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**NATIONAL DEFENSE UNIVERSITY
JOINT FORCES STAFF COLLEGE
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**MESSING WITH THEIR MINDS:
MASKIROVKA'S COGNITIVE EFFECTS IN CRIMEA AND DONBAS**

by

Miroslav Hofirek

Lieutenant Colonel, the Army of the Czech Republic

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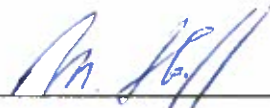
**MESSING WITH THEIR MINDS:
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DONBAS**

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Lieutenant Colonel, the Army of the Czech Republic


A paper submitted to the Faculty of the Joint Advanced Warfighting School in partial satisfaction of the requirements of a Master of Science Degree in Joint Campaign Planning and Strategy. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Joint Forces Staff College or the Department of Defense.

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Abstract

The Russian military concept known as *maskirovka* is an essential component of traditional military art that can provide a decisive advantage to Russian forces over an adversary through surprise, deception, and concealment of its intentions. A focal point to *maskirovka* is creating a distorted reality that serves to confuse, impair, and otherwise degrade adversarial cognitive and decision-making processes. The thesis examines the Russian conception, practical application, and cognitive effects of *maskirovka* as a case study in the Crimea and Donbas operations 2014-2015. The thesis explored Russian activities that ultimately adversely affected Ukrainian decision-making and genius while simultaneously degraded popular support, will, and unity. Unlimited by ethical and international legal restraints, Russia's successful military employment of *maskirovka* techniques ultimately proved effective and, consequentially, will find their way for consideration and possible usage during future military operations. *Maskirovka* degraded adversarial cognitive processing by leveraging heuristics and manipulating and reinforcing cognitive biases. More broadly, the Ukraine war provides valuable lessons for understanding the Russian way of war, developing counter-*maskirovka* measures, and increasing the efficacy of friendly and partner force information operations.

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Table of Contents

Abstract	v
Table of Contents	vii
Chapter 1: Introduction	1
Chapter 2: Maskirovka and Cognitive Effect	4
Maskirovka.....	4
OODA Loop, Dual Thinking Mode, Clausewitzian Trinity	6
Theoretical Framework of Cognitive Effect	9
Chapter 3: Analysis of War in Ukraine 2014-2015	11
Ukraine War 2014-2015 Overview.....	11
Factors Affecting Cognitive Processing in Ukraine War.....	13
Analysis of Crimea Case.....	16
Analysis of Donbas Case	20
Effect of Trinity and Friction in Ukraine War	27
Cognitive Factors Analysis	29
Chapter 4: Discussion	35
Crimea and Donbas Case Studies Comparison.....	36
Clausewitzian Trinity Effect and Friction Discussion	38
Cognitive Factors Discussion.....	39
Chapter 5: Conclusion	43
Bibliography	45
Vita	50

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Chapter 1: Introduction

Classical theorists of war emphasize the importance of deception and surprise. Deception is an integral part of warfare, an art mastered by skilled commanders. Surprise is a tool for gaining superiority, where deception increases the effectiveness of surprise.¹ In Russia, the term maskirovka refers to the integration of concealment, deception, and surprise.² Maskirovka is an essential component of the military art in planning and conducting operations.³ Maskirovka continues to be an integral part of Russian warfare after the reforms and modernization carried out after the armed forces' unconvincing performance in the Russia-Georgia conflict in 2008.⁴

The war with Georgia became a catalyst for change in the Russian armed forces, which resulted in an operational concept known in the West as the Russian New Generation Warfare (RNGW).⁵ The RNGW, demonstrated in Ukraine, is the synchronized use of all instruments of national power applied in non-military and military measures to achieve political goals. The applications vary according to the unique logic and circumstance of each individual conflict.⁶ The RNGW is unique because it seeks to exploits uncertainty, friction, and ambiguity in the operational environment to

¹ Sun Tzu, *The Art of War*, trans. Samuel B. Griffith (New York: Oxford University Press, 1971), 42; Carl von Clausewitz, *On War*, trans. Michael Eliot Howard and Peter Paret (Princeton: Princeton University Press, 2008), 233.

² "Маскировка," Министерство обороны Российской Федерации, accessed December 19, 2020, https://encyclopedia.mil.ru/encyclopedia/dictionary/details_rvsn.htm?id=13494@morfDictionary.

³ David L Hamilton, "Deception in Soviet Military Doctrine and Operations" (Master's Thesis, Monterey CA, Naval Post Graduate School, 1986), 62–63; Hamilton, 70.

⁴ Alexandros F. Boufesis, *The Russia-Georgia War of 2008: Russia's Geostrategic Ascension, Decisive Battles of the 21st Century*. (Michigan: Nimble Books LLC, 2015), 89–90.

⁵ Boufesis, 90.

⁶ Валерий Герасимов, "Ценность науки в предвидении," Военно-промышленный курьер, 2013, <https://www.vpk-news.ru/articles/14632>.

disadvantage the adversary and gain the initiative and surprise for Russian forces.⁷

Maskirovka contributes to creating a favorable environment for operations. Therefore, maskirovka is an integral part of the RNGW.

Maskirovka is a supportive activity to conceal, deceive, and surprise by creating a distorted reality. The distorted reality results in the cognitive effect coming from the cognitive processing of maskirovka stimulus.⁸ Cognitive processing applies dual thinking mode influenced by genetic heritage, cultural tradition, and previous experience and affected by stress, fatigue, and distraction.⁹ The distorted reality also has the second-order effect of increased unpredictability, disbalance, uncertainty, and friction within the Clausewitzian trinity of government, military, and population.¹⁰

The thesis suggests that Russia effectively employed maskirovka to disrupt, hinder, and hamper Ukrainian cognitive processes during Crimea and Donbas operations in 2014 and 2015. Maskirovka created a cognitive effect of distorted reality that provided an advantage to Russian regular and proxy forces through concealment, deception, and surprise. However, in Donbas, the lack of Russian regular forces' timely decisive action caused the conflict to transform into a frozen conflict. Additionally, the distorted reality also increased friction, unpredictability, and disbalance within the Ukrainian paradoxical

⁷ "Unclassified Summary of the U.S. Army Training and Doctrine Command Russian New Generation Warfare Study," Army University Press, accessed February 10, 2021, <https://www.armyupress.army.mil/Portals/7/online-publications/documents/RNGW-Unclassified-Summary-Report.pdf?ver=2020-03-25-122734-383>.

⁸ "Стратегическая Маскировка и Дезинформация это," Национальная политическая энциклопедия, accessed December 19, 2020, <https://politike.ru/termin/strategicheskaja-maskirovka-i-dezinformacija.html>; Daniel W. Krueger, "Maskirovka-What's in It for Us?" (Monograph, Fort Leavenworth, Kansas, School of Advanced Military Studies, 1987), 16.

⁹ Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011), 20–24; John R. Boyd, *A Discourse on Winning and Losing*, ed. Grant T. Hammond (Maxwell AFB, Alabama: Air University Press, 2018), 384; Anthony W.K. Gaillard, "Concentration, Stress and Performance," in *Performance Under Stress*, ed. James L Szalma and Peter A A Hancock (Aldershot, England: CRC Press, 2008), 73.

¹⁰ Clausewitz, *On War*, 101, 139.

trinity. Thus, maskirovka's cognitive effect of distorted reality negatively affected the popular support and loyalty of the Ukrainian people, the decision-making, genius, and will to fight of the Ukrainian government and military.¹¹

The primary research method is a case study of Crimea and Donbas operations. Russian maskirovka, the Observe, Orient, Decide, Act loop (OODA loop), dual thinking mode, Clausewitzian trinity, and general friction theory provide a reference framework for understanding the maskirovka transformation to cognitive effect. The case study focuses on significant factors of the operational environment, maskirovka techniques and outcomes. The subsequent discussion compares case studies, identifies favorable Russian maskirovka activities, and offers recommendations.

The thesis applies the following limitations. The thesis is not focused on the Russian domestic population. Exceptions are Russian citizens permanently living in Crimea and the Donbas region. The thesis does not examine Russian maskirovka camouflage techniques. The research focuses on the period from 2013 to 2015, starting with civil unrest in Ukraine and ending with the Minsk II agreement. Additionally, the thesis does not investigate the international dimension of Russian operations in detail in the context of Ukraine war. Lastly, maskirovka's effect on the adversary's cognitive processing is deemed successful if maskirovka influenced Ukrainian behavior to meet Russian expectations.

¹¹ Complex activity to be carried with virtuosity requires genius. Genius is harmonious combination of imagination, strength of character, intellect, and courage. (Clausewitz, 115–31.)

Chapter 2: Maskirovka and Cognitive Effect

The chapter describes the maskirovka concept, Observe, Orient, Decide, Act loop (OODA loop), dual thinking mode, Clausewitzian trinity, and general friction theory to support understanding the transformation of maskirovka-related activity to the cognitive effect of distorted reality.

Maskirovka

The description of maskirovka varies depending upon the source. In the narrowest sense, maskirovka represents camouflage and concealment. Conversely, in the broadest conception, maskirovka is a complex concept almost interchangeable and synonymous with the Russian New Generation Warfare (RNGW).¹ For the purposes of this study, the thesis defines maskirovka as a concept composed of concealment, simulation, demonstration, and disinformation techniques, applied from strategic to tactical levels of warfare.²

Concealment reduces indicators leading to the discovery of troops, plans, and production. Simulation is a technique to generate a false reality that leads to the creation of incorrect conclusions. Demonstration seeks to divert attention from real intentions and main effort.³ Lastly, disinformation utilizes the deliberate dissemination of false information or the distorted meaning of truth. Disinformation has two sub-categories.

