDO that are more efficient²² – then it is clearly in the Russian military's interests to engage heavily in electronic warfare (EW) capabilities that can disrupt NATO C4ISR links. Thus EW development has been a specific focus of attention in Russian military writings.²³ Gerasimov has been a particular proponent and envisages a Russian arrangement of EW capabilities that can itself be integrated into a single system to generate maximum effect.²⁴ In 2019, the head of the Russian Centre for Political-Military Studies, Colonel Anatoli Tsyganok, summed up the importance that should be attached to EW, saying that, 'EW is becoming the main element of information warfare and an integral part of combat operations.' He claimed that a lack of control of the electromagnetic spectrum would mean actual 'defeat' for Russia in any major conflict.²⁵

The result of this emphasis that the Russian military has placed on EW has led to this being perhaps the only area – in terms of military technologies – where those of Russia

²⁰ Nikolai Grishchenko: 'Zavod po Proizvodstvu Udarnykh Bepilotnikov Nachali Stroit' pod Moskvoi', *Russkoe Oruzhye*, 16 April 2021, <https://rg.ru/2021/04/16/reg-cfo/zavod-po-proizvodstvu-udarnykh-bepilotnikov-nachali-stroit-pod-moskvoj.html>.

²¹ Anton Lavrov: 'Nebesnoe Delo: Na Kakiye Bepilotniki Delaet Stavku Minoborony', *Izvestiya*, 13 December 2020, <https://iz.ru/1098861/anton-lavrov/nebesnoe-delo-na-kakie-bepilotniki-delaet-stavku-minoborony>.

²² Samuel Bendett, Mathieu Boulègue, Richard Connolly, Margarita Konaev, Pavel Podvig and Katarzyna Zysk: *Advanced Military Technology in Russia*, London: Chatham House, September 2021, <https://www.chathamhouse.org/sites/default/files/2021-09/2021-09-23-advanced-military-technology-in-russia-bendett-et-al.pdf>.

²³ See, for instance, Andrei A. Kokoshin: *Voprosy Prikladnoi Teorii Voiny*, Moscow: Izdatel'ski Dom Visshei Shkoly Ekonomiki, 2018, pp. 135–136; Vorobyev and Kiselev: 'Sovremennaya Taktika'; Konstantin Sivkov: 'Sovremennaya Voyna – Eta Bor'ba za Informatsionnoe Prevoskhodstvo', *Russian Council of International Affairs*, 8 May 2014, <https://russiancouncil.ru/analytics-and-comments/analytics/sovremennaya-voyna-eto-borba-za-informatsionnoe-prevoskhodstvo/>. See also Aleksei Sinikov: 'Gospodstvo vo Vozdukhe: Istoriya I Perspektivy', *Voennaya Mysl'* 3 (2009), pp. 46–49; Alexandr Bartosh: *Voprosy Teorii Gibridnoi Voiny*, Moscow: Goryachaya Liniya – Telekom, 2023; Aleksandr Bartosh: 'Budushchee Voennoi Tekhnosfery', *Nezavisimoe Voennoe Obozreniye*, 24 August 2023, https://nvo.ng.ru/concepts/2023-08-24/1_4_5_1250_technospere.html; Sergey Surovykin and Yu. V. Kuleshov: 'Osobennosti Organizatsii Upravleniya Mezhhvidovoi Gruppirovkoi Voysk (Sil) v Interesakh Kompleksnoi Bor'by s Protivnikom', *Voennaya Mysl'* 8 (2017), pp. 5–18.

²⁴ Gerasimov: 'Vektory Razvitiya Voennoi Strategii'; Gerasimov: 'Genshtab Planiruyet Uday'.

²⁵ Anatoli Tsyganok: 'Primeneniye Sil I Stredstv REB v Voynakh I Konfliktakh XXI Veka', *Nezavisimoye Voennoe Obozreniye*, 20 September 2019, https://nvo.ng.ru/wars/2019-09-20/6_1062_reb.html.

could be seen as superior to those of the US/NATO.²⁶ Theoretically, Russian EW assets represent a threat. They are numerous and their capabilities appear superficially to be quite profound. As one Western analyst argues: ‘Russian EW assets are present in every domain including land, sea, air, space, and cyber and can be used simultaneously.’²⁷

Field-testing in Syria

Much of the embedding in Russian operations of all the above elements – the reconnaissance-fire complex, the RPAS and the EW assets – has been practiced and trained for assiduously in major military exercises within Russia in recent years. There have been noted teething problems, mostly associated with the technologies themselves, but also with a lack of personnel skilled enough to operate them.²⁸ They have also been field-tested in the operational zone of Syria, where Russian troops were first deployed in 2015.²⁹ Here, the actual testing of the whole *mnogosfernaya operatsiya* concept was very much a goal. As the Chief of General Staff, General Valerii Gerasimov put it, ‘[t]he role of military strategy [in Syria] was to plan and coordinate joint military and non-military actions of the Russian group of troops (forces)’.³⁰

In Syria, Russian forces were able to make a number of operational and tactical refinements, not least, to C4ISR capabilities, the reconnaissance-fire complex (ROK) and also to the associated reconnaissance-strike complex. But it should be remembered that there were very few Ground Forces assets present in Syria. Exercises were mostly concerned with testing coordination between Special Forces and the Russian Aerospace Forces (VKS) in terms of generating precision strikes.³¹

As far as EW assets were concerned, a range was utilised – including the Krasukha-4 and the R-330Zh Zhitel. These were used to protect Russian bases, especially the airbase at Khmeimim, from ISIS drone and missile attack. As well as providing for guidance-jamming, these systems also created so-called ‘radio-electronic “mirages”’ that presented incorrect targets to ISIS drones.³² But with the environment in Syria

²⁶ Madison Creery: ‘Russia’s Edge in Electronic Warfare’, *Georgetown Security Studies Review*, 26 June 2019. <https://georgetownsecuritystudiesreview.org/2019/06/26/the-russian-edge-in-electronic-warfare/>; Oleg Bozhov: ‘Voyny Shestogo Pokoleniya: Kak My Glushim Chuzhie Lokatory, Sputniki I Kompyutery’, *Moskovskii Komsomolets*, 2 January 2015, <https://www.mk.ru/politics/2015/01/02/voyna-shestogo-pokoleniya-kak-my-glushim-chuzhie-lokatory-sputniki-i-kompyutery.html>.

²⁷ Andreas Turunen: ‘The Broader Challenge of Russia’s Electronic Warfare Capabilities’, in Samuel Bendett, Stephen Blank, Joe Cheravitch, Michael B. Petersen and Andreas Turunen (eds.): *Improvisation and Adaptability in the Russian Military*, Washington D.C.: Center for Strategic and International Studies, 2020, p.13.

²⁸ Roger McDermott: ‘The Revolution in Russian Military Decision-Making’.

²⁹ Grau and Bartles: ‘The Russian Reconnaissance Fire Complex Comes of Age’; Timothy Thomas: *Russia’s Electronic Warfare Force*, MITRE Center for Technology and National Security (September 2020), <https://apps.dtic.mil/sti/trecms/pdf/AD1137511.pdf>; TASS, ‘Russian Drones Make over 14,000 Sorties in Syria’, *TASS*, 25 August 2017. <https://tass.com/defense/962022>; Pavel Luzin: *Russian Military Drones: Past, Present and the Future of the UAV Industry*, Foreign Policy Research Institute, 2023. <https://www.fpri.org/article/2023/11/russian-military-drones-past-present-and-future-of-the-uav-industry>.

³⁰ Gerasimov: ‘Genshtab Planiruyet Udary’.

³¹ TASS, ‘Novaya Sistema ‘Gefest’ Pozvoliyayet’, *TASS*, 25 August 2017, <https://tass.ru/armiya-i-opk/4507779>; Aleksei Ramm and Dmitri Litovkin: ‘Medvedi’ Uvidyat Celi V Tyly Vraga’, *Izvestia*, 28 June 2017, <https://iz.ru/609062/aleksei-ramm/medvedi-uvidiat-tseli-v-tylu-vraga>.

³² Sergey Savel’ev: ‘Rossiyskiye Stantsii REB v Sirii “Sveli S Uma Protivnika”’, *Moskovskii Komsomolets*, 25 February 2021, <https://www.mk.ru/politics/2021/02/25/rossiyskie-stancii-reb-v-sirii-sveli-s-uma-protivnika.html>.

being a relatively permissive one for Russian forces, given the nature of the opposition, Russian EW assets were obviously not tested to their fullest.³³

Initial problems in the invasion of Ukraine

At first, of course, the Russian invasion of Ukraine that began in February 2022 did not go well for Moscow. The operation did not run as had been envisaged on the actual battlefield. But it could be argued that a major combined arms operation was not designed to be necessary; the ‘special military operation’ was, it seems, only supposed to last a few days.³⁴ The initial (and failed) ‘de-capitation’ *coup de main* attack against the Kyiv government was one that was in part designed to avoid all of the complexity of running a major multi-domain operation. But once it had failed, the Russian armed forces groupings, who, it seems, only appeared to be ready to move in to Ukraine as mere occupation troops, now had to engage in an opposed intervention.³⁵ What became clear then was that these forces had not trained or practiced enough to engage in the complexity of effective combined arms manoeuvre warfare.³⁶ Infantry, armour and artillery did not work well together.³⁷ Coordination with VKS aircraft and even with dedicated Army aviation assets was also lacking.³⁸ Logistics back-up was no more than rudimentary.³⁹ It also quickly became evident that there were severe problems in terms of C3. Systems, such as the new unified automated digital communications system (OATsSS), which had been delivered in 2018, seemed to make no difference.⁴⁰ Some Strelets systems were often, according to reports, simply left in their boxes because few personnel knew how to work them.⁴¹ There was also, and despite the prior emphasis on them, a lack of RPAS for both battlefield reconnaissance and for precision targeting by both artillery and aviation assets. EW assets were not having much influence either. Their lack of effect was a ‘puzzling failure’.⁴²

The systems that were supposed to reduce the complexity of modern warfare by enhancing C4ISR capabilities (including aiding precision-strike) and also those designed to stymie (using EW) those of the adversary, were either not present or were not being

³³ Timothy Thomas: ‘Russia’s Electronic Warfare Force: Blending Concepts with Capabilities’, MITRE, September 2020, <https://apps.dtic.mil/sti/trecms/pdf/AD1137511.pdf>.

³⁴ David V. Goe and Marina Miron: ‘Putin Should Have Known His Invasion Would Fail’, *Foreign Policy*, 24 February 2023, <https://foreignpolicy.com/2023/02/24/ukraine-russia-putin-war-invasion-military-failure/>.

³⁵ Goe and Miron: ‘Putin Should Have Known His Invasion Would Fail’.

³⁶ Mick Ryan: ‘Russia’s Adaptation Advantage’, *Foreign Affairs*, 5 February 2024, <https://www.foreignaffairs.com/ukraine/russias-adaptation-advantage>.

³⁷ Margarita Konaev and Owen J. Daniels: ‘The Russians are Getting Better’, *Foreign Affairs*, 6 September 2023, <https://www.foreignaffairs.com/ukraine/russians-are-getting-better-learning>.

