
Cross-Domain Coercion: The Current Russian Art of Strategy

Dmitry (Dima) Adamsky

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Abstract

This paper traces the evolution of Russian views on the art of coercion, and on the role of nuclear weapons in it, from the post-Cold War “regional nuclear deterrence” thinking to the current “Gerasimov Doctrine”. Often labeled as “hybrid warfare”, this “New Generation War” is waged across several domains (nuclear, conventional, informational, etc.) as a response to a perceived Western threat directed against Russia. Cross-domain coercion operates under the aegis of the Russian nuclear arsenal and aims to manipulate the adversary’s perception, to maneuver its decision-making process, and to influence its strategic behavior while minimizing, compared to the industrial warfare era, the scale of kinetic force use. Current Russian operational art thus involves a nuclear dimension that can only be understood in the context of a holistic coercion campaign, an integrated whole in which non-nuclear, informational, and nuclear capabilities can be used in the pursuit of deterrence and compellence.

* * *

Cette note retrace l'évolution de l'approche russe de la dissuasion et de la coercition depuis la fin de la guerre froide, et y évalue la place tenue par les armes nucléaires, depuis les débats sur la « dissuasion nucléaire régionale » jusqu'à l'actuelle « doctrine Gerasimov ». Souvent qualifiée d'« hybride », la « guerre de nouvelle génération » mise en œuvre par la Russie est conçue pour être conduite en parallèle dans différentes dimensions (nucléaire, conventionnelle, informationnelle, etc.) en réponse à la menace que Moscou voit en l'Occident. Opérant sous l'égide de l'arsenal nucléaire russe, cette stratégie vise à manipuler les perceptions de l'adversaire et à influencer son comportement, tout en limitant l'emploi de la force à une échelle relativement faible au regard des pratiques militaires de l'ère industrielle. Cette approche, renouvelant l'art opératif russe, intègre ainsi en un tout cohérent des capacités nucléaires, non-nucléaires et informationnelles au service de stratégies de dissuasion et de coercition.

Introduction

This paper traces the evolution of Russian views on the art of coercion, and on the role of nuclear weapons in it, from “regional nuclear deterrence” thinking (1991-2013) to the current “Gerasimov Doctrine” (from 2013 onward). It focuses on the Russian analogue of what Western professional discourse defines as cross-domain coercion. This corpus of ideas is emerging in Russian professional discourse under the rubric of “New Generation War” (NGW), and Western experts often dub it “Hybrid Warfare” (HW) implying that Moscow incorporates non-military, informational, cyber, nuclear, conventional, and sub-conventional tools of strategic influence in an orchestrated campaign.

Ironically, the Russian strategic community envisions its NGW, which it wages across several domains, as a response to what it sees as a Western “hybrid campaign” directed against Russia. Regardless of the label, the current version of Russian operational art constitutes an intriguing military innovation.¹ Essentially this is not a pure “brute force strategy,” but is closer to a “strategy of coercion,” in its pure and intra-war forms.² This cross-domain coercion aims to manipulate the adversary’s perception, to maneuver its decision-making process, and to influence its strategic behavior while minimizing, compared to the industrial warfare era, the scale of kinetic force use, and increasing the non-military measures of strategic influence.

The paper makes three main arguments. First, that the nuclear component is an inseparable part of Russian operational art that cannot be analyzed as a stand-alone issue and thus could be understood only in the context of a holistic coercion campaign. Second, that the current Russian cross-domain coercion campaign is an integrated whole of non-nuclear,

¹ In Russian military science, the term “operational art” is a sphere of military affairs interconnecting strategy and tactics, and it also means the theory and practice of achieving strategic goals through design, organization, and conduct of campaigns, operations, and battles. Theory of operational art explores change and continuity in the current character of war and highlights the most optimal concept of operations, organizational structures, and weaponry for a given historical period. As such, it is the sphere of intellectual activity that diagnoses emerging military innovations – evolutionary and revolutionary transformations in the ways and means of waging warfare. See: Dmitry Rogozin (ed.), *Voyna I Mir v Terminah I Opredeleniiah*, Moscow, Veche, 2011; Also see: Dima Adamsky, *The Culture of Military Innovation*, Palo Alto, CA, Stanford University Press, 2010, pp. 44-50.