¹ Timothy L. Thomas, *Recasting the Red Star Russia Forges Tradition and Technology through Toughness* (Fort Leavenworth, Kansas: Foreign Military Studies Office, 2011), 81; James Q. Roberts, *Maskirovka 2.0: Hybrid Threat, Hybrid Response*, Occasional Paper (MacDill AFB, Florida: JSOU University Press, 2015), 1.

² А.Ю. Королёв, А.А. Королёва, and А.Д. Яковлев, *Маскировка Вооружения, Техники и Объектов*, Учебное Пособие (Санкт-Петербург, Россия: Министерство образования и науки Российской Федерации Университет ИНТО, 2015).

³ Charles L. Smith, "Soviet Maskirovka," *Airpower Journal* II, no. No. 1 (Spring 1988): 31–32; Andrew W. Hull, Andrew J. Aldrin, and Peter B. Almquist, "Managing Uncertainty: Soviet Views on Deception, Surprise, and Control" (Institute for Defense Analyses, 1989), II-2.

Military disinformation targets the troops, while political disinformation, also known as propaganda, strives to influence political bodies and populations.⁴ Russia also deceives by increasing ambiguity by saturating the information environment with plausible and sufficiently consistent false information.⁵

Maskirovka applies all instruments of national power and exploits knowledge and technologies of psychology, cyber, information, and electronic warfare.⁶ Except for concealment, the employment of simulation, demonstration, and disinformation techniques require horizontal and vertical synchronization to increase the believability and likelihood of success.⁷ Relative to the western military information operations, Russian maskirovka is less encumbered by legal and ethical restraints. The main decision-making factor in the maskirovka's application is Russia's assessment of gains and risks.⁸

Maskirovka targets human senses and technical sensors to conceal Russian forces, deceive and surprise an adversary to gain an advantage, and ensure freedom of action.⁹ Maskirovka affects cognitive processing and creates a distorted reality that causes an

⁴ Morgan Maier, "Little Masquerade: Russia's Evolving Employment Of Maskirovka" (Monograph, Fort Leavenworth, Kansas, Command and General Staff College, 2016), 13; Krueger, "Maskirovka-What's in It for Us?," 20; Hull, Aldrin, and Almquist, "Managing Uncertainty: Soviet Views on Deception, Surprise, and Control." II-3.

⁵ Han Bouwmeester, "Lo and Behold: Let the Truth Be Told-Russia Deception Warfare in Crimea and Ukraine and the Return of Maskirovka and Reflexive Control Theory," in *Winning Without Killing: The Strategic and Operational Utility of Non-Kinetic Capabilities in Crises*, NL ARMS, Netherlands Annual Review of Military Studies (Den Haag, NDL: T.M.C. Asser Press, 2017), 135.

⁶ Roberts, *Maskirovka 2.0: Hybrid Threat, Hybrid Response*, 1-2.

⁷ Kenneth C. Keating, "Maskirovka: The Soviet System of Camouflage" (Student Research Report, Garmish, Germany, US Army Russian Institute, 1981), 13; Maier, "Little Masquerade: Russia's Evolving Employment Of Maskirovka," 7.

⁸ Maier, "Little Masquerade: Russia's Evolving Employment Of Maskirovka," 7-8.

⁹ "Маскировка"; Krueger, "Maskirovka-What's in It for Us?," 16.

adversary to misdirect effort or fix attention on unimportant issues. Consequently, misdirection and distraction deprive adversary initiative.¹⁰

Maskirovka's success rests on adherence to fundamental principles that ensure believability, including persuasiveness, activity, continuity, variety, and complexity. Persuasiveness emphasizes the plausibility of applied measures and their compliance with the operational environment. The principles of activity and continuity emphasize the persistent and diligent maintenance of maskirovka throughout the operation. The principle of variety emphasizes the imaginative application to avoid repetitive patterns. Complexity represents the principle of considering all adversary's senses and technical sensors when applying concealment and deception measures.¹¹

OODA Loop, Dual Thinking Mode, Clausewitzian Trinity

Colonel John Boyd's Observe, Orient, Decide, Act (OODA) loop is "a composite of how we think and learn, the source of who we are, and the potential we possess."¹² The observation function is to scan the environment and search for stimuli to be cognitively processed in the orientation phase. The orientation is a stimulus assessment process applying analysis-synthesis, genetic heritage, cultural traditions, and previous experience. Decision-making transforms cognitively processed stimulus to future action by selecting the action from the available options. The act then operationalizes the decision.¹³ The operationalized decision interacts with the environment and creates an experience that provides feedback to the OODA loop.

¹⁰ Timothy Thomas, "Russia's Reflexive Control Theory and the Military," *The Journal of Slavic Military Studies* 17, no. 2 (June 1, 2004): 239, <https://doi.org/10.1080/13518040490450529>; Maier, "Little Masquerade: Russia's Evolving Employment Of Maskirovka," 6.

¹¹ Королёв, Королёва, and Яковлев, *Маскировка Вооружения, Техники и Объектов*, 8.

¹² Boyd, *A Discourse on Winning and Losing*, 383.

¹³ Boyd, 384–85.

The operational environment and adversary create a variety of inhibitors that reduce performance and cognitive abilities. Inhibitors degrade all elements of the OODA loop. Inhibitors are a distraction (e.g., interruptions, drawbacks, other plans, goals and motives), fatigue (e.g., workload, time since awake, time of day, fitness, boredom), and stress (e.g., time pressure, unpredictability, ambiguity, social conflicts, powerlessness, and danger).¹⁴

The dual thinking mode is the focal point of cognitive processing. Humans assess the stimulus quickly and intuitively or slowly and rationally. Quick and slow modes are sometimes labeled as system 1 and system 2, respectively. System 2 requires human effort, analytical calculations, and logical thinking. Thus, humans make extensive use of system 1 based on heuristics for rational judgment and decision-making. Heuristics are mental shortcuts that can often deliver satisfactory results. However, heuristics are prone to cognitive biases.¹⁵

Availability heuristics allows readily available images and instances to be translated into significant and unbiased interpretations of reality. Availability heuristics is associated with confirmation and group thinking biases. Representativeness heuristics classifies events according to the stereotype and is often associated with framing and insensitivity to sample size biases. The first impression forms an anchor, and subsequent inadequate reassessment due to fixation on the anchor is a nature of anchoring and adjustment heuristics.¹⁶

¹⁴ Gaillard, "Concentration, Stress and Performance," 73.

¹⁵ Bouwmeester, "Lo and Behold: Let the Truth Be Told-Russia Deception Warfare in Crimea and Ukraine and the Return of Maskirovka and Reflexive Control Theory," 134.

¹⁶ Paul K. Davis, Jonathan Kulick, and Michael Egner, *Implications of Modern Decision Science for Military Decision-Support Systems* (Santa Monica, CA: RAND Corporation, 2005), 10–12; Georgii Pocheptsov, "Cognitive Attacks in Russian Hybrid Warfare," *Information & Security: An International Journal* 41 (2018): 41, <https://doi.org/10.11610/isij.4103>; Bouwmeester, "Lo and Behold: Let the Truth Be

The Clausewitzian trinity and friction theory explains war as a phenomenon full of unpredictability, randomness, complexity, and friction. The trinity represents the phenomenon of the dominant tendencies of war. The tendencies are emotional forces of “primordial violence, hatred, and enmity, which are to be considered as a blind natural force,” creative forces of “chance and probability within which the creative spirit is free to roam,” and rational forces of “policy, which makes it subject to reason alone.”¹⁷ Clausewitz attributes mainly emotional tendencies to the people, creative tendencies to the commander and the military, and finally, rational tendencies to the government.¹⁸ These social actors of the trinity are present in all types of contemporary conflicts, as leading entity, armed group, and population base. Therefore, these tendencies operate in conflicts with both state and non-state actors.¹⁹

Internal dynamics within the trinity and external interaction between the trinity of other belligerents cause the unpredictability, randomness, and complexity of war. The dynamics and interaction change the parameters of each variable - emotional, rational, or creative - making war chameleon-like as it hangs like a pendulum being pulled by differing magnetism of the three variables.²⁰

The primary sources of general friction are danger, physical exertion, uncertainties, chance, internal friction, and imperfections in the information on which action in war is based. Furthermore, physical and political limits to the use of force,

Told-Russia Deception Warfare in Crimea and Ukraine and the Return of Maskirovka and Reflexive Control Theory,” 134.

¹⁷ Clausewitz, *On War*, 101; Jan Ångström and Jerker Widén, *Contemporary Military Theory: The Dynamics of War*. (New York: Routledge/Taylor & Francis Group, 2015), 19.

¹⁸ Clausewitz, *On War*, 101; Ångström and Widén, *Contemporary Military Theory: The Dynamics of War.*, 19.

¹⁹ Edward J Villacres and Christopher Bassford, “Reclaiming the Clausewitzian Trinity,” *Parameters: U.S. Army War College*, Autumn 1995, 15.

²⁰ Clausewitz, *On War*, 101.

unpredictability stemming from interaction with an enemy, and disconnects between ends and means cause general friction. The general friction increases the difference between the planned war, called absolute war by Clausewitz, and real war.²¹

Theoretical Framework of Cognitive Effect

Figure 1 synthesizes maskirovka, OODA loop, dual thinking mode, Clausewitzian trinity, and friction theories to explain the transformation of maskirovka activity to the cognitive effect and consequent mechanism of gaining an advantage.