³⁸ Lt. Col Rafael Ichaso: ‘Russian Air Force’s Performance in Ukraine’, *the Journal of JAPCC* 25 (2023), pp. 47-52, https://www.japcc.org/wp-content/uploads/JAPCC_J35_Art-06_screen.pdf.

³⁹ Martin, Bradley, D. Sean Barnett, and Devin McCarthy, *Russian Logistics and Sustainment Failures in the Ukraine Conflict: Status as of January 1, 2023*, Santa Monica, CA: RAND Corporation, 2023, https://www.rand.org/pubs/research_reports/RRA2033-1.html.

⁴⁰ This system would use satellite, radio, radio relay, and tropospheric communications transmitted via fiber optic cables. The emphasis was on the use of space communications. See Ria Novosti, ‘Rossiiskaya Armiya Poluchit Obyedennyonnyu Sistemu Zifrovoy Svyazi’, *Ria Novosti*, 19 October 2018, <https://ria.ru/20181019/1531013517.html>.

⁴¹ Blair Battersby: ‘Russia Addressing Missing Links in Kill Chain’, *Red Diamond, Tradoc G-2 Newsletter*, 12 January 2024, <https://oe.tradoc.army.mil/2024/01/12/tradoc-russia-addressing-missing-links-in-kill-chain/>.

⁴² Bryan Clark: ‘The Fall and Rise of Russian Electronic Warfare’, *IEEE Spectrum*, 30 July 2022, <https://spectrum.ieee.org/the-fall-and-rise-of-russian-electronic-warfare>.

used correctly. The fact that they were not led, at least in some part, to massive Russian losses.⁴³

Wars, of course, are not fought in a vacuum. The fact that the invasion did not run smoothly has, in part, to be put down to the quality of opposition. But the Russian side was the principal architect of its own problems. There had patently been a lack of planning and preparation for an actual opposed invasion. The Russian armed forces were just not ready to conduct their *mnogosfernuyu operatsiyu*.⁴⁴ After all the prior intellectual guidance, all the procurement of technologies, all the training of personnel and all the major exercises across several years, including in Syria, better results should have been expected.

Adaptations

However, after its initial failings, the Russian military did start to improve the use of the three major influences on its *mnogosfernnye operatsii* highlighted earlier – the ROK, RPAS and EW. In part, this may be put down to the more static phase of the war that began around October 2022. The more stable situation, lacking the dynamism of the initial war of movement, appeared to allow for a more considered approach to be taken to how these three influences could be enhanced to create better effect. The Russian military *learnt* from its initial mistakes.⁴⁵

The obvious major adaptation made to the overall Russian operations in Ukraine was actually to put one person in charge of it all. In October 2022, a single commander for the ‘special military operation’ against Ukraine was appointed. General Sergei Surovykin, once in situ, created, importantly, a unity of effort. He vastly improved basic command and control procedures and established a common effort across the various fronts.⁴⁶ Land and Air domains began to work better together. Surovykin’s switch, moreover, to a ‘grinding down’ of the enemy as opposed to the earlier attempted swift advances appeared to suit Russian capabilities. Such an attritional approach involved less complexity as less of the intricacies of offensive combined arms manoeuvre warfare were necessary.⁴⁷

These factors aside, there were notable improvements made in regard to the ROK, RPAS and EW influences.

Reconnaissance-fire complex

With VKS strike aircraft largely not being risked in the intense GBAD environment, it fell to artillery to provide the principal fire support for Russian troops on the ground

⁴³ Vasily Kashin: ‘Na Chuzhikh Oshybkakh? Real’nye Uroki SVO dlya Kitaya I Ikh Posledstviya’, *Rossiya v Globalnoi Politike*, 19 December 2022, <https://globalaffairs.ru/articles/na-chuzhikh-oshybkakh/>.

⁴⁴ Watling and Reynolds: ‘Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine’; Ichaso: ‘Russian Air Force’s Performance in Ukraine’.

⁴⁵ Watling and Reynolds: ‘Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine’.

⁴⁶ Mick Ryan: ‘Russia’s Adaptation Advantage’, *Foreign Affairs*, 5 February 2024, <https://www.foreignaffairs.com/ukraine/russias-adaptation-advantage>.

⁴⁷ TASS, ‘Surovykin: Rossiiskaya Grupirovka Na Ukraine Metodichno “Peremalyvaet” Voyska Protivnika’, *TASS*, 18 October 2022, <https://tass.ru/armiya-i-opk/16090805>.

(as Russian doctrine had traditionally always envisaged⁴⁸). And with time, advances were made in the delivery of artillery support. The overarching adaptation was structural. By November 2023, new artillery brigades had been created, equipped with re-activated long range 203mm 2S7 Pion (or 2S7M Malka) self-propelled howitzers and 2S4 Tulpan 240mm mortars. The aim of such brigades was largely to make disruptive strikes on Ukrainian forces in their rear.⁴⁹ But these legacy pieces were not just being trundled to the front in haphazard fashion. They were being deployed now with new technologies that enhanced their capabilities. Targeting procedures were improved through better reconnaissance-related assets, including radar, acoustic and especially RPAS,⁵⁰ which ‘resulted in much closer integration of multiple UAVs directly supporting commanders authorised to apply fires.’⁵¹ New equipment such as the Penicillin acoustic-thermal artillery reconnaissance system also began to make a difference.⁵² Sensor-to-shooter times were markedly reduced and accuracy increased.⁵³ With, reportedly, many Russian forward observers (FOs) refusing to take up positions, it was vital that production of laser-guided shells such as the 2K25 Krasnopol 152mm round was ramped up. And it was. Guidance for these shells was coming from loitering Orlan-30 RPAS.⁵⁴

Moreover, there was a pressure for accuracy to increase as the dispersal of ammunition dumps, largely as a result of Ukrainian HIMARS strikes on large, concentrated depots, had created a shell shortage. Accuracy of fire had now to act in the stead of weight of fire. The guns in any battery were also being forced to disperse in order to avoid the speed and accuracy of Ukrainian counter-battery fire. Strelets helped here (by now in the hands of personnel who could employ them) and allowed for accurate and timely fire to continue despite gun dispersal. For the Russian side, the overall result of experience gained is now that, ‘Russian counter-battery fire is very fast and accurate when conducted using artillery-locating radar and UAVs together.’⁵⁵ However, this all carries that caveat that it seems that the whole ROK has not yet achieved the complete automation of linked sensors and shooters in the Ukraine war. Humans, and the delays they inevitably provide in decision making, are still in the Russian loop.⁵⁶

⁴⁸ Sam Cranny-Evans: ‘Russia’s Artillery War in Ukraine: Challenges and Innovations’, *Royal United Services Institute*, 9 August 2023, <https://rusi.org/explore-our-research/publications/commentary/russias-artillery-war-ukraine-challenges-and-innovations>.

⁴⁹ Aleksei Ramm & Bogdan Stepovoi: ‘Brigady Podriad: VS RF Usilyat Artilleriiskie Soedineniya Bol’shoi Moshchnosti’, *Izvestiya*, November 2023, <https://iz.ru/1612479/aleksei-ramm-bogdan-stepovoi/brigady-podriad-vs-rf-usiliat-artilleriiskie-soedineniya-bolshoi-moshchnosti>; Dmitri Kornev: ‘Vzryvnaya Mossh: Chto Izmenit na Pole Boya Artilleriya Krupnogo Kalibra’, *Izvestiya*, 3 December 2023, <https://iz.ru/1614128/dmitrii-kornev/vzryvnaia-moshch-cto-izmenit-na-pole-boia-artilleriia-krupnogo-kalibra>.

⁵⁰ Ria Novosti, ‘Penicillin’, *Ria Novosti*, 15 October, 2022, <https://ria.ru/20221015/artilleriya-1824225350.html>; TASS, ‘Razvedkompleks “Penicillin” Pomogayet VS RF Podtverzhdat’ Unichtozheniye Tseley’, *TASS*, 14 December 2023, <https://tass.ru/armiya-i-opk/19543287>.

⁵¹ Watling and Reynolds: ‘Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine’.

⁵² Ivan Petrov: ‘Kak Kompleks Artrazvedki “Penicillin” vsryvaet Pozitsii Artillerii VSU’, *Rossiiskaya Gazeta*, 1 February 2024, <https://rg.ru/2024/02/01/otvetnyj-udar-po-zvuku-vystrela.html>.

⁵³ See, for instance, Ivan Popov: ‘Artilleriyskiye Razvedchiki Ezhednevno Vykhodiat na Okhotu’, *Moskovskiy Komsomolets*, 22 November 2023, <https://rg.ru/2023/11/22/artilleriyskie-razvedchiki-ezhednevno-vyhodiat-na-okhotu.html>; Ramm & Stepovoi: ‘Brigady Podriad’; Kornev: ‘Vzryvnaya Mossh’.

⁵⁴ Blair Battersby: ‘Russia Addressing Missing Links in Kill Chain’, *Red Diamond, Tradoc G-2 Newsletter*, 12 January 2024, <https://oe.tradoc.army.mil/2024/01/12/tradoc-russia-addressing-missing-links-in-kill-chain/>.

⁵⁵ Cranny-Evans: ‘Russia’s Artillery War in Ukraine: Challenges and Innovations’.

⁵⁶ *Ibid.*

As the conflict in Ukraine progressed, the extent to which RPAS were deemed essential in creating the necessary battlefield effect began to be truly appreciated. Despite the fact that, prior to the war, RPAS had received such emphasis, it appeared to take battlefield reverses for the Russian side to fully understand their worth. While during the early stages of the war (spring/summer 2022) Russian forces had used Orlan-10, Orlan-30, Eleron, and Tachyon drones for reconnaissance,⁵⁷ too many of these heavy and expensive drones were lost to Ukrainian GBAD. It came to be realised that the requirement for basic reconnaissance tasks was actually for smaller, lighter drones which could be used in greater numbers and which, importantly, were less liable to be targeted by GBAD systems because of their small size. Commercial-off-the-shelf (COTS) RPAS – quad- and multi-copters – sometimes called First Person View (FPV) drones were purchased in large numbers and used for both reconnoitering targets and then later for the dropping of small-calibre munitions on those targets: either equipment, positions or personnel close to the front lines.⁵⁸ This meant that this particular sensor-to-shooter time was practically zero.