² For theoretical discussion on the subject see: Bronislav Slanchev, *Military Threats: The Costs of Coercion and the Price of Piece*, Cambridge, Cambridge University Press, 2012.

informational, and nuclear types of deterrence and compellence. Finally, the campaign contains a holistic informational (cyber) operation, waged simultaneously on the digital-technological and on the cognitive-psychological fronts, which skillfully merges military and non-military capabilities across nuclear, conventional, and sub-conventional domains.

A disclaimer about terms is necessary. Russian thinking about nuclear and non-nuclear coercion (both deterrence and compellence) is constantly evolving, sometimes lacking doctrinal codification and official lexicon. Thus, while a significant corpus of ideas on the subject informs current Russian military theory and policy, Russian and Western experts refer to this type of strategic influence by using different terms at different times. Russian professional discourse often mixes the terms *coercion*, *deterrence*, and *compellence* and uses them interchangeably. Russian equivalent of the Western term *deterrence* – *sderzhivanie* – refers to the complex of strategic efforts aimed at preserving the status quo, and implies, similarly to the Western usage, a more re-active *modus operandi*, and thus has a defensive connotation. The term *compellence* – *prinuzhdenie* – refers to the complex of strategic efforts aimed at changing the status quo and implies, similarly to the Western usage, a more pro-active *modus operandi*, and thus has an offensive connotation. There is no established and widely used Russian term for *coercion*, which the Western discourse utilizes as an umbrella term for both deterrence and compellence. The term *prinuzhdenie* (compellence), and seldom the term *sderzhivanie* (deterrence), are often used to express a concept similar to the Western term *coercion*. The context usually indicates which of the three forms of strategic influence that is referred to by Russian authors. This paper sticks to the Russian terminology as much as possible. However, to enable systematic analysis, it introduces the terms “regional nuclear deterrence,” and “cross-domain coercion” as heuristic expressions representing the clouds of ideas circulating in the Russian professional community. The paper indicates when using a Russian term, a Western one, or when it introduces its own term, to describe a phenomenon under scrutiny. Thus, *cross-domain coercion*, the term that this paper introduces, refers to the host of Russian efforts to deter and to compel adversaries by orchestrating soft and hard instruments of power across various domains, regionally and globally.

A disclaimer about the analysis is necessary. Labeling Russian strategy and operational art in a given geographical or historical context, in absolute terms, as being purely “offensive” or “defensive”, does not seem to contribute to a better understanding of Russian art of strategy. Such qualifications are subjective, relative, and often politicized, let alone that both approaches, especially in Russian strategic culture, often coexist and are indistinguishable. This is an important historical-normative debate, but it is beyond the scope of this paper. This paper seeks to contribute by representing reality as it is seen from Moscow, even if this analytical disposition, and Russian perception, may sound as counterintuitive, confusing, and contradictory. This particularly relates to the section of the paper discussing Russian threat perception and countermeasures to perceived challenges.

Finally, a disclaimer about sources is also necessary. The paper utilizes primary sources – doctrinal publications, white papers, professional periodicals, and programmatic speeches of the leadership – but it is often difficult to determine how credible these sources are. Official periodicals may have more credibility than unofficial sources, but the latter often offer useful insights. Some authors, being either government-affiliated or independent, have more credibility than others. To overcome the limitations inherent in open source research, this paper bases its assertions on unrelated materials by experts within and outside the government. The paper pays special attention to military professional publications exploring the main problems of strategy, operational art, force build-up, organization, and deployment in support of decision-making process of the government bodies.