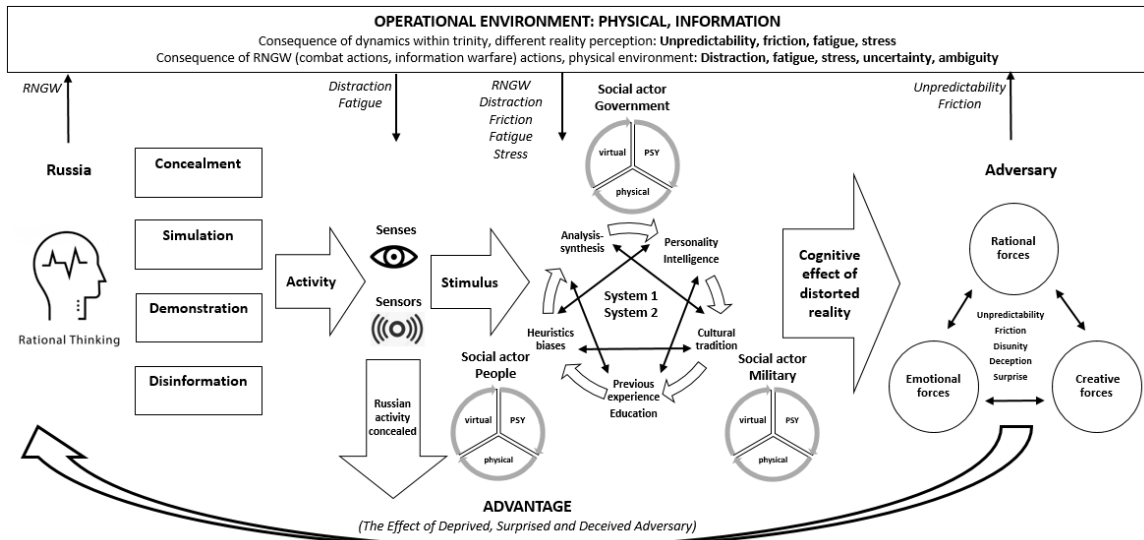


Figure 1: The theoretical framework of cognitive effect [author]

The process of transformation occurs in the operational environment composed of physical and information environments. The social actors of the adversary trinity are present in every dimension and domain as physical, virtual, and psychological entities.²² Russia uses maskirovka-related activity to engage adversary’s senses and technical

²¹ Barry D. Watts, *Clausewitzian Friction and Future War*, McNair Paper 68 (Washington, D.C: Institute for National Defense Strategic Studies NDU, 2004), 89; Clausewitz, *On War*, 138.

²² Paul A.L. Ducheine, Jelle van Haaster, and Richard van Harskamp, “Manoeuvring and Generating Effects in Information Environment,” in *Winning Without Killing: The Strategic and Operational Utility of Non-Kinetic Capabilities in Crises*, NL ARMS, Netherlands Annual Review of Military Studies (Den Haag, NDL: T.M.C. Asser Press, 2017), 159–61.

sensors scanning the operational environment. The adversary's senses and sensors detect the activity and provide the stimulus for cognitive processing. Following cognitive processing applies dual thinking mode to assess stimulus meaning. The analysis-synthesis, heuristics, previous experience, education, and cultural tradition support the assessment. Furthermore, personal abilities and organizational bureaucracy affect the assessment.

Distraction, fatigue, and stress, together with cognitive biases, inhibit cognitive processing. The inhibitors include but are not limited to combat activities, information warfare, physical environment, and friction. The outcome of the adversary's cognitive processing is the cognitive effect of distorted reality. The distorted reality induces adversary behavior to correspond with Russia's expectations. A deprived, deceived, and surprised adversary provides an advantage to Russia.

The cognitive effect of distorted reality also influences stability and friction within the adversary trinity. The cognitive processing of each social actor varies due to different experiences and education, access to information, physical and mental dispositions, exposure to danger, and cultural traditions. The resulting difference in perception causes misunderstanding. Misunderstanding, in turn, increases friction and the dynamics of rational, creative, and emotional tendencies within the adversary's trinity. Therefore, the different cognitive effects result in a growing unpredictability caused by the dynamics within the trinity and the disunity due to friction. Unpredictability and friction directly contribute to stress, fatigue, distraction, and feedback, inhibiting the adversary's cognitive processing, senses, and technical sensors.

Chapter 3: Analysis of War in Ukraine 2014-2015

The chapter provides a brief overview of the Ukraine war and significant factors affecting Ukrainian cognitive processing. The chapter also introduces analyses of the Russian operations conducted in Crimea and Donbas, the effect of the trinity and friction, and cognitive factor analysis.

Ukraine War 2014-2015 Overview

In the autumn of 2013, the Euromaidan uprising broke out against Ukrainian President Yanukovich's decision to reject the Association Agreement with the European Union (EU) and protest domestic corruption. Protesters received moral support from EU officials. After President Yanukovich fled to Russia on 22 February 2014, the collapse and dissolution of the Ukrainian security apparatus was a pretext for Russia's annexation of Crimea and Donbas, later in the conflict.¹

Russian preparations to respond to the developments in Ukraine began shortly after Euromaidan. The Russian media portrayed the Euromaidan as an unconstitutional coup endangering the Russian-speaking population, and Russian officials supported anti-Euromaidan unrest. The anti-Euromaidan protests took place in the south-eastern and eastern regions from Odesa to the Luhansk region and Crimea.²

The Crimean Parliament announced an intention to hold a referendum on autonomy and requested Russian support on 4 February 2014. The formation of Crimean militia and the demonstrations intensified after Yanukovich fled Ukraine.

¹ Elizabeth A. Wood et al., *Roots of Russia's War in Ukraine*. (Washington, D.C.: Woodrow Wilson Center Press, 2016), 12–19.

² Wood et al., 12–19; Mykola Balaban et al., *Donbas in Flames: Guide to the Conflict Zone* (Lviv, Ukraine: Prometheus, 2017), 23.

On 24 February, Russia initiated a snap military exercise in the Western and Central Military Districts, presumably to mobilize forces and divert/redirect attention away from the Crimea. On 27 February, the Russian annexation of Crimea started and concluded with the self-proclaimed Crimean reunification on 18 March 2014.³

While the annexation of Crimea complete, Russia increased its disruptive activities in Ukraine's southern and south-eastern regions. Pro-Russian militias occupied critical infrastructures such as government buildings, transportation hubs, and border crossings with Russia. However, the newly constituted Ukrainian interim government launched the Anti-Terrorist Operation (ATO) to suppress pro-Russian separatists. The Ukrainian operations successfully reduced separatist influence to the small portion of the Donetsk and Luhansk regions.⁴

In May 2014, the separatists declared the People's Republics of Donetsk and Luhansk. Fighting continued in Donbas, involving active Russian conventional forces and the contest for air superiority.⁵ With the active Russian involvement, the influx of volunteers and Russian military equipment prevented the separatist defeat and stabilized the front line. The following summit between France, Germany, Russia, and Ukraine resulted in the Minsk ceasefire protocol on 5 September 2014. Ceasefire violations and violence escalation in early 2015 led to the Minsk II agreement on 11 February 2015.⁶

From Moscow's perspective, the proximate causes of the Ukraine war were the West's penetration into the traditional Russian sphere of influence, Russian desire to be

³ Wood et al., *Roots of Russia's War in Ukraine*. xiii-xiv; Wood et al., 12–19.

⁴ Sabine Fischer, "The Donbas Conflict: Opposing Interests and Narratives, Difficult Peace Process," *Stiftung Wissenschaft Und Politik*, April 2019, 8, <https://doi.org/10.18449/2019RP05>.

⁵ Wood et al., *Roots of Russia's War in Ukraine*. xiv; Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 40.

⁶ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 65–82; Wood et al., *Roots of Russia's War in Ukraine*, xiv.

recognized once again as a great power (Russian Exceptionalism), and an opportunity to depict Russia's military prowess as an offset to Putin's decreasing domestic popularity. Additionally, Russia's annexation of Crimea eliminated the threat of Ukrainian basing contract termination for the aging Russian Black Fleet. The Donbas conflict has frustrated Ukraine's ambition to join the North Atlantic Treaty Organization (NATO).⁷

While similar in many respects, the Crimea and Donbas operations differed in the utilization of Russian conventional forces. In Crimea, conventional forces exploited the success of the proxy forces and completed the annexation. In Donbas, the conventional forces intervened when the defeat of separatists was imminent.

Factors Affecting Cognitive Processing in Ukraine War

Genetic heritage, cultural traditions, previous experience, education, distraction, fatigue, and stress affect cognitive processing. The shared history, geographical and social proximity were significant factors exploited by Russia during the Ukraine war. In addition to historical and social factors, Russia employed Information Warfare to support maskirovka activities.

Russia exploited historical factors of the Second World War (WWII), the legacy of the former Soviet Union and the Black Fleet to shape the information environment of the 2014-2015 conflict with Ukraine. Specifically, the Soviets used human-made famine, called *Holodomor*, to coerce the Ukrainian society in 1932-1933. Famine experience, together with the brutal Soviet occupation of western Ukraine in 1939, sparked Ukrainian resistance against the Soviets. Thus, some Ukrainians perceived the German invasion in

⁷ Wood et al., *Roots of Russia's War in Ukraine*; Michael Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine* (Santa Monica, CA: RAND Corporation, 2017), 45.

1941 as liberation and actively collaborated with the Germans, including participation in atrocities. The *Holodomor* and Ukrainian collaboration with the Nazis remain an important part of an ingrained Ukrainian historical memory.⁸ Russia exploited WWII and the Soviet legacy to effectively shape the information environment to mobilize its friendly support base and inspire fear and dread in opposition groups.⁹

The next historical factor exploited by Russia was the Black Sea legacy. Crimea has been the base for the Russian Black Sea Fleet since 1870. After the Soviet Union disintegrated, the Russian Black Fleet remained in Crimea under a lease agreement due to expire in 2035.¹⁰ The fleet basing in Crimea allowed Russia to conduct intelligence collection and covert build-up of force for the annexation within the conditions of the lease agreement.¹¹ The exploitation of the lease agreement enabled Russia to complete the annexation with speed and surprise because the fleet stationing made the Russian military presence in Crimea an ordinary fact of life. Normalized Russian military activities allowed Russian forces to operate and hide in plain sight.