By the summer of 2022, the Russian side had also started to copy the Ukrainian tactic of using small kamikaze drones.⁵⁹ And in late 2022, it had come up with a ‘deadly combination’ as one Western author describes it. This consists of Orlan-10 and Lancet drones. The former has a much better ‘view’ due to operating at high altitudes (of up to 5 km). And once the Orlan-10 has identified a target, the information is passed on to loitering Lancets, which then engage the target.⁶⁰

The role of RPAS in the Ukraine war has re-affirmed for the Russian military what was initially obvious in the 2008 war against Georgia. RPAS have a vital role to play in terms of creating battlefield advantage. But it has taken the exigencies of actual combat to generate this re-affirmation. No less a figure than the state president stressed the role that RPAS play as part of the ROK. At the end of 2022, Vladimir Putin, when looking at what needed to be improved in his military’s efforts, put a special emphasis on RPAS, saying, ‘The target must be detected as quickly as possible, and information must be transmitted to strike in real-time.’⁶¹

Electronic warfare

Once its EW systems were in more established positions by the end of 2022, the Russian military was able to make truly effective use of them. They have been used in the offence by jamming/spoofing the guidance of Ukrainian GBAD systems designed to intercept Russian RPAS, missiles and shells. They have also been used in the defence by jamming/spoofing the guidance of Ukrainian RPAS/missiles/shells and providing protection for Russian assets such as individual vehicles, buildings and whole bases.⁶²

⁵⁷ TASS, ‘Kak Spetsoperatsiya na Ukraine Izmenila Russkoye Oruzhiye I Oboronno-Promyshlennyi Kompleks’, *TASS*, 22 February 2023, <https://tass.ru/armiya-i-opk/17115401>.

⁵⁸ *Ibid.*

⁵⁹ John Ismay: ‘Russia is Replicating Iranian Drones and Using Them to Attack Ukraine’, *The New York Times*, 10 August 2023, <https://www.nytimes.com/2023/08/10/us/russia-iran-drones-ukraine.html>

⁶⁰ Schmidt: ‘Ukraine Is Losing the Drone War’.

⁶¹ Putin quoted in Geyrekhanova: ‘Neobkhodimo Sovershenstvovat’.

⁶² ‘Russia is starting to make its superiority in electronic warfare count’, *The Economist*, 23 November 2023.

It is not the intention here to discuss the effect that many of the older Russian EW systems have had, rather to highlight the newer ones that have been introduced and integrated effectively into existing structures. First to mention in the offensive category is the Kometa-M that was initially noted as being used in January 2023.⁶³ It is a radar system that is designed not only to guide Russian RPAS and glide bombs to their targets but it can also interfere with any Ukrainian EW countermeasures designed to prevent accurate targeting. It is said that, with the Kometa-M operating, it is theoretically impossible for Ukrainian EW to jam the GNSS signal that guides any munition it is attached to.⁶⁴ Kometa-M appears to be quite a sophisticated system able to operate even in unfavourable weather conditions.⁶⁵

In the defensive realm, of particular note might be seen to be the introduction, in September 2023, of a new EW system known as Volnoretz. This was first showcased during the Russian Army Expo 2023 and operationally introduced in November 2023.⁶⁶ It is designed to be a small, vehicle-mounted system that can protect that individual vehicle from, in particular, FPV RPAS by disrupting the signal that would be guiding them. The Volnoretz can provide cover over a radius of up to 250m. Presently, it is being used on just a number of more important armoured vehicles, such as the T-80BVM main battle tank.⁶⁷ Another vehicle-defence EW system, which is claimed by Russian sources to be superior to Volnoretz, has also been recently deployed. This is the Sanya. It is designed to suppress the signals to FPV drones within a radius of 1km.⁶⁸

Also apparent now are lighter, hand-held, systems for countering Ukrainian RPAS. Such systems include the anti-drone guns, Stupor and Harpoon-3. These very localised systems are capable of disrupting the link between the RPAS and its operator.⁶⁹ Another system, the Sapphir – designed for protecting civilian infrastructure – has also been repurposed as a vehicle-mounted battlefield asset. In the summer of 2023, it began to be used to protect military installations from adversary RPAS drones with an interference range of 30km. This system also helps to actually locate the RPAS' ground control station, thereby being capable of acting to guide munitions onto that control station.⁷⁰

⁶³ Kometa has several variants to protect manned aviation, vehicles, and stationary objects. See Taras Safironov: 'Kometa: Challenge for Ukrainian EW', *Militaryni*, 15 July 2023, <https://mil.in.ua/en/articles/kometa-challenge-for-ukrainian-ew/>.

⁶⁴ Defence Express, 'Chomu RF Postavyla na Bomby s UMPK Blok "Kometa-M" vid "Orlan-10"', *Defence Express*, 21 July 2023, https://defence-ua.com/weapon_and_tech/chomu_rf_postavila_na_bombi_z_umpk_blok_kometa_m_vid_orlan_10-12275.html.

⁶⁵ Focus, 'Potribni Pereshkody v 1 MBt: Eksperty Rozpovili, Yak Mozhna "Pidmazhyty" Elektroniku Bomby FAB-500', *Focus*, 14 July 2023, <https://focus.ua/uk/voennye-novosti/578958-potribni-pereshkodi-v-1-mvt-eksperti-rozpovili-yak-mozhna-pidmazhyti-elektroniku-bombi-fab-500>.

⁶⁶ TASS, 'MO RF Soobshchilo, Chto T-80BVM v Zone SVO Osnastili Kompleksami Podavleniya Dronov "Volnoretz"', *TASS*, 26 January 2024, <https://tass.ru/armiya-i-opk/19822157>.

⁶⁷ Kirill Sadovskiy: 'Polkovnik Obyasn timer Printsyp Raboty Rossiyskogo Kompleksa REB "Volnoretz"', *Lenta*, 26 January 2024, <https://lenta.ru/news/2024/01/27/volonoretz/>.

⁶⁸ Anton Valagin: 'Novaya Sistema Zashchity Tankov RF ot FPV Dronov Okazalas' v Chetvero Moshhnee Prezhnih', *Rossiyskaya Gazeta*, January 2024, <https://rg.ru/2024/01/15/novaia-sistema-zashchity-tankov-rf-ot-dronov-okazalas-vchetvero-moshhnee-prezhnih.html>.

⁶⁹ TASS, 'Kak Spetsoperatsiya na Ukraine Izmenila Russkoye Oruzhiye'.

⁷⁰ Aleksandr Stepanov: 'Na Linii Boevogo Soprikosnoveniya Kruzhat Sotni, Esli ne Tysyachi Dronov', *Russkaya Gazeta*, 31 July 2023, <https://rg.ru/2023/07/31/voennyj-ekspert-knutov-novyj-kompleks-sapfir-otnositia-k-novoj-versii-reb-pokazal-sebia-ochen-effektivnym.html>.

The use by the Russian military of a range of EW assets in the war in Ukraine has confirmed Russia's advantage in this sphere. Overall, EW remains a fundamental feature of both offensive and defensive operational activities by this military. This is to be expected. This military does understand that to avoid 'defeat' in any major conflict it does, as Colonel Tsyganok said, need to control the electromagnetic spectrum.⁷¹ Looking to the future of warfare, one of its defining features – and representing one of its major complexities – will be the constant action-reaction dynamic in the contested electromagnetic environment.⁷²

Conclusion

The Russian military has, since 2008, been engaged in a modernisation process. This has been geared principally to enhancing its MDO capabilities. Overall, before the war in Ukraine, progress had been made. Systems were being introduced designed, in essence, to create efficiencies that would alleviate, at least to some degree, the complexity of modern warfare and create, at the operational level, a level of battlefield advantage. The 'special military operation', however, began without seemingly any real utilisation of the concept of *mnogosfernoy operatsii*, which had seen worked on seemingly assiduously in the years before February 2022. But changes have now been made. The Russian military has, indeed, shown itself to be a learning organisation. This military may not have perfected the MDO concept, and it may not be able to match the capabilities of NATO in this regard (although the Alliance has yet, of course, to operationally test its own MDO concept), but certainly combat experience in Ukraine has improved the Russian military.

⁷¹ Anatoli Tsyganok: 'Primeneniye Sil I Stredstv REB v Voynakh I Konfliktakh XXI Veka', *Nezavisimoye Voennoe Obozreniye*, 20 September 2019, https://nvo.ng.ru/wars/2019-09-20/6_1062_reb.html.

⁷² Aleksandr Stepanov: 'Na Linii Boevogo Soprikosnoveniya Kruzhat Sotni, Esli ne Tsyachi Dronov', *Russkaya Gazeta*, 31 July 2023, <https://rg.ru/2023/07/31/voennyj-ekspert-knutov-novyj-kompleks-sapfir-otnositia-k-novoj-versii-reb-pokazal-sebia-ochen-effektivnym.html>.

FEATURES OF RUSSIA'S DEVELOPMENT OF CIVIL-MILITARY RELATIONS IN THE TEMPORARILY OCCUPIED TERRITORIES OF UKRAINE

Olha Meloshyna

The presentation by Olha Meloshyna in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=77CC9BdPIps&list=TLPQMTIwNTI-wMjTxxF0nHeXGGA&index=2> starting from 1:32:33.

Introduction

The full-scale invasion of the Russian Federation on February 24, 2022 dramatically changed the perception of the world community about the level of threat that the Russian Federation poses to the global security environment.

For a long time, the occupation of Ukrainian territories since the beginning of the invasion in 2014 was not perceived as a potential danger to the world order. Analysis and systematization of the peculiarities of Russia's implementation of civil-military relations in the temporarily occupied territories of Ukraine will help to understand what the main processes of Russia's occupation of Ukraine's territories are based on.

In the conditions of the new stage of the international armed conflict, which has been ongoing since February 2014 between Ukraine and the Russian Federation, the concept of occupation, which Russia uses in order to build its own policy of psychological influence on the citizens of Ukraine, who for various reasons remained to live in the temporarily occupied territories, acquires a new meaning. Understanding the latest manifestation of the introduction of civil-military relations by Russia and its impact on the TOT of Ukraine will allow for the development of more effective and adaptive approaches to conflict resolution and preservation of international security.

Today, the Russian Federation paid special attention to the development of civil-military relations in the temporarily occupied territories of Ukraine: Kherson, Donetsk, Luhansk, Zaporizhzhia regions and the Autonomous Republic of Crimea and the City of Sevastopol. Russia is doing everything to enlist the support of civilians, because in addition to the territory, they occupied the population. It is more difficult to capture human consciousness than an enemy trench. That is why the Russian Federation is trying to keep the territories not only by armed means, but also by ideological means. The occupying power pays special attention to education, culture, language, religion, holding fictitious elections, influence through the media, forced to obtain Russian citizenship.

The confiscation of Ukrainian literature

One of the first actions taken by the Russians in the occupied territories was the confiscation of Ukrainian literature. Most often, literature about the Holodomor in

Ukraine (1932–1933), Ukrainian revolutions especially the Revolution of Dignity (2013–2014), Anti-Terrorist Operation in the east of Ukraine (2014–2018), Joint Forces Operation (from 2014 to February 24, 2022), educational aids, methodical materials, reference books on the history of Ukraine, as well as works of fiction by famous Ukrainian writers and poets fall under the ban and confiscation.

The initial distressing reports regarding the plundering of Ukrainian museums and libraries surfaced in early March of 2022 year, coinciding with the occupation of the Chernihiv, Kyiv, and Sumy regions by Russia. Inhabitants of these areas recounted witnessing Russian forces setting ablaze school libraries containing educational materials. They further noted that any discovered books were either seized, immediately destroyed, or removed to undisclosed locations by the occupying forces.