Following the introduction, the paper consists of three parts. The first part traces the evolution of Russian thinking on regional nuclear deterrence – the main novelty of the post-Soviet strategic thought until 2010. It discusses its essence and the reasons behind Russian nuclear “incoherence.” The second part covers the period from the publication of the 2010 Military Doctrine and onward, and outlines the transformation of Russian perception of the Western HW threat, analyzes Moscow’s countermeasure under the NGW, and then focuses on its main element – informational (cyber) warfare. The third part discusses the logic of the emerging Russian thinking on cross-domain coercion, and looks into the interplay of its components (non-nuclear deterrence, informational deterrence, and nuclear deterrence), which is the most recent novelty of Russian operational art. The conclusion summarizes the findings and discusses avenues of future research.

Russian Nuclear Deterrence Thinking Since 1991

Regional Nuclear Deterrence and Non-strategic Nuclear Weapons

Since 1991, conventional wisdom has attributed two strategies of nuclear deterrence to Russia. The first, global nuclear deterrence, aims to deter nuclear aggression. It is based on a threat of retaliation by a strategic nuclear arsenal. Its essence and the related weapons have been relatively clear to observers – largely a prolongation of familiar Soviet practices. The second type of nuclear deterrence aims to deter a large-scale conventional war. Implicitly, it is based on a threat to strike with a non-strategic nuclear arsenal. This relatively new notion is referred to in this paper as regional nuclear deterrence (RND). Russia’s reliance on its non-strategic nuclear weapons (NSNWs), reportedly the largest in the world, has been an ongoing concern for security experts. Confusion has amplified the anxiety about the ends, means, and ways of Russian RND. In contrast to global deterrence, RND’s essence and the extent to which NSNWs are nested in it, have been puzzling. Despite solid intellectual investment in exploring this topic, Russia’s non-strategic nuclear arsenal, its location, operational status, doctrine and pertaining deterrence framework have been ambiguous.³

Theoretically, the logic of the Russian RND approach fits the “asymmetric escalation” posture. It operationalizes “nuclear weapons as usable war fighting instruments” and implies the “first use against conventional attacks to deter their outbreak”. Theoretically, for the threat to be credible, “this posture must be largely transparent about capabilities, deployment patterns, and conditions of use.”⁴ However, at least until 2010, Russian NSNWs had no meaningfully defined mission and no strategic or deterrence framework. Contrary to expectations, nuclear reality in Russia is a constellation of contradictory trends and narratives unlinked by either unifying logic or official policy. For more than a decade, at least until 2014, the ends, means, and ways of RND have not been calibrated among different parts of the Russian strategic community.

³ See: Dmitry (Dima) Adamsky, “Nuclear Incoherence: Deterrence Theory and Non-Strategic Nuclear Weapons in Russia,” *Journal of Strategic Studies*, vol. 37, no. 1, 2014, pp. 91-134.

⁴ See: Vipin Narang, “Posturing for Peace? Pakistan’s Nuclear Posture and South Asian Stability,” *International Security*, vol. 34, no. 3, Winter 2009/10, pp. 40-41.

The Russian leadership began to gradually reduce its threshold for nuclear use in the early 1990s to compensate for the inferiority of its conventional forces. Since then, national level declaratory nuclear policy evolved in several steps. The 1993 Military Doctrine withdrew from the commitment to no-first use. In addition to the traditional strategic deterrence mission, it tasked nuclear forces to deter large-scale conventional wars. The nuclear threshold reduction continued in 1998 when the Security Council tasked the nuclear forces to deter regional conventional conflicts. The 2000 Military Doctrine codified this new approach. The *Immediate Tasks of the Armed Force Development*, published in 2003, maintained first use in regional conventional wars. The 2010 Military Doctrine's text was relatively restrained and preserved the first use policy on the level of a conventional war. Detailed elaboration was left to the classified *Foundations of the Nuclear Deterrence Policy* appendix,⁵ which does not necessarily provide any doctrinal clarification on the role of non-strategic nuclear weapons.⁶ In light of this nuclear threshold reduction, Russian military internalized in the late 1990s that from then on, in addition to their traditional global task, nuclear weapons had acquired a new regional mission. On the regional level, the arsenal's mission became to deter, and, if deterrence were to fail, to terminate large-scale conventional aggression through a limited nuclear use in the theater of military operations. This nuclear thwarting of conventional threats was designed as a temporary solution to buy time for restoring Russian conventional power.⁷