Russification was a significant societal factor. Russification based on the promotion of the Russian language and resettlement intensified after WWII. By 2001, the cumulative effects of russification resulted in 77% of Crimean, 69% of Luhansk, and 75% of Donetsk citizens considering Russian to be their native language. Resettlement resulted in a growth in ethnic Russian populations in these regions, reaching 58% in

⁸ Ivan Katchanovski et al., *Historical Dictionary of Ukraine*, 2nd ed. (Maryland, USA: The Scarecrow Press, Inc., 2013), 212–16, 756–62.

⁹ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 16; Gwendolyn Sasse and Alice Lackner, "War and Identity: The Case of the Donbas in Ukraine," *Post-Soviet Affairs* 34, no. 2–3 (May 2018): 152–53, <https://doi.org/10.1080/1060586X.2018.1452209>.

¹⁰ Wood et al., *Roots of Russia's War in Ukraine*, 16.

¹¹ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 32.

Crimea, 39% in Luhansk, and 38% in Donetsk.¹² The language, proximity to Russia, and concentration of like-minded people made these regions particularly sensitive to Russian propaganda. Additionally, the regions most affected by russification provided convenient conditions for Russian intelligence and military personnel to blend within the ethnically and linguistically aligned population.

Lastly, Russian Information warfare (IW) effects contributed to shaping and domination of the information environment. Russian IW preferred quantity rather than quality and probed the audience with various narratives by trial and error to discover topical resonance among the target audiences.¹³ Russian IW featured multi-channel distribution, and rapid, continuous, and repetitive dissemination, but their message lacked consistency and a commitment to reality. Cognitive biases were essential for IW. Cognitive biases made the first impression powerful and repetition made the message familiar, increasing acceptability by the receiver.¹⁴

Russian IW exploited controversial and sensitive cultural and historical themes, conducted cyber-attacks, and suppressed opposition views. Specifically, Russia carried out cyber-attacks on Ukrainian authorities and pro-Euromaidan websites, cell phones, and news outlets. Russian and proxy forces seized critical communication infrastructure in

¹² “Всеукраїнський Перепис Населення 2001 | Русская Версия,” Государственный комитет статистики Украины, accessed October 19, 2020, <http://2001.ukrcensus.gov.ua>.

¹³ Paul Goble, “Hot Issue – Lies, Damned Lies and Russian Disinformation,” The Jamestown Foundation, August 13, 2014, <https://jamestown.org/program/hot-issue-lies-damned-lies-and-russian-disinformation/>; Matthew A. Lauder, “Truth Is the First Casualty of War: A Brief Examination of Russian Informational Conflict during the 2014 Crisis in Ukraine,” Defense Technical Information Center, November 14, 2014, 11, <https://discover.dtic.mil/>.

¹⁴ Christopher Paul and Miriam Matthews, “The Russian ‘Firehose of Falsehood’ Propaganda Model: Why It Might Work and Options to Counter It” (Santa Monica, CA: RAND Corporation, 2016), 5–8.

occupied territories and physically or electronically disrupted Ukrainian communication and broadcasting lines.¹⁵

Cyber-attacks and activities to degrade and isolate adversary communication permitted Russia to dominate the information environment, proving particularly successful when synchronized with the maneuver of Russian and proxy forces. In Crimea, Russia successfully disrupted the command and control system about a week before annexation. Cyber-attacks contributed to the information blackout. Ukrtelekom, the telecommunication provider, reported a loss of technical capacity to maintain connections with and within the Crimean peninsula.¹⁶

Simultaneous and complementary to the cyber operations, Russian IW narratives justified the annexation of Crimea, marginalized the Euromaidan uprising, weakened and vilified the Ukrainian state, glorified and strengthened Russia, identified and pointed at internal enemies, and weakened and vilified the West.¹⁷

Analysis of Crimea Case

The thesis suggests that in 2014 Russia utilized maskirovka to disrupt, hinder, and hamper the Ukrainian cognitive processes in Crimea. Maskirovka created a cognitive effect of distorted reality that provided a decisive advantage to Russian regular and proxy forces through concealment, deception, and surprise. The distorted reality also negatively affected the popular support and loyalty of the Ukrainian people, the Ukrainian government and military decision-making, genius, and will to fight.

¹⁵ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 13, 50; Tim Maurer and Scott Janz, "The Russia-Ukraine Conflict: Cyber and Information Warfare in a Regional Context," *The International Relations and Security Network*, October 17, 2014, 104.

¹⁶ Maurer and Janz, "The Russia-Ukraine Conflict: Cyber and Information Warfare in a Regional Context"; Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 10.

¹⁷ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 79–82.

Firstly, the concealment included diverse activities and measures, complemented by disinformation. The purpose was to obscure Russian forces' involvement and intentions during the initial phase of annexation and reduce local population hostile interference with the operation. Russia employed an unattributable military force and proxy force, exploited the Black Fleet agreement and its accepted presence as well as leveraged activities surrounding the Olympic Games in Sochi for deployment or employment of military forces – all the while maintaining plausible deniability for involvement in these activities.

Specifically, Russian soldiers performed tasks in military uniforms and with equipment without insignia. Additionally, Russia employed various proxy forces, such as the Russian Cuban Cossacks.¹⁸ Russia also exploited the Black Sea Fleet agreement, allowing the stationing of a large number of Russian forces in Crimea, to obscure preparations and building-up of military forces necessary for the annexation.¹⁹ Furthermore, the high readiness of the forces providing security for the Olympic Games in Russian Sochi provided an additional disguise for massing forces.²⁰ Russian authorities, including the president, denied in media statements the active involvement of Russian forces in Crimea.²¹

The concealment and disinformation created the cognitive effect that negatively affected the Ukrainian genius, decision-making, and popular support. At the strategic

¹⁸ Fredrik Westerlund and Johan Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," *The Journal of Slavic Military Studies* 29, no. 4 (2016): 590–92, <https://doi.org/10.1080/13518046.2016.1232560>; Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 8–9; Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 32.

¹⁹ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 32.

²⁰ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 18.

²¹ "Владимир Путин ответил на вопросы журналистов о ситуации на Украине," Президент России, accessed February 12, 2021, <http://kremlin.ru/events/president/news/20366>.

level, the meeting minutes from the Security and Defense Council of Ukraine reflects certain ambiguity and uncertainty about Russian intentions in Crimea and concerns about conflict escalation due to possible inappropriate Ukrainian actions.²² The West saw the Russian denial as an approach for de-escalating the crisis and finding a political settlement.²³ In Crimea, Ukrainian military commanders struggled to use force during political uncertainty against unattributable military and proxy forces. Therefore, most commanders decided not to act.²⁴ The local population viewed the invading force as legitimate and friendly. The long-standing presence of the Russian naval forces facilitated such local population perceptions.²⁵

Secondly, the simulation technique utilized various activities and measures. The purpose was to create the perception of spontaneity and legality while evoking Ukrainian military inferiority. Russia used the Ukrainian security forces uniforms, organized and employed self-defense militia, and deployed their most elite force. Specifically, Russian soldiers disguised as Ukrainian police and Interior troops performed riot control and maintained public order.²⁶ Russian Special Operations Forces (SOF) provided the nucleus of self-defense militia, composed of Cossacks, anti-Euromaidan protesters, and disbanded Ukrainian Berkut troops.²⁷ The militia occupied key administrative buildings and infrastructure, initiated political change, and arranged referendums on independence and

²² Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 23.

²³ Kofman et al., 24.

²⁴ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 32.

²⁵ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 16.

²⁶ Kofman et al., 17.

²⁷ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 32; Westerlund and Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," 590.

Berkut is Ukrainian special police unit disbanded for participation in violent suppression of Maidan uprisal. (Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 32.)

reunification.²⁸ In addition to SOF, Russia employed airborne forces and marines to execute the annexation. The Russian forces isolated the Ukrainian forces and applied psychological pressure to defect.²⁹

The cognitive effect of the simulation negatively affected Ukrainian popular support, loyalty, and will to fight. The local population considered the self-defense militia and Russian soldiers disguised as Ukrainian security forces as native.³⁰ The Russian elite forces rapidly isolated the Ukrainian forces with speed, surpassing Ukraine's ability to respond. Although the besieged Ukrainian troops did not resist, most of them did not defect. The number of defectors increased significantly when the annexation was complete.³¹ The local population nicknamed Russian soldiers "polite people" because of their professionalism. Russian speed and professional performance reduced violence, which could have catalyzed local population disapproval of the annexation.³²

Lastly, the demonstration encompassed diverse activities and measures, supplemented by disinformation. The purpose was to divert the Ukrainian authority attention and resources from Crimea. Russia initiated a snap exercise, overtly concentrated military forces, and expressed readiness to intervene in Ukraine. Explicitly, Russia conducted an unannounced military exercise in the Russian Western and Central Military Districts. One hundred fifty thousand personnel from land, air, naval, and

²⁸ Westerlund and Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," 590; Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 32; "Игорь Стрелков vs Николай Стариков. Такие Разные Патриоты. Особенности Патриотической 'Кухни,'" *Видео Полит-Пинг* (НЕЙРОМИР-ТВ, 2015), <https://neuromir.tv/tsentrily-silatsentra/>; Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 8.

²⁹ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 8–12, 22.

³⁰ Kofman et al., 23.

³¹ Kofman et al., 27.