The occupiers themselves publish in their propaganda telegram channels about the confiscation of books. Thus, in the telegram channel "Tokmak Press Center", as stated in the description, this is the official channel of the occupying Military Civil Administration of the Tokmak district, it is stated that on December 20, 2022, according to the occupiers, "Ukrainian provocative literature" was seized from the branch of the Tokmak Central Library, which is located at TOT of Zaporizhzhya region.¹ This kind of message is common in the Russian propaganda space.

Damaging literature in a specific language can profoundly affect a nation's culture, given that books are often regarded as a vital repository of a society's accumulated knowledge, principles, and history. Through the destruction of books, essential information, narratives, and cultural conventions may be erased or distorted, potentially leading to a loss of identity and cultural legacy. However, it is crucial to acknowledge that merely destroying books is insufficient to entirely obliterate a culture. Culture is a multifaceted and dynamic entity deeply entrenched in people's beliefs, customs, and interactions. Nonetheless, the destruction of books can undeniably exert adverse consequences on a culture, particularly if executed systematically or extensively, or if combined with other forms of cultural suppression or violence.

Education acts as an instrument of soft power

Education acts as an instrument of soft power in relation to preschoolers, schoolchildren and students. The Russian Federation is changing educational curricula, Ukrainian children are forced to study: Russian language and literature, history of Russia, "The Donetsk People's Republic"(abbreviated as DPR or DNR, Russian), "The Luhansk People's Republic"(abbreviated as LPR or LNR in Russian), "Lessons of citizenship of Donbas", the course is divided into three areas: "Donbas - my native land", "Raise in yourself a citizen of the Donetsk People's Republic" and "Donbas and the Russian world".

In June 2022, after the start of the full-scale invasion, the Russians began a campaign to prepare for the 2022-2023 school year in the new temporarily occupied regions of Ukraine.

¹ https://t.me/tokmak_today/705?single.

The destruction of education includes:

- complete transition to Russian education standards;
- replacement of educational materials with Russian ones;
- replacement of teaching staff with those 'loyal' to the new government;
- absence of teaching of Ukrainian Studies subjects, such as the History of Ukraine, Ukrainian Language and Literature.

An interesting fact is the issue of studying the Ukrainian language as an educational discipline in schools. The Russian language and literature are compulsory for students from the 1st to the 11th grade. As for studying Ukrainian or Crimean Tatar, they note that for this they created the discipline "Native language" and "Literary reading in the native language".² That is, the occupiers introduce the study of the state Ukrainian language at the level of a foreign language.

The occupying authority of Russia hold events of Russian national holidays for children, such as Victory Day, National Unity Day, Defender of the Fatherland Day, Russia Day, as well as other important dates in the history of Russia. Extracurricular hours are spent on the following topics: "Moscow is the capital of our Motherland", "Our soldiers" (the main goal is to create in children the first ideas about the types of troops and the role of "defenders of Russia". Recommended children's songs: "Russia is a ship", "Russia and I", "Song for Russia", "Children of Russia", "Motherland", "My dear Russia", "I will embrace Russia".

The occupiers force preschool children to dress in Russian uniforms and participate in pro-Russian holidays. So in the city of Tokmak of the Temporarily occupied Zaporizhzhia region, on February 23, 2024, a contest of young readers was held in the kindergarten "Zhuravlyonok" in the city of Tokmak. Kindergarten students recited poems about soldiers and heartily congratulated the soldiers of the Armed Forces of the Russian Federation on the upcoming Defenders of the Fatherland holiday.³

Militarization of the young generation

A totalitarian system of brainwashing and militarization of the young generation has been created through the organizations as well as through a centralized system of child education, which is designed to raise children in the cult of Russian war. In the newly occupied territories of Kherson and Zaporizhzhia regions as of June 4, 2023, the occupiers write that they opened regional branches of youth movements opened in the region - #MIVMESTE, "Russian Youth Union", "Russian Student Teams", "All-Russian Student Rescue Corps", "Medical Volunteers", "Young Guard of United Russia", "Do!", "Volunteers of Victory", Russian movement of children and youth "Movement of the First". There is also an interregional youth movement "South Young", uniting young people from Zaporozhye and Kherson regions.

The Military Patriotic Social Movement, known as "Yunarmiya", functions as a paramilitary organization within Russia. "Yunarmiya" and its members have actively

² <https://hersonka.ru/news/164594>.

³ https://t.me/tokmak_today/6149?single.

supported Russia's aggressive war against Ukraine, disseminating Russian propaganda regarding the conflict. Notably, “Yunarmiya” has adopted the "Z" military symbol, frequently utilized by Russian propaganda to endorse Russia's incursion into Ukraine.

With endorsement from the Ministries of Defense and Education in the Russian Federation, “Yunarmiya” orchestrated a campaign encouraging schoolchildren to correspond with Russian soldiers involved in the invasion of Ukraine. Additionally, it solicited gifts for troops engaged in the conflict and organized summer camps for children within the unlawfully annexed Crimean Peninsula. Consequently, “Yunarmiya” bears responsibility for either advocating or executing actions or policies that undermine or jeopardize the territorial integrity, sovereignty, and independence of Ukraine, as well as the stability and security within the nation.

Forward to the past

Forward to the past - this is how you can describe the promotion of ideology in the temporarily occupied territories of Ukraine. Russians actively promote the heroic deeds of the Soviet Union during the Second World War through billboards, newspapers and postcards. Russia's manipulation of historical memory, as well as attempts to interpret current events through the prism of ideas inherited from the USSR about the Second World War, are not random actions. These are components of a general strategy aimed at restoring the status of Russia as a great power and world leader, spreading and rooting the ideas of "Russian world".

October 23, 2024 marked the 80th anniversary of the liberation of Melitopol from the German-fascist invaders. Unfortunately, for the second year in a row, the city celebrates this date under the conditions of Russian occupation.

The Rashists decided to turn this significant day for all Melitopol residents into another "victorious day". Preparations began in the spring. In May, the occupiers removed the T-70 tank from its pedestal and sent it to Russia for restoration. The invaders prepared the military equipment, which stood on the pedestal for tens of years, after which it began to move slowly, but on its own.⁴

Illegal elections

The occupiers conduct illegal elections to the local occupation administrations, appoint so-called heads of the occupied regions, establish an administrative system and force the population to obey the laws of the Russian Federation. For example, on September 10, 2023, Russia-directed pseudo-elections to the so-called local authorities ended in the occupied territories of Donetsk, Luhansk, Kherson, and Zaporizhzhia regions. The fake vote lasted almost 2 weeks and Putin's party "won" as expected.

Pre-election activities of the occupiers on the eve of the presidential elections of the Russian Federation took on an even larger scale. The Center of National Resistance

⁴ <https://melitopol-news.ru/society/2023/09/18/52100.html>.

informs that The Russians are trying to legitimize pseudo-elections in the temporarily occupied territories.

The main reason for the raids carried out by the occupiers on the TOT in advance of the "elections" were the conclusions drawn from the local fake voting in September 2023. Then the residents of the temporarily occupied territories massively sabotaged the pseudo-elections: they did not open the doors, they ignored visits to precincts, etc. Therefore, the occupiers decided to conduct raids in advance to capture houses and apartments where people live.

Currently, the so-called "members of the election commissions of the Russian Federation" are making rounds of people. They gather information and campaign for participation in the Russian presidential "elections". They conduct illegal audio or video recording of the conversation. During the recording, residents are asked whether they will "vote" or know when the elections are.

The Center of National Resistance notes that each member of the so-called election commission will bear responsibility for organizing illegal "elections".⁵

Forced to obtain Russian citizenship

Russia has initiated a systematic campaign aimed at compelling residents of occupied regions of Ukraine to acquire Russian citizenship, as part of its strategy to solidify control. Individuals residing in areas such as Luhansk, Donetsk, Kherson, and Zaporizhzhya are being subjected to various forms of coercion, including threats, intimidation, limitations on access to humanitarian aid and essential supplies, and the potential risk of detention or deportation. These tactics are employed with the intention of coercing them into accepting Russian citizenship.

These efforts bear striking similarities to the passportization campaign implemented by Russia in Crimea and certain areas of Donetsk and Luhansk since 2014. Such laws and tactics represent clear violations of international law, particularly the prohibition on discriminating against individuals living under occupation based on nationality. Furthermore, compelling individuals to pledge allegiance to an occupying power is deemed illegal under both the Hague Convention and the Geneva Conventions.

Efforts to coerce all inhabitants of the occupied regions in Ukraine into accepting Russian citizenship operate on two fronts. Initially, the Russian federal government has implemented legislation that ostensibly facilitates the process of obtaining a Russian passport, while simultaneously issuing warnings of detention or expulsion for those who resist. Additionally, occupation authorities in Russia have instituted practical barriers for individuals lacking Russian citizenship, effectively rendering it unfeasible to reside in the occupied territories without acquiescing to passport acquisition. These measures entail the denial of medical care and social welfare, limitations on driving privileges and employment opportunities, alongside blatant instances of intimidation and violence.

Russian occupation administrators, in collaboration with occupation troops, persist in conducting incursions into settlements under their control. Their targets encom-

⁵ <https://sprotyv.mod.gov.ua/en/russian-passports-do-not-save-occupants-take-away-housing-in-tot/>.

pass not only properties without rightful owners but also those that have been re-registered in accordance with Russian law.

Primarily concentrated in Zaliznyi Port, situated along the Black Sea coast in the Kherson region, these hostile raids predominantly target residences. Notably, individuals holding Russian passports are not exempt from inclusion in these lists compiled by the Russian occupation administrations. This alarming trend has already resulted in the confiscation of numerous apartments, subsequently allocated to individuals categorized as "IDPs" or "victims" of conflict.

It is pertinent to highlight that previously, occupiers seized properties vacated by owners who fled the occupied territory. This methodical displacement of residents loyal to Ukrainian documentation reflects a concerted effort by occupation authorities to perpetuate the genocidal alteration of the ethnic demographics within Ukrainian territory.⁶

Extensive system of Russian propaganda

The picture invented by the Russians of national support and the benefits of a joyful life under the occupation administration is impossible without media coverage. In connection with this, the networks of propaganda institutions became an indispensable attribute of the occupation administrations.

Since 2014, Russia has established numerous online platforms aimed at influencing domestic political dynamics, carried out numerous cyber assaults targeting banks, media outlets, and governmental bodies, and deployed thousands of trolls and bots to orchestrate artificial discussions on the internet.

Simultaneously, Russia hasn't neglected the Ukrainians within its grasp. Following the annexation of Crimea and occupation of parts of Donetsk and Luhansk regions, Russia has focused on controlling the "information landscape" for its inhabitants. Ukrainian television and radio broadcasts were blocked, replaced by local and Russian channels. However, access to the internet and social media remained open.

With the onset of full-scale invasion, restrictions have tightened significantly. Presently, the Russian Federation is censoring anything beyond its control. Since summer 2022, residents of the temporarily occupied territories (TOTs) have had no access to independent radio and television broadcasts, nor to most Ukrainian or international websites, including popular social networks. Consequently, inhabitants are deprived of unbiased news sources and are subjected to the pervasive influence of Russian propaganda.