Since then, observers have attributed two strategies of nuclear deterrence to Russia. The first one, based on a threat of massive launch-on warning and retaliation strikes, aims to deter nuclear aggression. The second one, based on a threat of limited nuclear strikes, aims to deter and terminate a large-scale regional conventional war. The global deterrence rests on a strategic nuclear arsenal, and regional one would be, presumably, supported by NSNW.⁸ Russian experts lack a single opinion and consensual definition of what are tactical, operational-tactical or non-

⁵ *Kontseptsiiia natsionalnoi bezopasnosti Rossiiskoi Federatsii*, Ministry of Foreign Affairs of the Russian Federation, Moscow, December 1997; "Voennaia doktrina Rossiiskoi Federatsii," *Nezavisimaya gazeta*, April 2000; *Aktual'nye zadachi razvitiya vooruzhen- nykh Sil Rossiyskoy Federatsii*, Ministry of Defense of the Russian Federation, Moscow, March 2003; *Voennaia doktrina Rossiiskoi Federatsii*, National Security Council of Russia, Moscow, February 2010; Andrei Kokoshin, *Armiia i politika*, Moscow, Mezhdunarodnye otnosheniia, 1995, pp. 243-244, 256; Andrei Kokoshin, *Strategicheskoe upravlenie: Teoriya, Istoricheskii Opit, Sravnitel'nii Analiz, Zadachi Dlya Rossii*, Moscow, ROSPEN, 2003, pp. 315-319, fn.31, 32, 33; Nikolai Efimov, *Politiko-Voennye Aspekty Natsional'noi Bezopasnosti Rossii*, Moscow, URSS, 2006, pp. 108-10, 121-125.

⁶ Hans Kristensen, *Non-Strategic Nuclear Weapons*, Federation of American Scientists, Special report no. 3, Washington, DC, May 2012, p. 78; Dmitry Trenin, "Russia's Nuclear Policy in the 21st Century Environment", *Proliferation Papers*, no. 13, 2005, p. 9; Roger McDermott, *Russia's Conventional Military Weakness and Substrategic Nuclear Policy*, Fort Leavenworth, KS, Foreign Military Studies Office, 2011, p. 12; Andrei Zagorski, *Russia's Tactical Nuclear Weapons: Posture, Politics and Arms Control*, Hamburg, Hamburger Beitrage, 2011, p. 24; Vladimir Dvorkin, "Prazhskii rubezh poriden," *NVO*, 4 February 2011.

⁷ See sources in Adamsky, "Nuclear Incoherence," *op. cit.*, p. 95, footnote 11.

⁸ See sources in *ibid.*, p. 96, footnote 12.

strategic (sometimes sub-strategic) nuclear weapons – the most frequently and interchangeably used terms in the Russian professional lexicon. In various works, including military dictionaries, classification refers to: target and mission (a tactical vs. an operational level of warfare), scale of combat (regional vs. global), yield (destructive power), range, delivery platform and corps affiliation (General Purpose Forces vs. Strategic Missile Forces or Long Range Aviation), and type of subordination (commanders in the theater of operations vs. high command authority), or done by exclusion (not part of SALT and START).⁹ Similarly, in the West, the most frequently used dividing line designates all weapons not covered by strategic arms control treaties as non-strategic. The size and the status of the NSNW stockpile as well as yields and ranges is one of Russia's most tightly kept secrets. "Uncertainty sustains a public debate."¹⁰ Russian experts usually cite estimates that vary between 2,000 and 4,000 warheads. Western experts argue that Russia has up to 5,000 tactical nuclear weapons.¹¹ Experts are uncertain about the arsenal's distribution among the services, its location, and deployment status. During the last decade, NSNWs have usually been mentioned in the context of balancing the conventional qualitative threat emanating from the West (NATO) and the conventional quantitative one from the East (China).¹²