³² Kofman et al., 22.

strategic nuclear forces participated in the exercise.³³ Russia also amassed ten brigades, four regiments, and other units on Ukraine's eastern border.³⁴ Moreover, Russian authorities articulated their intention to intervene if the situation in Ukraine continued to deteriorate.³⁵

Negatively affected Ukrainian genius and decision-making resulted from the cognitive effect of the demonstration and disinformation. The National Security and Defense Council of Ukraine meeting records reveal the fear of a repeat of a Georgian war scenario.³⁶ The large-scale military exercise, Kavkaz 2008, precluded the Russian invasion of Georgia.³⁷ Thus, the Russian demonstrations certainly distracted the Ukrainian authorities attention. Additionally, the Ukrainian president's escape to Russia led to the creation of the new interim Ukrainian government, which further complicated the government response.

Analysis of Donbas Case

The thesis suggests that in 2014-2015 Russia utilized maskirovka to disrupt, hinder, and hamper the Ukrainian cognitive processes in Donbas. Maskirovka created a cognitive effect of distorted reality that provided an advantage to the pro-Russian proxy forces backed by Russian regular forces through concealment, deception, and surprise.

³³ Kofman et al., 8; Westerlund and Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," 591–92.

³⁴ Алексей Рамм, "Проверка Украиной | Ежедельник," Военно-промышленный курьер, accessed December 20, 2020, <https://www.vpk-news.ru/articles/25027>; Glen E. Howard and Matthew Czekaj, *Russia's Military Strategy and Doctrine* (Washington, DC: The Jamestown Foundation, 2019), 366; Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 9–10.

³⁵ "Владимир Путин ответил на вопросы журналистов о ситуации на Украине"; Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 15.

³⁶ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 23.

³⁷ Svante E. Cornell and S. Frederick Starr, *The Guns of August 2008: Russia's War in Georgia* (Armonk, N.Y.: Routledge, 2009), 163.

The distorted reality also negatively affected the popular support and loyalty of the Ukrainian people, the Ukrainian government and military decision-making, genius, and will to fight.

Firstly, the concealment included various activities and measures accompanied by disinformation. The purpose was to reduce indicators of the Russian armed forces' involvement in Donbas, conceal material support being provided to pro-Russian separatists, and maintain the narrative of Russian impartiality in an Ukrainian internal conflict. Russia employed unattributable military force, supplied separatists with anonymized military hardware, utilized military exercise and humanitarian convoys as cover, saturated the information environment with false narratives, and disseminated misleading information.

In order to employ unattributable forces in support of Donbas operations, the Russian military went so far as to process formal resignations of the soldiers involved. The next measures were removing factory markings, insignia, badges, rank designation, distinguishing features of uniforms and equipment, and confiscating personal identification documents.³⁸ Russia denied military involvement by disseminating the narratives about Russian soldiers participating voluntarily or being on legal leave while deployed to Donbas. The narratives, supported by the People's Republics authorities public statements, allowed Russia to maintain plausible deniability in the event of Russian soldiers' death or detention.³⁹ Moreover, Russia used weapons and equipment

³⁸ Ilya Yashin and Olga Shorina, "Putin. War Based on Materials from Boris Nemtsov" (Moscow, Russia: Free Russia Foundation, 2015), 21–22; Westerlund and Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," 595.

³⁹ Yashin and Shorina, "Putin. War Based on Materials from Boris Nemtsov," 21; Lauder, "Truth Is the First Casualty of War: A Brief Examination of Russian Informational Conflict during the 2014 Crisis in Ukraine," 7–8.

from the Soviet Union era because identical types and models could also be found in the Ukrainian army inventory. The use of Soviet-era weapons further obscured the Russian involvement and allowed surrogate and proxy forces to claim that their weaponry had been liberated from Ukrainian arsenals.⁴⁰ To maintain a reduced signature and deniability, Russia also limited its close air support, even during significant conventional battles.⁴¹

Russia utilized concentration of forces on the borders and humanitarian relief convoys to disguise military deployments and covert logistics. Specifically, Russia amassed forces on the Ukraine border in March 2014 and launched a surprise attack against rapidly advancing Ukrainian forces in August 2014 near Mariupol.⁴² Russian humanitarian convoys provided cover for the delivery of supplies, the transfer of manpower, and the evacuation of military casualties (known as Cargo 200).⁴³ Russia also seeded the information environment with false narratives. For example, many sources, including the Russian General Staff, disseminated false allegations when the Malaysian airliner MH 17 was downed in 2015 to cover Russian complicity.⁴⁴

The cognitive effect of the concealment and disinformation negatively affected Ukrainian genius, decision-making, and will to fight. Although there was considerable

⁴⁰ Yashin and Shorina, "Putin. War Based on Materials from Boris Nemtsov," 27, 40.

⁴¹ Westerlund and Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," 594–95.

⁴² Andrew E. Kramer and Michael R. Gordon, "Ukraine Reports Russian Invasion on a New Front," *The New York Times*, August 27, 2014; Lauder, "Truth Is the First Casualty of War: A Brief Examination of Russian Informational Conflict during the 2014 Crisis in Ukraine," 10; Howard and Czekaj, *Russia's Military Strategy and Doctrine*, 366.

⁴³ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 49; Yashin and Shorina, "Putin. War Based on Materials from Boris Nemtsov," 27.

⁴⁴ "Russian Defense Ministry Publishes Data Regarding Malaysian Boeing Crash," TASS, July 21, 2014, <https://tass.com/world/741669>; "Reports That Putin Flew Similar Route as MH17, Presidential Airport Says 'Hasn't Overflowed Ukraine for Long Time,'" RT International, accessed December 30, 2020, <https://www.rt.com/news/173672-malaysia-plane-crash-putin/>; Lauder, "Truth Is the First Casualty of War: A Brief Examination of Russian Informational Conflict during the 2014 Crisis in Ukraine," 9.

evidence of Russian involvement in the Donbas conflict, the Ukrainian government initiated the Anti-Terrorist Operation (ATO) in eastern Ukraine in April 2014.⁴⁵ The ATO continued until 19 January 2018, when Ukraine declared Russia as the aggressor, rebranded the operation, and transferred command and control of the operation from the Ukrainian Intelligence Service SBU to the Ministry of Defense.⁴⁶ Similarly, despite the evidence of Russian misuse of humanitarian convoys for covert logistics, the flow of resources continued, and separatist forces were finally sufficiently equipped.⁴⁷ The concentration of forces successfully covered preparation for the Russian operation near Mariupol in August 2014. The attack, coupled with the false reports regarding Russian strength, caused shock and a Ukrainian retreat.⁴⁸ Although denied, Russian direct military involvement resulted in a conflict stalemate and subsequent Minsk talks.⁴⁹ Russian deception by increasing ambiguity, as the example of the MH 17 incident showed, produced information overload that inhibited critical thinking.⁵⁰

Secondly, the simulation comprised numerous activities and measures complemented by disinformation. The purpose was to achieve the Ukraine federalization through the guise of a spontaneous pro-Russian separatist movement, a strengthened perception of the Ukraine war as an internal conflict, and the elimination of Ukrainian

⁴⁵ Eliot Higgins, "Russian Tanks in Millervo Train Station," *bellingcat*, July 13, 2014, <https://www.bellingcat.com/resources/case-studies/2014/07/13/russian-tanks-in-millervo-train-station/>; Maksymilian Czuperski et al., *Hiding in Plain Sight: Putin's War in Ukraine* (Washington, DC: The Atlantic Council of the United States, 2015); Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 35.

⁴⁶ Christopher Miller, "Kyiv Rebrands Its War In The East," *RadioFreeEurope/RadioLiberty*, January 19, 2018, <https://www.rferl.org/a/ukraine-russia-fighting-donbas-rebranding-ato-/28985423.html>.

⁴⁷ Yashin and Shorina, "Putin. War Based on Materials from Boris Nemtsov," 27, 40; Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 49.

⁴⁸ Kramer and Gordon, "Ukraine Reports Russian Invasion on a New Front."

⁴⁹ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 42–44.

⁵⁰ Vladimir Sazonov, Holger Mölder, and Kristiina Müür, *Russian Information Campaign Against the Ukrainian State and Defence Forces* (Tartu, Estonia: NATO Strategic Communications Centre of Excellence, 2016), 108.

resistance. The separatists were supposed to provide Russia leverage over Ukrainian foreign policy.⁵¹ Russia created and supported the separatist movement, organized protests and referendums, intimidated Ukrainian authorities, and disseminated false reports.

Specifically, Russia exploited local elites, oligarchs, Russian nationalists, the Crimean militia, mercenaries from ex-Soviet republics, and deflected Ukrainian servicemen to form an indigenous separatist movement.⁵² Russia transported the demonstrators to Ukraine, established separatist leaders, and organized referendums regarding the People's Republic.⁵³ Separatists threatened Ukrainian civilian and military authorities and forced them to either deflect or remain uninvolved.⁵⁴ Additionally, Russia deliberately distributed frightening information about the separatist force combat activities, such as armor unit movements.⁵⁵

Negatively affected Ukrainian genius, decision-making, popular support, loyalty, and will to fight resulted from the cognitive effect of the simulation and disinformation technique. The Ukrainian government entered the conflict by initiating the ATO under the SBU intelligence service supervision.⁵⁶ The SBU supervision indicates that the conflict was considered to be an internal conflict. Moreover, Ukrainian troops were unable to orient in the situation and respond adequately to the separatist activities because

⁵¹ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 26–27; Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 46.

⁵² Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 56–59.

⁵³ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 32–33; Westerlund and Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," 595.

⁵⁴ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 41.

⁵⁵ Sazonov, Mölder, and Müür, *Russian Information Campaign Against the Ukrainian State and Defence Forces*, 105–6.