The Russian invaders are intensifying measures of informational and psychological influence on Ukrainians under occupation. In particular, residents of the occupied communities of the Kherson region are massively connected to Russian satellite television called "Русский мир" in order to block access to information about the real situation at the front, in Ukraine and in the world. This was reported by the Main

⁶ <https://sprotyv.mod.gov.ua/en/russian-passports-do-not-save-occupants-take-away-housing-in-tot/>.

Directorate of Intelligence of the Ministry of Defense. According to Ukrainian intelligence, the Russians have already installed more than 18,000 relevant devices.⁷

At the same time, the Main Intelligence Directorate of Ukraine informed that the Russian occupiers are expanding the network of Russian mobile coverage: in 2023-24, more than 700 base stations were installed in Donetsk region, and more than 200 in Kherson region, which is more than 85% of all mobile coverage in the occupied region.

From January 2, 2024, the Russians began to install antennas for broadcasting Russian TV channels in the temporarily occupied territory of the Kherson region.

In November 2023, the mayor of Melitopol, Ivan Fedorov, reported that the occupiers had announced and launched 39 Russian Mir satellite television channels in certain areas of the temporarily captured parts of the Zaporizhia and Kherson regions.

In October 2023, the Center for National Resistance reported that special commissions of the occupation administrations, accompanied by the Russian police, were conducting raids on TOT and seizing satellite television equipment from residents of temporarily occupied Ukrainian territories. In return, the occupiers provide free receivers, satellite dishes and converters for broadcasting Russian propaganda channels.⁸

In addition, the occupiers distribute printed editions of propaganda newspapers such as "Zaporozhsky Vestnik", "Naddnepryanskaya Pravda", "Komsomolskaya Pravda", "Krymskaya Gazeta", etc.

Concluding remarks

Russian culture is used as a weapon to dominate and destroy other cultures. This statement shows a genocidal intention to destroy all dissenters. It is no coincidence that Russian tanks appear first, and then - banners with with the title Russia is here forever. These are kind of signposts with which the Russian marks the occupied territories.

During the occupation, the Ukrainian language and symbols are banned, the state ideology of the Kremlin is taught under the guise of history, the state religion is established in the form of the "Moscow Patriarchate", and in classrooms once filled with the melodies of Ukrainian literature and the poetry of its land, now forcibly replaced the propagandist narratives of the invader, masquerading as history.

Russia understood to destroy a certain national group, it is not necessary to kill all its representatives. You can forcibly change their identity - and the entire nation will disappear.

⁷ <https://t.me/DIUkraine/3490>.

⁸ <https://sprotyv.mod.gov.ua/okupanty-vyluchayut-komplekty-sputnykovogo-telebachennya-u-meshkantsiv-tot/>.

THEORETICAL AND POLITICAL RELATIONS BETWEEN “STATE AND ARMED FORCES” - THE RUSSIANS WIVES OF MOBILIZED RECRUITS

Oleksandr Ponypaliak¹

Abstract

We are witnessing the emergence of a new social movement in Russia: the wives of mobilized recruits of the the Russian Armed Forced. They demand that those who have been boots on the ground for over a year does not returned to home. Ever since the Russian total war against Ukraine in 24 February 2022 started, many people were puzzled by the inertia of the “soldiers’ mothers,” – an anti-war grassroots movement that was active during both Chechen wars.

Before the mobilization kicked off, the Russian government had been quite circumspect when it came it recruitment 80 % of inmates had no one waiting for their release on the outside. But it wasn’t just about the convicts. Some Russians volunteered to go to war just to make quick money and opportunity. These persons wanted to rake in a \$2,000 monthly paycheck. We know for a fact that was the principal motivation. After all, it was the sole incentive cited by the Kreml. It were volunteers and professional soldiers, but after collapse “*Blitzkrieg war*” in spring – summer period of 2022 and defeats in Kharkiv and Kherson in September – October 2022 Kreml was forced to announce mobilization.

Mobilized recruits. With mobilized recruits it’s a different story. These as usual regular guys, typical civilians Russians. The fundamental difference between the mobilized recruits and the volunteers who fell for an easy \$2,000 jackpot is that the former have loving families and are cared for. Wives of mobilized recruits wouldn’t just swap their men for a pile of cash. That what sparked the protests in the RF. A year into the mobilization drive, it finally clicked with people. No one’s willing to bring their loved ones back. This situation provokes misunderstanding and possible protest in Russian society a couple of months before Putin’s presidential election.

¹ Oleksandr Ponypaliak had to cancel his partisipation due to operational reasons.

EVERYTHING FOR THE FRONT? RUSSIA'S RELUCTANT ECONOMIC MOBILISATION AFTER FEBRUARY 2022

Emil Wannheden

The presentation by Emil Wannheden in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=nr4KG1mtKvc> starting from 5:34:35.

Abstract

This paper discusses what measures the Russian government has put in place to mobilise the country's economy in the wake of its 2022 invasion of Ukraine. It also analyses the current debate among Russian economists and policymakers about the future direction of Russia's economy and to what degree it should be mobilised and converted to a war economy. The paper argues that the Russian government has started to mobilise the economy, albeit belatedly and reluctantly. However, depending on how it is defined, it can be misleading to characterise Russia's economy as a war economy, even if there are signs it is moving in that direction.

Introduction

There is an impression among some journalists and analysts that, following Russia's invasion of Ukraine in February 2022, the Russian government has transformed the country's economy into a "war economy."¹ The successive increases in Russia's military budget and the expansion of the military-industrial complex at the expense of the civilian economy are put forward as arguments supporting this claim. Claims that Russia has adopted a war economy are usually accompanied by the assumption that it has managed to vastly increase its production of weapons and military materiel. There is every reason to investigate this narrative, since it risks playing into the hands of Russian propagandists, who like to exaggerate the output of Russia's defence industry and the resilience of its economy in the face of Western sanctions. The purpose of these Russian claims is to instill a sense of hopelessness in Ukraine's supporters and Western partners, as well as portray the war as unwinnable for Kyiv.

The term "war economy" conjures up the image of a Herculean, whole-of-society, Soviet-style effort towards military production and mobilisation. However, this type of mobilisation is not occurring in Russia, at least not yet. While it is undoubtedly true that the Russian military-industrial complex is receiving more funds and recruiting more workers, there is so far scant evidence in open sources that it has managed to increase its output vastly, even if it is reasonable to assume that it has done so to some degree. In addition, Russia is not close to the levels of military spending that the Soviet Union had during World War II, or even during the Cold War. The main reason

¹ One example is Simon Kuper: "What if Russia wins?", *Financial Times*, 22 December 2023.

behind Russia's relatively limited increases in military spending in 2022 and 2023 is likely President Vladimir Putin's wish to isolate the Russian population from the effects of the war. Putin has also previously stated that Russia needs to avoid repeating the mistake of the leaders of the Soviet Union, who weakened the country by spending too much on the military.²

Still, the Russian government has been forced to gradually devote more and more resources towards the war effort as the illusion of a quick Ukrainian capitulation evaporated and the realities of long-term war set in. In September 2022, a partial mobilisation was announced. Military spending has risen steadily in 2023, and it is becoming ever more difficult for the government to pretend that the war is a "special military operation." Is Russia sliding towards a war economy, perhaps by force of inertia and as a result of the decision to invade Ukraine and step up the confrontation with the West?

There is no widely agreed-upon definition among economists of what, precisely, the term "war economy" means, other than that it indicates the adjustments that a country undertakes to adapt its economy to the conditions of war. In current usage, it indicates the adaptation or transformation of the economy through increased military expenditure and increased state intervention to ensure enough resources are allocated to the country's military. A country with a war economy does not necessarily need to be at war; it can be either a market economy or a planned economy. The closest corresponding term in Russian is *mobilizatsionnaia ekonomika* ("mobilisation economy"), usually defined along the lines of "the concentration of the state's resources to counter threats against the country's existence, in which the leading role is played by the state."³ The obvious point of reference is the experience of the Soviet Union during World War II, when the entire Soviet economy and society was directed towards supporting the war effort. In Russia, the Soviet Union's economic and industrial mobilisation during World War II is generally seen as one of the most important factors that contributed to the defeat of Nazi Germany.

Once the full-scale invasion started in 2022, Russia's leadership expected to win relatively swiftly. Instead, after Russia managed to occupy a sizeable portion of Ukraine, a stalemate developed in 2023, leading to a war of attrition. In this context, economic factors became more important. As the war dragged on, Russia's economic resources became more strained, and the government was forced to make difficult choices. To what degree should the country's economy be mobilised for war? If the government spends too little on the war, it risks undermining the effort in Ukraine. If it spends too much, it risks creating economic problems down the line and sapping domestic political support for the war.

In this context, two questions arise. First, what measures has the Russian government implemented since February 2022 to mobilise its economy? And second, is Russia moving towards what can be called a "war economy," or, to use the Russian term, a "mobilisation economy"?

² Emil Wannheden and Tobias Junerfält: "The Russian economy: Bracing for the long haul," in Maria Engqvist and Emil Wannheden (eds.): *Russia's War Against Ukraine: The First Year*, FOI-R--5479--SE (Stockholm: Swedish Defence Research Agency, 2023), p. 91.

³ Sedov V. V.: "Mobilizatsionnaia ekonomika: ot praktiki k teorii," in *Mobilizatsionnaia model ekonomiki: istoricheskii opyt Rossii XX veka: sbornik materialov vserossiiskoi nauchnoi konferentsii* (Chelyabinsk: 2009).

These questions are important, but difficult to answer. Given the increase in censorship and lack of statistics, it is difficult to assess the degree of militarisation of the economy quantitatively.⁴ Lack of data makes it difficult to assess how much is spent on the military, how much the defence industry is producing, and to what degree civilian economic activity is being converted to military-related production.⁵ Further research is necessary in this direction. This paper tries to answer the research questions qualitatively by examining new and existing legislation, government initiatives, government bodies and structures, news articles, and academic articles. The level of military expenditure is also taken into account.

The following sections analyse, in turn, Russia's current system of economic mobilisation, the economic mobilisation measures implemented after the 2022 invasion, and the internal debate in Russia on whether the economy should be mobilised to a greater degree. The last section of the paper presents some conclusions.

The discussion here focuses on economic, rather than military, mobilisation. In contemporary Russia, just as in the Soviet Union, economic mobilisation is part of a wider concept of mobilisation that also includes military mobilisation. Since military and economic mobilisation are supposed to work together, the division is somewhat artificial. Indeed, the Russian concept of mobilisation has a “whole-of-society” thrust that makes it a wider and more comprehensive concept than in many countries in the West.