Nuclear Incoherence

Although NSNWs do exist, and ideas about RND have been circulating for more than a decade in professional discourse, they have not been, at least not until 2014, part of a coherent doctrine. Russian political-doctrinal declarations match "asymmetrical escalation" ideal type, but the actual state of Russian nuclear affairs hardly fits it. Unless a state opts for deterrence posture heavily leaning on ambiguity, its nuclear posture – "capabilities, deployment patterns, and command and control procedures", – should be identifiable, at least in theory.¹³ In the Russian case, research beyond national level political declarations indicates that the ends, means, and ways of nuclear deterrence of conventional aggression are not consistent among different parts of the Russian strategic community and that NSNWs lack a clearly articulated mission. At least until the publication of the 2014 Military Doctrine, neither written doctrine nor doctrinal consensus underlined RND ideas. Coexistence of mutually exclusive thoughts would be impossible if there was a binding doctrinal regulation about nuclear deterrence of conventional aggression and about the role of NSNW in it.¹⁴

Differences in the views of Russian senior military strategists on the role of nuclear weapons suggest that there is no clarified role for NSNWs in RND. Under declarations of the late 1990s allegedly "operational-tactical nuclear forces" ceased to be a war-fighting tool, but acquired a deterrence mission similar to that of strategic nuclear weapons. The contents of the

⁹ See sources in *ibid.*, p. 96, footnote 13.

¹⁰ Hans Kristensen, *Non-Strategic Nuclear Weapons*, *op.cit.*, p. 45.

¹¹ See sources in Adamsky, "Nuclear Incoherence," *op. cit.*, p. 97, footnotes 17-19.

¹² See sources in *ibid.*, p. 98, footnote 23.

¹³ Narang, "Posturing for Peace?," *op. cit.*, pp. 40-41.

¹⁴ Adamsky, "Nuclear Incoherence," *op. cit.*, pp. 99-100.

then political-strategic decisions are unavailable. It is clear, however, that Russian commanders found statements specifying new nuclear tasks unsatisfactory. The main conceptual problem was determining the capabilities supporting global and regional types of deterrence. During the last decade, several competing schools of nuclear thought promoted the following, sometimes mutually exclusive and still unsettled, views on RND and on the role of NSNWs in it. One school of thought suggested to base RND on NSNWs from non-strategic platforms, other experts promoted the idea of RND based on NSNWs launched from strategic platforms, an alternative view promoted the idea of RND by strategic nuclear weapons, with additional suggestions to deter conventional aggression by pre-nuclear deterrence or by a new generation of nuclear weapons.¹⁵

Statements of operational level commanders from the general purpose forces, who plan and train for regional fighting, did not add much doctrinal clarity. Due to the above conceptual disagreements, the strategic level echelon was unable to provide the general purpose forces with clear doctrinal directives. However, the emphasis on RND in professional discourse stimulated concrete thinking about NSNWs among the operational level commanders. It is unclear how many of the NSNWs are deployed in the general purpose forces' services and branches. However, it is obvious that senior and operational level commanders from general purpose Ground, Naval and Air Forces think about the NSNWs in relatively concrete terms. Since the Russian parliament never ratified the PNIs, there was no legal enforcement to stop thinking about, and training with, this capability.¹⁶

Evidence from military exercises till 2012 reveals patterns of nuclear use, but does not disclose the existence of a codified posture regulating the role of NSNWs. During the exercises simulating conventional wars, the nuclear threshold was crossed at the final phase of the exercise when conventional attacks of the qualitatively or quantitatively superior enemy produced daunting situations. At that stage, targets in the theater of operations, in proximity and in remote naval and ground theaters were struck not using general purpose air forces, but Long Range Aviation platforms. In other exercises, surface-to-surface missile units of the general purpose forces took similar "nuclear responsibilities." Although the Navy assigned itself theater nuclear responsibilities, and has a significant NSNW arsenal, the combined arms exercises have demonstrated that, as a rule, the Long Range Aviation equalized naval inferiority and conducted de-escalation and deterring strikes at sea. Officially, ground and naval strategic platforms were not part of the regional war exercises. However, in several cases, they conducted their own maneuvers simultaneously and executed or simulated limited long-range launches. In several of these exercises, NSNW were utilized at the initial stage of the escalation as part of the global deterrence scenario.