⁵⁶ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 35; Miller, "Kyiv Rebrands Its War In The East."

the separatists often mixed with or were accompanied by civilians. Russian-speaking Ukrainian commanders also hesitated in fighting against fellow Russian-speaking citizens.⁵⁷ However, Russian overreliance on numerous and competing proxy forces created disunity in the separatist movement. Each separatist fraction had a different particular interest. These fractions' divergent interests caused internal clashes and increased criminality. As a result, Russia responded by deploying and integrating regular-type forces within separatist fractions to increase unity, discipline, and predictability.⁵⁸

Local government, police, and military passivity allowed the separatist territorial expansion in the Donetsk and Luhansk regions.⁵⁹ By August 2015, 5,000 police and 3,000 military personnel fled to join the separatists.⁶⁰ In contrast, where the Ukrainian law enforcement and the pro-Euromaidan sympathizers resisted, the separatists did not gain influence.⁶¹ Additionally, the Russian disintegration effort energized Ukrainian patriotic enthusiasm among the pro-Western-minded population in areas beyond separatist influence.⁶²

Loudspeakers, social media, and the local population were effective ways of distributing false reports. These ways worked faster than the Ukrainian command could counter. False reports about separatist and armor movements often caused the retreat of Ukrainians without a fight.⁶³

⁵⁷ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 41.

⁵⁸ Kofman et al., 58–59.

⁵⁹ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 38.

⁶⁰ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 41.

⁶¹ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 33.

⁶² Balaban et al., 33.

⁶³ Sazonov, Mölder, and Müür, *Russian Information Campaign Against the Ukrainian State and Defence Forces*, 105–6.

Lastly, the demonstration included diverse activities and measures complemented by disinformation. The purpose was to divert attention and resources from operations in Donbas and discourage Ukrainian forces or a third party from interfering. Russia conducted snap exercises, concentrated forces on the Ukrainian border, and utilized humanitarian convoys.

Specifically, in 2014, Russia initiated conventional and strategic forces exercises and military activities, including long-range patrols in the Atlantic and Pacific, followed by significant readiness inspection of the Western and Central Military Districts.⁶⁴ Russia also began deploying forces and maintaining a military presence on the Ukrainian border.⁶⁵ In 2015, the snap exercise took place in the Western Military District.⁶⁶ Additionally, Russian authorities stated the readiness to intervene if the situation in Ukraine continued to deteriorate.⁶⁷ At the tactical level, humanitarian convoys deliberately attracted the attention of media and observers.⁶⁸

The demonstration and disinformation created the cognitive effect that negatively affected Ukrainian genius and decision-making. The increased activity of the Russian armed forces, including nuclear forces and long-range aviation going beyond routine activities, discouraged third parties from interfering in the Donbas conflict.⁶⁹ However,

⁶⁴ Westerlund and Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," 596.

⁶⁵ Howard and Czekaj, *Russia's Military Strategy and Doctrine*, 366.

⁶⁶ "Национальный Центр Управления обороной России Впервые Посетили Более 100 Иностранных Военных Аташе," Министерство обороны Российской Федерации, accessed November 8, 2020, https://function.mil.ru/news_page/country/more.htm?id=12011147@egNews.

⁶⁷ "Владимир Путин ответил на вопросы журналистов о ситуации на Украине."

⁶⁸ Maier, "Little Masquerade: Russia's Evolving Employment Of Maskirovka," 40–41.

⁶⁹ Jacek Durkalec, *Nuclear-Backed "Little Green Men: "Nuclear Messaging in the Ukraine Crisis* (Warsaw, Poland: The Polish Institute of International Affairs, 2015), 15; Westerlund and Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," 596.

the Russian demonstrations did not discourage the Ukrainian government from launching ATO. The demonstrations also did not dispirit Euromaidan supporters from forming volunteer battalions of the National guard.⁷⁰ The Russian military posture diverted Ukrainian military resources from participation in ATO countering Russian incursions.⁷¹ Over time, humanitarian convoys attracted considerable attention from observers and the media. Russia, therefore, exploited the attention focused on convoys to infiltrate Ukraine elsewhere.⁷² Large quantities of deliveries to separatists, including tanks and self-propelled artillery systems, demonstrate successful cover and deception provided by humanitarian convoys.⁷³

Effect of Trinity and Friction in Ukraine War

Maskirovka covers activities or selectively reveals activities to adversary sensors and senses depending on intentions. The social actors of government, military, and population scan the physical and information environment. The social actors receive stimulus from maskirovka activity. Cognitive processing of stimulus differs for each social actor. The diverse genetic heritage, cultural traditions, experiences and education, heuristics and biases, analysis-synthesis, stress, fatigue, and exposure to distraction cause a variation in the quality of cognitive processing. Therefore, the various quality of cognitive processing leads inevitably to differences in social actor perceptions of reality. The differences in reality perception cause instability and friction within the trinity.

⁷⁰ Westerlund and Norberg, "Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine," 593; Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 35.

⁷¹ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 42.

⁷² Maier, "Little Masquerade: Russia's Evolving Employment Of Maskirovka," 40–41.

⁷³ Yashin and Shorina, "Putin. War Based on Materials from Boris Nemtsov," 40.

The thesis suggests that in Ukraine 2014 - 2015, the cognitive effect of the distorted reality increased friction, unpredictability, and disbalance within the Ukrainian paradoxical trinity. Consequently, distorted reality negatively affected the popular support and loyalty of the Ukrainian people, the Ukrainian government and military genius, decision-making, and will to fight.

The different exposure to danger, the intensity of maskirovka and IW, uncertainty, cultural and political preferences, and imperfections in shared information caused mutual distrust within the Ukrainian defense and security apparatus and the division of society.

Initially, the Ukrainian government was unclear about Russian intentions and feared possible conflict escalation by taking inappropriate measures.⁷⁴ Additionally, the Ukrainian authorities were unable to provide timely information to subordinates due to the disruption of communication and the faster spread of disinformation through informal communication channels.⁷⁵ Thus, Ukrainian soldiers and police, facing political uncertainty, had difficulty orienting in the situation and failed to respond adequately by utilizing coercive measures against the Russian-speaking proxy force.⁷⁶ Consequently, the military and police passivity and alleged defections caused the Ukrainian government to distrust and suspect the loyalty of the Ukraine military and security forces in Crimea

⁷⁴ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 23–24.

⁷⁵ Maurer and Janz, “The Russia-Ukraine Conflict: Cyber and Information Warfare in a Regional Context”; Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 10; Sazonov, Mölder, and Müür, *Russian Information Campaign Against the Ukrainian State and Defence Forces*, 105–6.

⁷⁶ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 38; Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 41.

and Donbas.⁷⁷ The motivation made Ukrainian volunteers more resilient to disinformation compared to regular and reserve unit conscripts.⁷⁸

Ukraine is a vast geographical area inhabited by a culturally and politically diverse population. The diversity of the population resulted in the varying quality of cognitive processing. Therefore, maskirovka and IW polarized society and disintegrated Ukrainian identity. In Russian and separatist-dominated territories, population and internally displaced people sympathized with pro-Russian forces. Moreover, the population considered Russian activities as favorable and legitimate.⁷⁹ Conversely, in Ukrainian-controlled territories, Russian activities ignited Ukrainian patriotism, causing the formation of volunteer battalions of the National Guard and the ATO initiation.⁸⁰ Different reactions to the separatist uprising and Crimea annexation indicate national disunity.

Cognitive Factors Analysis

The thesis assumed that maskirovka successfully influenced cognitive processing if the cognitive effect of distorted reality affected the Ukrainian decisions and behavior to correspond with Russian intentions. The cognitive processing complexity does not allow precise tracking of the root causes for creating a particular cognitive effect. However, further analysis provides some simplified ideas regarding the impact of select factors on Ukrainian cognitive processing.

⁷⁷ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 6, 19, 41.

⁷⁸ Sazonov, Mölder, and Müür, *Russian Information Campaign Against the Ukrainian State and Defence Forces*, 103.

⁷⁹ Sasse and Lackner, "War and Identity: The Case of the Donbas in Ukraine," 152–53; Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 16, 54.

⁸⁰ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 42; Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 35.

Cognitive processing applies heuristics and analysis-synthesis to assess stimulus. The quality of cognitive processing depends on genetic heritage (personality, intelligence), cultural tradition (customs, identity, language), experience (history), and education.⁸¹ The genetic heritage investigation is beyond the scope of this analysis.

However, cultural tradition played a significant role in cognitive processing. Crimea and Donbas russification affected the local population composition.⁸² The population inclined toward Russia and was easily exposed to the Russian interpretation of events due to the shared language. Russification could have caused the amplified local population sensitivity to Russian IW. Consequently, Russian IW could have increased population participation in protests, referendums, separatist movement, and self-defense militia. Availability heuristics and associated confirmation bias could have contributed to the cognitive effect of distorted reality. Confirmation bias could have supported aligning the cognitive effect of maskirovka with the local population's desire for closer ties with Russia or a reunification with Russia. For example, confirmation bias could have allowed the local population to believe that the creation of a self-defense militia and political change were spontaneous in Crimea.⁸³

Experience and education also played a critical role. The historical experience influenced cognitive processing. Russian IW polarized the Ukrainian population by linking the Ukrainian uprising with Nazism.⁸⁴ The high diversity of the Ukrainian population with various historical experiences caused the WWII analogy to have varying

⁸¹ Boyd, *A Discourse on Winning and Losing*, 384–85.

⁸² “Всеукраїнський Перепис Населення 2001 | Русская Версия.”

⁸³ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 16, 23.

⁸⁴ Kofman et al., 79–82.

traction.⁸⁵ The Nazi analogy could have caused fear. In contrast, the same analogy could have caused the association with the Soviet propaganda and *Holodomor*. Therefore, the distinct perspective on WWII analogy could have been a determinant for public support to the pro-Russian or Euromaidan case. The distinct perspective could also have strengthened or weakened the sensitivity to Russian disinformation. For example, the people who associated Russia with *Holodomor* could have significantly contributed to the panic regarding separatist armor unit movements. The false reports disseminated via locals often compelled Ukrainian units to withdraw.⁸⁶

The recent experience of the Georgian war affected Ukrainian cognitive processing. The Russian military exercise Kavkaz 2008 and force concentrations on Georgian borders preceded the Russian invasion.⁸⁷ Georgian experience, together with the Russian threats, could have made the Russian invasion of Ukraine realistic.⁸⁸ Hence, the Georgian war could have been the anchoring bias for Ukrainian authorities.