Russia's system of economic mobilisation

Russia inherited its system of mobilisation from the Soviet Union. After the end of World War II and throughout the Cold War, the Soviet Union maintained a system of economic mobilisation that was unique in the world given its size and importance.⁶ Most Soviet military and civilian factories had to maintain huge spare capacities to potentially scale up and/or convert to military production. The government also financed the creation of extensive stockpiles of strategic goods. Economic mobilisation was to be conducted within the framework of the planned economy and the five-year plans. The system was inefficient from an economic point of view and contributed to the decline of the Soviet economy, but Soviet leaders considered it a necessity in the event of a conflict with the NATO countries. After the Soviet Union collapsed, the Russian government gradually scaled down the system's scope. It was decided that economic mobilisation should work within the framework of Russia's market economy, with enterprises fulfilling state orders on commercial terms.

The main legal basis for the current system is the law “On mobilisation preparation and mobilisation in the Russian Federation,” first adopted in February 1997 and amended several times since. As the law's name suggests, it regulates both peacetime mobilisation preparation and wartime mobilisation. In the event of complete or partial

⁴ For a discussion on the difficulties of assessing Russian military expenditure, see Emil Wannheden: *Assessing Russian military expenditures in times of war*, in Maria Engqvist (ed.): *Russian Military Capability at War: Reflections on Methodology and Sources Post-2022*, FOI report, forthcoming.

⁵ An attempt at answering this question is found in Heli Simola: *The role of war-related industries in Russia's recent economic recovery*, BOFIT Policy Brief No. 16, 13 December 2023.

⁶ For a historic overview of the system of economic mobilisation in Russia, see Julian Cooper: *If War Comes Tomorrow*, RUSI Whitehall Report 4-16, August 2016. Cooper's report is the main source and inspiration for the discussion in this paper.

mobilisation, the law requires the government and the federal subjects to prepare the transition of the economy to “wartime conditions.”

In 2013, the government approved a “Mobilisation Plan for the Economy of the Russian Federation.” This federal mobilisation plan is the first of its kind in Russia. The plan specifies the annual needs for the population and the Armed Forces during wartime and sets targets for the supply of the most important products, including weapons and military equipment, based on the State Armament Programme.

In practice, the adoption of a mobilisation plan at the federal level meant that the system of economic mobilisation was significantly reformed and reduced in scope. Although classified, some details about the plan are known. Rather than requiring enterprises to maintain large spare capacities for production, it was decided that the increase in production during wartime is to be achieved by raising labour productivity. In all, 800 enterprises and organisations are involved in the plan for the production of military equipment and materiel.⁷ Since many of these enterprises are state-owned anyway, the system is less market-based than it might appear at first glance. The companies of the military-industrial complex are considered “too important to fail” and operate with soft budget constraints. Also, similarly to practices during the time of the Soviet Union, the price for defence materiel was determined by the government using a formula of cost plus fixed profit.⁸ Consequently, state-owned defence enterprises have little to gain from efforts to reduce costs and improve efficiency. In other words, while the mobilisation system for the military-industrial complex is meant to rely on increases in productivity, the existing incentive structures work against this goal.

The federal mobilisation plan is supposed to be updated every five years, much as it was during Soviet times. However, there is no openly available information that indicates that any update has taken place since 2013. Regardless of whether the federal mobilisation plan has been reviewed since then, it is likely that the system described above was not significantly altered by the time of the invasion of Ukraine in February 2022.

The reluctant and partial economic mobilisation of 2022 and 2023

Initially, the government and the Central Bank of Russia took measures in the weeks following the invasion of February 2022 to avoid an economic crisis caused by the Western sanctions. These measures focused on stabilising the exchange rate of the rouble.⁹ At first, not much was done to mobilise the economy or increase military expenditure. In July 2022, the government amended the federal law on defence to achieve several outcomes: allowing the temporary reactivation of mobilisation capacities and facilities; initiating the release of material assets from the state reserve; and permitting the government to intervene in the regulation of labour relations in individual enterprises, including regulating work outside normal working hours (at night,

⁷ Sergei V. Khutortsev: “Mobilisatsionnyi plan ekonomiki Rossiskoi Federatsii – vashneishaia sostavliushaia plana oborony Rossiskoi Federatsii,” in *Federalnyi Sprovochnik, Oboronno-promyshlennyi kompleks Rossii*, vol. 10 (2014); Cooper: *If War Comes Tomorrow*.

⁸ Julian Cooper: “The Russian economy twenty years after the end of the socialist economic system,” *Journal of Eurasian Studies*, no. 4 (2013), p. 61.

⁹ Wannheden and Junerfält: “The Russian economy,” p. 78.

on weekends and on holidays).¹⁰ In hindsight, it is quite clear that these amendments prepared the ground for the government's announcement of a partial mobilisation in September 2022. The government also introduced criminal liability for managers and officials who, either intentionally or by negligence, fail to honour contracts relating to the state defence order, punishable with a hefty fine or up to ten years of prison.¹¹

It is interesting to note that the partial mobilisation decree of September 2022 lacks any measures relating to economic mobilisation. According to an analysis by legal researchers at the Law Department of the Baikal State University, the decree of partial mobilisation is, to some extent, legally inconsistent with the mobilisation law. In particular, the researchers note the absence of measures to implement mobilisation plans, prepare for economic mobilisation, or transfer the economy to "wartime conditions," as required by the mobilisation law.¹²

In conjunction with the declaration of martial law, the President announced the creation of the "Government's Coordination Council for Support of the Armed Forces of the Russian Federation, Other Troops, Military Formations and Agencies" (GCC), headed by Prime Minister Mikhail Mishustin. The GCC has a mandate to coordinate the ministries and agencies involved in the supply of weapons and other equipment to the military formations active in Ukraine, and to facilitate transport, logistics, construction of fortifications, healthcare, and social spending for veterans and the families of those killed or missing in action.¹³ A similar structure was used during the COVID-19 pandemic to coordinate Russia's pandemic response efforts. In practice, the GCC embodies the principles of concentration of resources, centralisation of leadership, and control of implementation that are characteristic of the Russian concept of economic mobilisation. Through the GCC, Prime Minister Mishustin coaxes the federal ministries and agencies to redirect the country's resources towards the Armed Forces and the defence-industrial complex.

The fact that the partial mobilisation, the introduction of martial law, and the creation of the GCC came about six months after the start of the invasion reinforces the impression that the government was not planning for a long war. In fact, it was probably hoping to avoid these measures. It was also during the autumn of 2022 that the government gradually started raising military expenditure.¹⁴ Military expenditure has continued to increase gradually, from 4.7% in 2022 to 5.3% in 2023, to a planned 7.1% in 2024.¹⁵ It remains unclear to what degree the increase in military expenditure has helped to expand the rate of production in the defence industries. Russia's current level of military spending can be compared to that of the Soviet Union, which was substantially higher: around 20% in 1940, over 60% in 1942, and around 15%-17%

¹⁰ Federal law no. 272, *O vnesenii izmeneniy v otdelnie zakonodatelnie akty Rossiiskoi Federatsii*, 14 July 2022.

¹¹ Interfax, *Duma primiala zakon ob ugolovnoi otvetstvennosti za sryvy v gosoboronzakaze*, 20 September 2022, <https://www.interfax.ru/russia/863115>.

¹² Prikhodko T.V., Tarasova T.N: "Mobilizatsiia 2022: Problemy realizatsii pravovykh predpisaniy," in *Pravo i gosudarstvo: teoriia i praktika*, no. 6 (222), 2022.

¹³ Government, *Koordinatsionnyi sovet pri Pravitelstve Rossiiskoi Federatsii*, <http://government.ru/info/46858/>.

¹⁴ Wannheden and Junerfält: "The Russian economy," p. 77.

¹⁵ Julian Cooper: *Another Budget for a Country at War: Military Expenditure in Russia's Federal Budget for 2024 and Beyond*, Stockholm International Peace Research Institute, 2023.

during the 1980s.¹⁶ The comparison is very rough since the underlying statistics do not correspond, but it illustrates a difference in magnitude.

The overall picture that emerges is that, after an initial period of inaction, the government decided in August or September 2022 to increase military expenditure and introduce organisational changes in order to increase defence-industry production. While no other major initiatives for economic mobilisation have been declared since then, the GCC has continued its work, and it is coordinating the implementation of a growing military budget. The result is an increasing militarisation of the Russian economy, where the defence-industrial complex is increasing in importance as a growth engine for the rest of the economy. In addition, the GCC ensures that the defence-industrial complex is given priority for the supply of the best available inputs, both in terms of technology (such as imported semiconductors) and skilled labour. Much like in the Soviet Union, the rest of the economy is expected to adapt accordingly, with less-prioritised sectors having to make do with what is left over. However, the overall level of military spending is still much lower than it was in the Soviet Union, and it would be wrong to say, at the time of writing, that Russia is mobilising “everything for the front,” to borrow a Soviet slogan from World War II.

The current Russian debate about the mobilisation economy

While the government has gradually increased the amount of resources reserved for the war effort, there is a nascent debate on whether Russia should move towards a full “mobilisation economy.” Academic interest in Russia about whether a mobilisation economy is a viable economic model for the country and what it could entail has increased after the 2014 annexation of Crimea and especially after the invasion of Ukraine in 2022, given the increasing challenges for Russia’s economy and its trade with the rest of the world.¹⁷ The question being debated is whether the government should accelerate its intervention in the economy in order to secure more resources for the war against Ukraine and the confrontation with the West. In this context, it is possible to sketch four options put forward by different interest groups.¹⁸

The first option is to try to contain the economic fallout of the war and, to the extent possible, limit the increases in military and other government expenditure and thereby preserve macroeconomic stability. This is the preferred course of “technocrats,” such as the finance minister, Anton Siluanov, and Elvira Nabiullina, the governor of the Central Bank of Russia and former deputy finance minister. Nabiullina rather favours a structural transformation of the Russian economy based on the maintenance of a

¹⁶ Mark Harrison: “Soviet National Income and the Burden of Defence, 1937 and 1940–1944,” University of Warwick working paper, 7 July 1989; Franklyn D. Holzman: “Politics and Guesswork: CIA and DIA Estimates of Soviet Military Spending,” *International Security* 14, no. 2 (1989).

¹⁷ Oleg B. Ivanov and Evgeniy Bukhvald: “Mobilizatsionnaia ekonomika v Rossii: vchera, segodnia i ...” in *ETAP: Ekonomicheskaia Teoriia, Analiz, Praktika*, no. 3, 2022.

¹⁸ Naturally, most of these discussions take place behind closed doors within the state apparatus, which makes them impossible to monitor with open sources. However, they can be inferred from the known positions of officials and different interest groups, and sometimes the discussions take place openly. The options discussed should also not be seen as mutually exclusive. Rather, they emphasise different aims. For a further discussion on the analysis of the different positions within Russia’s elite, see Ivan Fomin: “Sixty Shades of Statism: Mapping the Ideological Divergences in Russian Elite Discourse,” *Demokratizatsiia* 30 (3), 2022, 305–332.

market economy, which is seen as incompatible with the introduction of a mobilisation economy.¹⁹

A second option appearing in the debate is that the government should mobilise the economy through increased investments and expenditures in order to stimulate economic growth, industrial production, and technological innovation, preferably in cooperation with China and other friendly countries. This position has been advanced by Denis Manturov, Minister of Trade and Industry, and by Vladimir Mau, former rector of the Russian Presidential Academy of National Economy and Public Administration, in an intervention in the Committee on Budget and Taxes in the State Duma.²⁰ The group arguing for this option can be called the “optimists,” since the policy they propose requires increased government spending, which is hard to come by as long as the war against Ukraine continues.

A third group, which could be called the “hawks,” also wants to mobilise the economy, but with a focus on the defence industry and by increasing military expenditure. The advocates for this approach come from the military, the defence industry, and the security sector.²¹ A fourth group, which is more marginal than the others, can be called the “nostalgics,” since they argue for a return to a Soviet-style mobilisation economy. The leader of the Communist Party of Russia favours the implementation of a mobilisation economy, drawing on lessons from the Soviet Union.²²

So far, the government has played down the possibility of introducing a mobilisation economy. Such an option was not included, for example, in the macroeconomic forecast that informs the federal budget.²³ If the government plans to increase economic mobilisation, it will need to finance it, either by raising more money through taxes, by cutting other expenditures, or by using its reserves to a greater degree. Since these alternatives are unattractive for different reasons, the government has so far resorted to a gradual and relatively limited increase in military and social expenditure without committing to full-scale economic mobilisation. The longer the war goes on and the more pressure the sanctions put on Russia’s economy, the more difficult it will be for the government to continue finding the “golden mean” between mobilisation and financial restraint.

Conclusions

The evidence presented in the discussion above suggests that, so far, Russia’s economic mobilisation after the invasion of Ukraine in 2022 has been limited. The pre-existing system of economic mobilisation was not used to generate more resources for the war. The government has focused on limiting the war’s economic damage and

¹⁹ Central Bank of Russia, *Vystupleniie Elviry Nabiullinoy na vstreche Assotsiatsii bankov Rossii*, press release, 26 May 2022, <http://www.cbr.ru/press/event/?id=12904>.

²⁰ Interfax, *Denis Manturov: totalnogo otказа ot printsipov rynochnoy ekonomiki ne budet*, accessed 13 February 2024, <https://www.militarynews.ru/story.asp?rid=2&nid=579328&lang=RU>; Vedomosti, *Rektor RANKhGS predlozhit rassmotret' perekhod k mobilizatsionnoy ekonomike*, 17 October 2022.

²¹ Andrew Monaghan: *Power in Modern Russia* (Manchester: Manchester University Press, 2017), p. 70.

²² Communist Party of the Russian Federation, “*Ziuganov: Trebuetsia maksimalnaia mobilizatsiia resursov i splosheniie obschestva*,” press release, 12 December 2022, <https://kprf.ru/party-live/cknews/215469.html>.

²³ Meduza, *Rossiiskie chinovniki postoianno govoriat o perekhode k “mobilizatsionnoy ekonomike” — kak v gody Velikoy Otechestvennoy voyny. Eto pravda proishodit?* 21 November 2022, <https://meduza.io/feature/2022/11/21/rossiiskie-chinovniki-postoianno-govoryat-o-perekhode-k-mobilizatsionnoy-ekonomike-kak-v-gody-velikoy-otchestvennoy-voyny-eto-pravda-proishodit>.

sanctions rather than initiating a structural transformation towards a mobilisation economy. In addition, Russia has increased its military spending only gradually over the last two years.

However, some interest groups outside and inside the government are arguing for bigger state intervention in the economy and higher government expenditure, either on investments or on the military. There is a tension within the state apparatus between those who want to maintain a careful economic policy and limit public spending and those who want to mobilise the economy to a greater degree to finance the war in Ukraine and the confrontation with the West. So far, the government has chosen to strike a balance between these positions. If the system is put under greater stress, either through stricter sanctions or because of a drawn-out war, the political leadership might find it difficult to maintain this balance. It will also become more difficult to isolate the population from the economic effects of the war.

Even if the government has not committed to full-scale economic mobilisation, it has belatedly started to introduce measures to mobilise the economy. Through the Coordination Council and other bodies, the state is intervening more in the economy to secure resources for the war effort. Military expenditures are continuing to rise. The defence industry has become the growth engine of the economy, and has privileged access to the best inputs and the most qualified labour in Russia. The war is leading to a re-militarisation of the economy, creating lock-in effects. It would be both economically and politically painful to decrease military expenditure, even if the war in Ukraine comes to a halt. Russia can ill afford to decrease military expenditure when it wants to reconstitute and expand its Armed Forces. Therefore, it is likely that Russia's economy will remain structurally militarised as long as the confrontation with the West persists.

RUSSIA'S ASSESSMENT OF GEOPOLITICAL THREATS AND DANGERS IN 2030 AND 2045 – FUTURE DRIVERS FOR CHANGE

Sari Voinoff

The presentation by Sari Voinoff in the Russia Seminar 2024 can be found on the FNDU YouTube-channel:
<https://www.youtube.com/watch?v=nr4KG1mtKvc> starting from 6:01:40.

Russia's strategic military foresight

Russian military scientists, experts and civilian researchers who prepare the Military-Political Situation Assessment (VPO)¹ for the Russian Security Council carry out foresight to identify potential and probable military threats to Russia. The VPO examines the balance and differences in military, economic, technological, and other potentials between states and anticipates Russia's ability to mitigate the threats they pose. Researchers and analysts compare Russia's respective drivers of change with those of its potential adversaries, such as the United States and China.²

In the early 2000s, Russian strategic planning was still carried out by assessing and maintaining a threat list of more than 700 threats. These were, in turn, refined by various variables and quantitative indicators to be monitored. In total, there were several thousand different actions to be monitored, making it practice impossible to use the assessment mechanism.³

Russia's strategic planning methodology is still in a state of flux. At present the Russian National Security Strategy defines the factors and indicators of change according to strategic national priorities rather than security sectors or types of activity. The reform is important for the scientific and methodological support of Russian strategic planning.⁴

Strategic military foresight in Russia often adopts a comprehensive perspective of military strength or potential. The latter is described as the totality of the intellectual and material resources that are engaged in both peace and war, as well as the state's capacity to mobilise all of these resources in order to conduct battle (or defend off an attack).⁵

In the Russian view, global multipolarity does not lead to a reduction in threats but to their multiplication. The earlier estimate that the threat will come from the West will change by 2045. Then the threat can come from any direction, including space.

¹ (Военно-политическая обстановка, *voenno-polititsheskaya obstanovka*). Assessment of the development of the military-political situation in support of military strategic planning for the long term (more than 10 years).

² Назаров 2021; Reach 2022.

³ Назаров 2021, P. 232.

⁴ Ibid. 2021, Pp. 236–237.

⁵ Reach 2022, P. 22.

The most likely scenario in Russian thinking is that between 2040 and 2050, the Western bloc will retain its power of influence in the world order and will determine the direction of global development. It will control other allies and centers of power, such as the Islamic, Indian, and Chinese. In reality, however, in Russian experts' opinion, only China can challenge the West in a confrontation.⁶

Russian military experts estimate that Russia will lose its important and strong role in shaping and maintaining trade, economic, political, and social relations by 2030 if it fails to strengthen its industry and maintain its domestic policies in line with the fundamental values of its people. At the same time, it will lose its military alliances with non-Western states. It will lose its strong position in the formation of new centers of power and influence in the global arena. On the other hand, experts estimate that Russia's role in the modern world order is so great that its removal from the ranks of the leading players could dramatically change the trends of global development. Economic stagnation and the ensuing economic crisis will inevitably lead to growing domestic instability in Russia, a process of Russian annexation, and military action against Russia to seize areas of natural resources.⁷

The foreign military threats

Russian scientists estimate that the regional and local military threats and dangers are emerging on Russia's borders. Russia's main military threats in the period to 2030 and 2045 are related to the United States and its allies, both in the West and in the East.⁸

The threats in general are described as arising from old and new conflicts with neighbouring countries or in areas where Russia is protecting its national interests. The escalation of these tensions can lead to the outbreak of various military conflicts. The main threat for Russia is that they could escalate into large-scale wars involving weapons of mass destruction. China's considerable superiority over Russia in terms of combat capability in the strategic regions of Siberia and the Far East, and its economic potential are in themselves a military threat to Russia. According to Russian experts, China's military and political leadership has no aggressive intentions towards Russia and therefore no military threat, although contrary assessments have been made.⁹ Concerns have been raised in Russia regarding the country's increasing reliance on China¹⁰. Russians refer to this phenomenon as "Asianization" and "Sinicization", even "Sino-phobia" has been raised as a consequence of becoming overdependent on China¹¹.

There are three likely developments in the Russian Ministry of Defence's scenarios up to 2030: Russia's military threats and dangers consist of a US-led coalition (NATO, European Union, Japan, and Australia). The United States will be able to maintain its leading position, but it will no longer be hegemonic and will not dictate international relations. Russia continues to participate in international alliances and organisations. The world is becoming more polarised, and states are grouping around the two

⁶ Подберёзкин 2021.

⁷ Коржевский 2021.

⁸ Цырендоржиев 2015, P. 11.

⁹ Ibid.

¹⁰ Kendall-Taylor 2021, P. 3.

¹¹ Rus. Азиатизация, китаизация, синофобия.

superpowers, the United States and China. This would create a new bipolar world order. In all these scenarios, the military-political situation is changing. Because of Russia's geopolitical position its military threats and dangers remain largely unchanged but vary in level and scale in different scenarios.¹²

The Russian Military Academy foresees Russia's military threats in a geopolitical framework up to 2045. The threat to Russia's Arctic region will remain at the same level in both the 2030s and 2040s. In the Arctic region, the United States and NATO threaten Russia's national interests, including through claims on its natural resources.¹³

In assessments the threats from the West include the Baltic States, Poland, Germany, and the United States, who have military claims on both Belarus and Russia. At the same time, it is proposed that these countries want to take advantage of the other Eastern European countries.¹⁴

With regard to the Baltic Sea, Russian experts argue that the threat is potential. They forecast that the Estonian and Finnish navies might attempt to block the strategically significant Gulf of Finland, a crucial transport route to Kaliningrad, by deploying mines. Consequently, the main forces and troops of the Baltic Fleet stationed in Kaliningrad would find themselves completely cut off, facing all the effects that would follow.¹⁵ At the same time, Russia's maritime doctrine¹⁶ foresees that several states will present future territorial claims on some of its coastal, island, and enclave areas, such as Kaliningrad. As a result, Belarus will become even more important as a buffer state in the western region.

In the south-west of Russia, the military threat up to 2045 is foreseen to arise from Ukraine's territorial claims with the support of the US and NATO. Azerbaijan's territorial claims, with Turkish support, against Armenia over Nagorno-Karabakh and Georgia's efforts to regain Abkhazia and South Ossetia with US and NATO support pose a threat to Russia. States and actors posing a military threat are projected by Russia to be equipped with disruptive technologies¹⁷ and employing nuclear deterrence by 2045.¹⁸

In terms of geopolitics, the area of concern would be extensive, including the Xinjiang Uyghur region in China, as well as the North Caucasus and the Volga region. Furthermore, there is a significant threat arising from the dismantling of Islamic caliphates through the seizure of territories from Russia, China, and Kazakhstan, as well as the potential occurrence of coups d'état in Tajikistan, Kyrgyzstan, and Uzbekistan. Persistent conflicts regarding the Kuril Islands, Sakhalin Islands, and potential future disputes over the Kamchatka Peninsula and Primorsky Krai in Russia's eastern region are identified as possible triggers for military tensions until 2045. According the

¹² Цырендоржиев 2015, Р. 11.