The contemporary experience of Crimea annexation also influenced Ukrainian cognitive processing. The Crimean operation was a decisive operation ending in the peninsula's reunification with Russia. The deployment of Russian armed forces followed the organization and employment of self-defense militia.⁸⁹ The Ukrainian soldiers stationed in Crimea were hesitant to defect because of political uncertainty.⁹⁰ On the contrary, the prospect of Crimea scenario repetition could have encouraged the local Ukrainian authorities in Donbas to defect. The timely defection to separatist force would

⁸⁵ Katchanovski et al., *Historical Dictionary of Ukraine*, 756–62.

⁸⁶ Sazonov, Mölder, and Müür, *Russian Information Campaign Against the Ukrainian State and Defence Forces*, 105.

⁸⁷ Cornell and Starr, *The Guns of August 2008 : Russia's War in Georgia*, 163.

⁸⁸ “Владимир Путин ответил на вопросы журналистов о ситуации на Украине.”

⁸⁹ Wood et al., *Roots of Russia's War in Ukraine.*, xiii–xiv, 12–19.

⁹⁰ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 27.

have ensured them a better position within the state apparatus of an annexed Donbas. For example, Rear Admiral Denis Berezovsky, the Ukrainian Navy commander, defected and was appointed as the Russian Black Fleet deputy commander.⁹¹ The initial similarity of Donbas and Crimea scenarios could have functioned as representativeness bias.

Education influenced Ukrainian cognitive processing.⁹² The education and training in modern armies include lectures on the Law of Armed Conflict (LOAC).⁹³ LOAC regulates behavior in conflict and frames human judgment. In Ukraine, Russia utilized the maskirovka technique on the brink of perfidies, such as wearing adversary uniforms, using humanitarian convoys for covert logistics, employing unattributable forces, and mixing separatists with the civilian population.⁹⁴ Handling these challenging situations required thorough education and practice in the application of LOAC. For example, how to deal with so-called humanitarian convoys that did not have any protecting markings or with civilians that took part in hostilities.⁹⁵ Ukrainians could also have had difficulties considering the Russian abuse of uniforms that is prohibited by international law. Besides challenges with the LOAC application, the Russian

⁹¹ “Rear Admiral Denis Berezovsky Appointed Deputy Commander of Russian Black Sea Fleet,” TASS, March 24, 2014, <https://tass.com/russia/725041>.

⁹² Education, “the knowledge and development resulting from the process of being educated.” Educated, “giving evidence of training or practice” (Dictionary by Merriam-Webster: America’s Most-Trusted Online Dictionary,” accessed January 31, 2021, <https://www.merriam-webster.com/>.)

⁹³ “Dissemination of Knowledge of International Humanitarian Law Applicable In Armed Conflicts,” International Committee of The Red Cross, n.d., <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Article.xsp?documentId=D690337F274D563EC12563CD0051EA92&action=OpenDocument>.

⁹⁴ Perfidy, “are acts that invite the confidence of enemy persons to lead them to believe that they are entitled to, or are obliged to accord, protection under the law of war, with intent to betray that confidence” (Office of General Counsel, *Department of Defense Law of War Manual* (Washington, DC, 2015), 321; Kofman et al., *Lessons from Russia’s Operations in Crimea and Eastern Ukraine*, 17, 41; Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 49; Westerlund and Norberg, “Military Means for Non-Military Measures: The Russian Approach to the Use of Armed Force as Seen in Ukraine,” 590–92.

⁹⁵ “Russian Humanitarian Convoy Inspected by Pascal Cuttat,” EMERCOM of Russia, August 17, 2014, <https://en.mchs.gov.ru/for-mass-media/novosti/4018449>; Kofman et al., *Lessons from Russia’s Operations in Crimea and Eastern Ukraine*, 41.

propaganda exploited any alleged misuse of force by Ukrainian security forces. These examples show how LOAC could have provided bases for framing and anchoring biases.

Information warfare was a significant inhibitor of cognitive processing and an enabler of cognitive biases. The social conflict created by IW demonstrates the IW inhibiting effect. The Ukrainian illegitimate coup d'état narrative could have caused the fragmentation of the Ukrainian population. The narrative could have inhibited Russian-speaking Ukrainian commanders from following orders and intervening against Russian-speaking fellow citizens.⁹⁶ In contrast, the same narrative could have radicalized Ukrainian armed forces volunteers.⁹⁷ Various ethnicity, culture, and political preference caused Ukrainian to have distinct perspectives on the uprising legitimacy. The friction between these perspectives created the social conflict that was a substantial stressor.

IW was a cognitive biases enabler. Information warfare saturated the information environment with narratives that provided the context for maskirovka. Russian narratives responded quickly to the population information requirements and were easily accessible through various channels.⁹⁸ Therefore, the narratives influenced the heuristics of system 1 thinking. For example, the narratives of Russian historical ownership of Crimea and the imminent Ukrainian ultra-nationalist threat provided context for maskirovka simulation activity of spontaneous revolt in Crimea.⁹⁹ Therefore, the narratives could have provided the cognitive anchor and frame for the Crimean population cognitive processing.

⁹⁶ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 14, 40–41.

⁹⁷ Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 33.

⁹⁸ Goble, “Hot Issue – Lies, Damned Lies and Russian Disinformation”; Lauder, “Truth Is the First Casualty of War: A Brief Examination of Russian Informational Conflict during the 2014 Crisis in Ukraine.”

⁹⁹ Kofman et al., *Lessons from Russia's Operations in Crimea and Eastern Ukraine*, 14; Balaban et al., *Donbas in Flames: Guide to the Conflict Zone*, 32; “Игорь Стрелков vs Николай Стариков. Такие Разные Патриоты. Особенности Патриотической ‘Кухни.’”

Moreover, multi-channel narrative dissemination could have enabled availability heuristics.

Chapter 4: Discussion

Maskirovka contributes to operations by providing advantage through concealment, deception, and surprise. The essential element of maskirovka success is the intentional influencing of the adversary cognitive processing. Maskirovka includes concealment, simulation, demonstration, and disinformation techniques.

Maskirovka activities engage the adversary senses and technical sensors that provide a stimulus for cognitive processing. Cognitive processing, intuitive and rational, assess the stimulus using heuristics and analysis-synthesis. The outcome of cognitive processing is the cognitive effect. Personality, intelligence, cultural tradition, previous experience, and education affect the quality of cognitive processing. Moreover, distraction, fatigue, and stress from exposure to the environment also inhibit cognitive processing. Maskirovka pursues to mislead, deceive and surprise the adversary. Thus, the desired cognitive effect of maskirovka actions is to distort reality. The cognitive effect of distorted reality affects adversary decision-making and behavior. Besides, maskirovka increases friction and alters the dynamics within the adversary trinity of government, people, and military. The stimulus of maskirovka actions is inevitably cognitively processed by each social actor with various quality resulting in different perceptions of reality. Consequently, different reality perceptions create frictions, tensions, misunderstanding, and disbalance of rational, emotional, and creative forces within the trinity.

The case studies assumed that maskirovka successfully created the cognitive effect of distorted reality if Ukrainian decisions and behavior corresponded with Russian intentions. The assumption was necessary because the available resources are mainly

focused on Russian activities, less on outcomes of these activities, and rarely provide insight into Ukrainian cognitive processing.

Crimea and Donbas Case Studies Comparison

Case study comparisons reveal similarities and differences in the application of maskirovka techniques in Crimea and Donbas. Russia similarly employed unattributable, separatist, and self-defense force to conceal intentions, deny involvement, and portray the events in Ukraine as an internal conflict. Likewise, Russia organized protests and referendums to increase the perception of spontaneous political change. Russia also used snap exercises and concentration of forces on Ukrainian borders to conceal preparations for annexation and intrusions. Furthermore, Russian snap exercises and concentration of forces intimidated and distracted authorities and western countries. Finally, the Russian authorities contributed to maskirovka by disseminating disinformation.

Differences in maskirovka application in Crimea and Donbas come from the differences in the operations conducted in the two regions and the unique opportunities each event presented. Unlike the protracted conflict in Donbas, the Crimea annexation was a short, decisive operation. In Donbas, Russia utilized humanitarian convoys to provide covert logistical support and evacuation. Later, when convoy cover was compromised, Russian humanitarian convoys diverted attention from logistic supplies deliveries elsewhere. Moreover, Russia supplied separatist force with anonymized military hardware to maintain plausible deniability. In Crimea, Russia exploited the Black Fleet agreement and the Sochi Olympic Games for build-up and force projection. Similar to the Georgian war timing with the Beijing Olympic Games in August 2008, the

Crimea annexation almost overlapped with the Sochi Olympic Games.¹ Finally, Russian forces used Ukrainian security forces uniforms to mislead the population in Crimea.

The two case studies show that maintaining plausible deniability in protracted conflicts is unrealistic. Unlike in Crimea, where Russian conventional forces exploited the initial success of unattributable force to accomplish annexation, the investigation of various state and non-state actors exposed Russian involvement in Donbas. The digital domain exploitation provided valuable information because of the undisciplined use of social media among Russian armed forces and separatists. Although the Russian military adopted measures to control its servicemen's social media activity, proxy forces and bystanders remain Russia's vulnerability.² The Russian military will never have complete control of proxy forces and bystanders.