¹³ Reach 2022; Цырендоржиев 2015.

¹⁴ Reach 2022, Р. 105; Цырендоржиев 2015, Р. 12.

¹⁵ Евменов; Пучнин Яа Ещенко 2023; Рейнекин 2022.

¹⁶ Кремль 2022; Russian Maritime Doctrine 2022.

¹⁷ Disruptive technologies enable applications and innovations that redefine markets and replace existing structures and business models. Innovation can be radical, creating significant new markets and changing mindsets without being disruptive. Disruptive technologies displace existing technologies and applications based on them. <https://mooc.fitech.io/fi/oppitunteja/kasvua-tuottavat-teknologiat/>.

¹⁸ Reach 2022; Цырендоржиев 2015.

foresight Japan, the United States, South Korea, and China are all asserting territorial claims in these areas.¹⁹

The assessment of Russia's ability to maintain the Central Asian countries and the Caucasus region as a buffer zone until 2045 is that it will still be able to maintain some kind of weakened position in the region, mainly through its state-owned enterprises. Kazakhstan is seeking an increasingly independent foreign policy, but many other countries are heavily indebted and remain indebted to China. The influence of the China-Russia-Turkey axis in the region will continue to grow. Russia is seeking to dominate the region through energy as a competitor to China. Kazakhstan and Turkmenistan, as oil states, have common interests with Russia, and Russia will continue its previous trade relations with them.²⁰

Russian experts claim that future global military dangers and threats will be driven by the ambitions of Russia's geopolitical rivals:

- to dominate Russia and significantly weaken its position as a nuclear power.
- weakening Russia so that it is unable to influence the development of international relations
- There's a chance China might turn into a military threat to Russia if it takes the lead in international military-political developments. Such a development is possible if Russia is unable to play the role of an equal ally.²¹

The internal dangers and military threats

The military threat for Russia is projected to arise from the rise of Islamic extremism and regional rivalries by 2045, both within Russia and in its neighbourhood. Islamic extremism is strongly related to the threat of mega-terrorism; which Russia intends to combat through counter-terrorism operations. Russia's main internal military danger and threat is a violent overthrow of the regime and a change in its constitutional order by 2030. However, if the regime has not been overthrown by then, the threat will not significantly diminish even by 2045, says experts.²²

Russian Military Academy experts claim that the main challenges and threats to Russia's domestic policy in the long term (2025–2045) are related to the inadequate ability to foresee the future, which should also include conceptualisation and the legal basis for action. Russian political power faces medium- and long-term challenges that stem from its structures. For example, there is not enough political will to resolve socio-political issues, as the power structure lacks the capacity to apply different solutions. The solutions require application models that included legal, political, and social standards and innovative solutions at the same time.²³

Military Academy experts are very critical of Russia's internal political system. The assessment concludes that Russia's party-political system is immature, party ideologies are uncertain and there is a high-level threat to the personalisation of power. This is

¹⁹ Цырендоржиев 2015

²⁰ Абдулjabbarov 2022.

²¹ Цырендоржиев 2015, P. 11.

²² Ibid.

²³ Коржевский, 2021, P. 89.

also seen as a major divide between the state leadership and the rest of society. These major factors are major drawbacks and obstacles to political development.²⁴

Russia's internal political threats in the long term involves many elements that could substantially weaken the state's control and lead to crises. These include the following:

- change of power
- distrust of those in power
- a widening gap between power and society
- lack of prospects for the working population, lack of political competition
- inadequate consideration of the interests of society in political decision-making.
- low or non-existent participation in decision making
- the emergence of a class society
- limited scope for political competition
- identity crisis in the state - lack of grand projects and goalsetting within the ruling party - outdated, stereotyped ideological lines
- dominance of technocrats and bureaucrats and outdated ideology
- the education system in teaching political values and ideology
- lack of ideology
- lack of coherent values and meanings and of a vision of the future and
- lack of transparency of information/communication.²⁵

Russian experts have estimated that a disintegrating development and socio-cultural crisis in the Russian state can be expected after 2024²⁶. The assessment was made in the year just before Russia's war of aggression in Ukraine. The said unfavourable trend is likely to accelerate in this context. The unfavourable trend for Russia leading to it is the result of public distrust of the political leadership and the deteriorating state of society²⁷. From a political point of view, this development would lead to an ideological vacuum, which could be filled by various religious movements and extremist thinking in society²⁸.

The US and EU sanctions have severely impacted Russia's banking and financial system, affecting the sustainability of banks supporting state defence. The sharing of financial and banking information on certain contracts has been restricted. Experts argue that Russia's planning horizon is decreasing, with key measures limited to budget revenue and expenditure, and no economic policy.²⁹

The Russian defence industry attaches great importance to prioritisation. Of particular importance are projects in the space, cyber, information and cognitive domains. Opportunities for the exploitation of cheaper technologies, new concepts of operation, paramilitary activities and the development of dual-use products will be explored. At

²⁴ Коржевский, 2021, P. 89.

²⁵ Ibid.

²⁶ Ibid. P. 93.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid. P. 104; Подберёзкин, 2021, P. 945.

the same time, Russia is closely monitoring changes in the global environment and changes in the behaviour of the population in this context.³⁰

The future development

Despite extensive sanctions, the development of the Russia's defense-industrial complex will continue through international military-technical cooperation³¹. The sustainability and pricing of defense and defense industry funding are serious obstacles to Russia's foreign trade³². Several points have been added to the Armed Forces Development Programme to improve weaknesses. This includes improving the financial performance of the forces, improving logistics and addressing shortcomings such as waste of resources, organisational confusion and incoherence.³³ But the first step should be to take real action to tackle corruption. Corruption is not confined to the military-industrial complex, but is pervasive throughout the whole of government and society. Corruption is a burden of Russia's past, a trend of the present and still an obstacle to the future.

If Russia's ability to modernize its nuclear arsenal does not progress by 2035, it is likely to fall behind the United States and, above all, China. The development of China's nuclear arsenal has been slow due to a shortage of materials and the slowness of the processes for dealing with them. Russia can arm China by selling it weapons-grade plutonium, which will weaken Russia's position but at the same time at least maintain control and deterrence of its nuclear weapons complex.³⁴

By 2045, Russia is likely to be able to maintain its critical infrastructure, with the state continuing to manage the transport and energy sectors, although infrastructure instability and obsolescence will continue to be a slowing factor. Critical infrastructure is maintained at the expense of other sectors and industries. Climate change will increase maintenance costs and slow down reforms. They are also affected by the duration of the conflict with the EU, the US, and China's desire for cooperation.³⁵

References

Abdujabbarov, Mukhammadanas J. 2022. New Course of Russia's Foreign Policy in Central Asia, *Oriental Journal of History, Politics and Law*. *Oriental Journal of History, Politics and Law*, 294-292. doi: <https://doi.org/10.37547/supsci-ojhpl-02-02-38>.

Kendall-Taylor, A. and Shullman, D. 2021: "The Future of Russia-China Relations," <https://www.jstor.org/stable/resrep28653.5> .

Reach, C. & al. 2022: Russian Military Forecasting and Analysis. The Military-Political Situation and Military Potential in Strategic Planning. RAND. doi: <https://doi.org/10.7249/RR-A198-4> .

³⁰ Панкова, Et Al. 2020.

³¹ Ibid.

³² Ibid.

³³ Панкова, Et Al. 2020.

³⁴ Ibid.

³⁵ The Finnish Defence Research Agency 2023.

Russian Maritime Doctrine, 2022. Russian Strategic Documents. Harvard Kennedy School, Belfer Center for Science and International Affairs. <https://www.russiamatters.org/russian-strategic-documents> .

The Finnish Defence Research Agency, 2023. “Russia workshop: Future studies with the futures triangle.”

Евменов, Н.А., В.В. ПУЧНИН, и Я.В. Ещенко, 2023: Основные тенденции изменения характера и содержания военных угроз Российской Федерации с океанских и морских направлений, *Vojennaja Mysl* 5, 2023, <https://dlib.eastview.com/search/simple/doc?pager.offset=3&id=85552463&hl=%D0%BC%D0%BE%D1%80%D1%8F%D1%85>.

Коржевский, А. С. (под общей ред.) (2021): Прогнозируемые вызовы и угрозы национальной безопасности Российской Федерации и направления их нейтрализации. Военная Академия Генерального Штаба Вооруженных Сил Российской Федерации, Москва: Издательство РГГУ, <https://urly.fi/2Wzt>.

Костенко, А.Н. (2024): Национальная безопасность России и вызовы нового времени. *Военная Мысль* 1, 2024, <https://dlib.eastview.com/browse/issue/12927302/viewer?udb=6&page=8>.

Кремль. 2022. “Морская Доктрина Российской Федерации.” 512, Утверждена Указом Президента Российской Федерации от 31 июля 2022 г.

Назаров, Владимир, Павлович (2021): “Развитие теоретических и методологических основ стратегического планирования в Российской Федерации в условиях новых вызовов и угроз.” Диссертация на соискание ученой степени доктора политических наук, Федеральное государственное автономное образовательное учреждение высшего образования «Московский государственный институт международных отношений (университет) министерства иностранных дел Российской Федерации», Москва, doi: <https://mgimo.ru/science/diss/nazarov-v-p.php>.

Панкова, Л.В, Гусарова, О.В, Савельев, А.Г, Гилькова, О.Н, Королева, Е.М, и Куцына, Е.А. (2020): Военно-экономическое развитие и безопасность. Национальный исследовательский институт мировой экономики и международных отношений имени Е.М. Примакова Российской академии наук (ИМЭМО РАН), Москва, Издательство Весь Мир.

Подберёзкин, А. И. (2021): Оценка и прогноз военно-политической обстановки. Москва: Юстицинформ, <http://eurasian-defence.ru/?q=node/49206>.

Рейнекин, Роман (2022): Внутреннее море НАТО»: реальны ли угрозы закрыть Балтику для российского флота? <https://www.politnavigator.news/vnutrennee-more-nato-realny-li-ugrozy-zakryt-baltiku-dlya-rossijskogo-flota.html>.

Цырендоржиев, Самбу (2015): Прогноз военных опасностей и угроз России. *Защита и безопасность*, том 4, 2015, 7-13, <https://urly.fi/38b1>.

National Defence University

Department of Warfare
P.O. Box 7, 00861 HELSINKI

Tel. +358 299 800

www.mpkk.fi

ISBN 978-951-25-3454-8 (Pbk.)

ISBN 978-951-25-3455-5 (PDF)

ISSN 2343-5275 (print)

ISSN 2343-5283 (web)

SOTATAIDON YTIMESSÄ



Puolustusvoimat
The Finnish Defence Forces