The comparative analysis leads to the following recommendation for the intelligence community:

- Consider Russian snap exercises as an observable indicator and possible linkage to ongoing or future maskirovka operations. Russian practice has been to conduct exercises as a deception effort to support the conduct of operations.
- Search for indications of the deployment or employment of proxy forces. Russia employs proxy forces to maintain plausible deniability. Look for the nexus of proxy force presence and Russian interests.
- Maintain vigilance during significant global events as Russia often conducts operations in the shadow of significant global events.

¹ "Beijing 2008 Summer Olympics - Results & Video Highlights," International Olympic Committee, accessed January 30, 2021, <https://www.olympic.org/beijing-2008>.

² Lauder, "Truth Is the First Casualty of War: A Brief Examination of Russian Informational Conflict during the 2014 Crisis in Ukraine," 8.

- Consider differences in Russia’s approach to deception and influence operations. Russia acts less restrained by ethics and laws.
- Exploit social media to prove Russian involvement by taking advantage of poor social media discipline of the Russian military and proxy forces as well as open-source social media posts from local bystanders.

Both cases, the Crimea and Donbas operations, are from Russian near abroad, which provided Russia with a unique set of opportunities due to geographical and social proximity.³ However, outside near abroad, the principles of maskirovka application and cognitive processing factors remain the same. Besides external politics and military actions, it is necessary to consider maskirovka in relation to Russian internal politics.

Clausewitzian Trinity Effect and Friction Discussion

The social actors of Clausewitzian trinity are government, people, and military. Maskirovka engages the adversary social actors’ senses and sensors. The social actors’ cognitive processing varies due to different exposure to inhibitors, genetic heritage, cultural tradition, experience, and education. The differences cause each social actor dual thinking mode to be prone to various heuristics applications, resulting in a different perception of reality. The different reality perception disrupts national unity and increases friction and dynamic between rational, creative, and emotional forces. The culturally and historically diverse Ukrainian society, with inadequately distributed wealth and population, provided Russia with vast exploitation opportunities. The dialog among the Ukrainian social actors was already challenging before the crisis. The Russian intensive

³ Russia considers its post-Soviet neighbors as an area called near abroad. (Elizabeth A. Wood et al., *Roots of Russia’s War in Ukraine*. (Washington, D.C.: Woodrow Wilson Center Press, 2016), 29.)

coercive and influence activities, including maskirovka, have made the dialog more difficult or impossible since the crisis erupted. The unaddressed challenges and taboo topics in peacetime became multiplied vulnerabilities in crisis. Therefore, to build national resilience to the effects of maskirovka and broadly information warfare, it is necessary to follow the recommendation:

- Maintain open dialog within nations regarding their societal and political seams in peacetime to mitigate the harmful effect caused by adversary activities to hinder communication during crisis.

Cognitive Factors Discussion

Cognitive processing applies dual thinking mode to assess stimulus. Systems 1 and 2 compose dual thinking mode. System 1 is quick and intuitive, and system 2 is slow and rational. Humans use system 1 extensively for rational judgment because system 1 is effortless. Mental shortcuts called heuristics provide system 1 with increased speed and efficiency. However, despite mostly satisfactory results, system 1 is vulnerable to cognitive biases. Leveraging cognitive biases is a necessary precondition allowing maskirovka to create a distorted reality among its target audiences.

The quality of cognitive processing depends on genetic heritage, cultural tradition, experience, and education. Russification, the Second World War (WWII) legacy, the Soviet Union legacy, past Russian activities, and information warfare (IW) were significant factors in the Ukraine war. Therefore, russification (cultural tradition), WWII, Soviet legacy, and past Russian activities (experience) influenced Ukrainian cognitive processing of maskirovka activities. Simultaneously, Russian IW exploited these factors to magnify and amplify preexisting cognitive biases.

Russification consisting of resettlement and Russian language promotion resulted in Crimea and Donbas inhabited mainly by the Russian-speaking population. The population inclined culturally and politically toward Russia. The preferences for Russia could have influenced the judgment of maskirovka activities to be favorable to Russia. Briefly, the population assessed stimuli in line with their aspiration for a closer relationship and, ultimately, a future reunification with Russia.

The historical, recent, and contemporary experiences influenced cognitive processing. The WWII analogy, the Georgian war, and the Crimea annexation were considerations for maskirovka activity assessment. The WWII analogy created fear that was a conduit for the dissemination of false reports. Past Russian actions, such as the invasion of Georgia and the annexation of Crimea, provided references for assessment of ongoing events in Donbas. The references worked as anchors affecting critical thinking. The anchoring bias increased the plausibility of the Russian show of force and attractiveness of deflection to Russia.

By design, the Law of Armed Conflict (LOAC) regulates the behavior of belligerents in combat. LOAC provides both legal and moral framework for what to expect in conflict. Some maskirovka activities went beyond the traditional LOAC frame. Russian designating and branding its proxies as self-defense militia and logistic convoys as humanitarian convoys, while seemingly innocuous and benign, created the cognitive positive connotations and associations with peaceful and non-threatening defensive elements. Moreover, humanitarian activities are typically protected by the article and conventions of the LOAC. However, Russia used the militia and convoys for decidedly aggressive actions, including combat operations and combat service support. These

ambiguous actions were probably in direct contravention to the article of the LOAC and internationally accepted practices of *jus ad bellum*. Thus, appropriate coercive measures in such unclear situations required advanced knowledge and training in the LOAC.

Information warfare was a cognitive processing inhibitor and cognitive biases enabler. IW inhibited cognitive processing by creating distractions and stressors. Distraction by increasing ambiguity, often used for deception, saturated the information environment with too many messages, creating information overload. Consequently, the information overload caused a reduced capability for critical thinking. The messaging, exploiting social seams, created the stressor of a social conflict.

IW contributed to maskirovka believability by enabling cognitive biases. IW produced a false reality in the information environment. The false reality provided context and reference. For example, the self-defense militia Russia established to deliver political change in Crimea was portrayed as a spontaneous movement in response to the Nazi threat from the Ukrainian mainland.

Engaging broad audiences with maskirovka activities and IW can have the intended effect of creating friction and disunity within the trinity. However, engaging a broad target audience can also have unintended effects due to the breadth and depth of diversity in disparate audience groups' cognitive processing ability. For example, the unintended consequences of a rise of patriotism and voluntarism in Ukraine caused by Russian military interventionism was an inherently disadvantageous development for Russia.

Cognitive processing factors analysis leads to the following recommendations for the conduct of friendly information operations, training, and education of forces:

- Develop and disseminate counter-narratives to protect the cultural vulnerabilities of diverse societies because Russia IW exposes and exploits cultural seams.
- Degrade maskirovka believability by countering IW that provides maskirovka with the situational background and enables cognitive biases (including but not limited to active psychological defense measures, point to point refutation, and broader inoculation against Russian disinformation and misinformation efforts).
- Consider the adverse effect of information and deception operations during the planning of friendly information operations. Information operations activities can have unintended consequences if they engage a broad target audience with various cultural traditions, education, and experience.
- Provide advanced education and training in the LOAC to the military personnel because such training and education enable adequately respond to maskirovka activities on the brink of perfidies. An inadequate response fails to counter Russian activities while exposing friendly forces to an enemy's information warfare, emphasizing the misuse of force.

Chapter 5: Conclusion

Unconvincing performance of the Russian military in the Georgian war in 2008 initiated military reforms, including the introduction of Russian New Generation Warfare (RNGW). RNGW includes maskirovka that deceives and surprises an adversary to provide an advantage. Russia utilized maskirovka during the annexation of Crimea and protracted conflict in Donbas.

The focal point of maskirovka is a cognitive effect of distorted reality. The cognitive effect is the outcome of cognitive processing. Cognitive processing applies dual thinking mode for judgment and decision-making, influenced by personality, intelligence, customs, identity, language, history, experience, and education. Inhibitors such as distraction, fatigue, and stress also affect cognitive processing. Information warfare is a significant inhibitor because it is an adversary's deliberate attempt to influence cognitive processing.

In Ukraine, Russia utilized maskirovka to conceal, deceive, and surprise by creating a distorted reality for Ukrainian decision-makers and the population. Besides gaining an advantage, maskirovka disrupted the balance, unity, and increased friction within the Ukrainian trinity of government, military, and population.

The case studies have examined the application of maskirovka in Crimea and Donbas. The analysis revealed maskirovka's effectiveness by comparing maskirovka actions with effect. Furthermore, the analysis investigated maskirovka's relationship with the friction and disunity within the adversary social system and the Russian exploitation of cognitive factors.

Russia repeatedly used proxy forces, military exercises, and global events in support of military operations. Russia focused primarily on cultural seams and acted less restrained by ethics and law to exploit adversary cognitive processing. Moreover, Russian information warfare supported maskirovka by increasing ambiguity, creating social conflict stressors, and enabling cognitive biases.

The thesis recommendations have implications for developing counter-maskirovka measures, increasing the efficacy of friendly force information operations, understanding the role of historical, cultural, and social critical vulnerabilities. The recommendations also support the broad effort of building national resiliency.

The thesis argues that a cognitive effect of distorted reality is a consequence of influencing judgment. Future studies focusing on applying machine learning and artificial intelligence to offset the disadvantages of heuristics could significantly contribute to our development of counter-maskirovka techniques. The primary focus areas should include degrading inhibitors, overcoming genetic limits, and increasing knowledge in decision-making.

At different levels of warfare, maskirovka varies regarding scope, content, and tools. Additional research on the correlation of tactical, operational, and strategic maskirovka would further broaden our understanding of how maskirovka operates at different levels of warfare.

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Vita

Lieutenant Colonel (LTC) Miroslav Hofirek is an officer of the Armed forces of the Czech Republic. LTC Hofirek occupied leadership, staff, and command positions within the Czech army and North Atlantic Treaty Organization. His experience spans from team-level to brigade-level, including combat deployments. LTC Hofirek is a graduate of the Military Academy of Ground Forces in Vyskov, the Czech Republic.