¹⁵ See sources in *ibid.*, pp. 100-102, 106-111. Analysis of statements by the Russian nuclear industry's senior officials suggests that the fundamental scientific research of low-yield nuclear weapons with tailored effects has generated another strand of thought about nuclear deterrence of conventional aggression during the last decade.

¹⁶ See sources in *ibid.*, pp. 102-106.

The causal mechanism underlying the RND concept was never spelled out and elaborated officially for operational-level commanders. Implicitly, it assumed that regional conventional wars would not involve core interests for which the adversary would tolerate the risk of even a single nuclear strike. Consequently, limited nuclear use would deter or terminate conventional hostilities, without escalation to a massive nuclear exchange. Scenario vignettes from all of the exercises demonstrate that when a counter-attack by NSNWs restores the status quo, the adversary terminated hostilities and did not turn to a nuclear retaliation. However, this wisdom that saw NSNWs as a neutralizer of conventional inferiority did not substitute for a detailed doctrinal regulation. At least until the publication of the 2014 Military Doctrine, the role of NSNWs seems to be undefined in the general purpose forces.¹⁷

Explaining Nuclear Incoherence

Several factors may explain why the set of Russian RND ideas has been detached from the arsenal that should supposedly support it, making it a vague notion, not calibrated among different parts of the strategic community. First, the Western theory of deterrence was a novelty for Russian strategic studies, when the intellectual activity started in the 1990s. The latter started to co-opt the former systematically only during the last decade and the concept of deterrence remains under construction. Second, Russian national strategic declarations have minor bearing on the actual force posture. Contradictory white papers neither reflected nor framed intellectual and professional dynamics within the nuclear, and broader, strategic community. Un-coordination of national security priorities and threat perceptions, coupled with bureaucratic parochialism, produced a chronic inconsistency between official nuclear policies, procurement, military-technical decisions and theoretical thinking. Should one expect more nuclear coherence than that observed in the Russian case? Evidence suggests that one should not set the bar too high. Orchestrating policy, science, strategy, procurement, and execution is a challenging enterprise for any, particularly nuclear, country. States' national security and military policies are frequently saturated with bureaucratic parochialism, disconnects between declarations and implementation, organizational complexities, and varying views on the "theory of victory," especially during defense transformations. This is particularly relevant in the discussed case. Indeed, Russian defense spending and reforms have changed several times in the past two decades, which certainly had some effect on coherent development of any kind of strategic plan or doctrine.

Lack of tight integration between strategy and policies, operational concepts, and forces evident in the Russian case is not unique. The NATO's Cold War Flexible Response demonstrates that establishing a coherent theater nuclear posture and streamlining it with national deterrence strategy has been a demanding and frequently unfulfilled task. If the Russian experience is analogous to the NATO one, then the incoherence is the manifestation of bureaucratic politics and of a learning exercise about the limits of nuclear weapons. In both cases, different services and powerful players seem to claim responsibility for the authority

¹⁷ See sources in *ibid.*, pp. 105-106.

to implement the emerging concept. Thus, the Russian case has been unique, not so much when compared to other states, but primarily when observed from the perspective of Russian strategic tradition. Tsarist and Soviet military innovations demonstrated that it is not unusual for Russian doctrine to outpace the actual capabilities, but not the other way around, as in the present case.¹⁸

This incoherence continues. Although the 2014 military doctrine re-confirmed the first use policy in response to the conventional aggression that threatens the territorial integrity and sovereignty of the Russian Federation, until recently, it seems, Russian strategic planners have lacked a codified procedure to estimate the conditions under which they would recommend that senior leadership to de-escalate non-nuclear aggression by nuclear means. Russian experts argue that the deliberated decision about crossing the nuclear threshold in response to conventional aggression would be “practically impossible” in Russia today, as there is no methodology for calculating an unacceptable level of damage after which the nuclear threshold will be crossed. As of fall 2015, this critical threshold of unacceptable damage, that justifies crossing the nuclear threshold, has been undefined. The problem partially rests in the inability of the Russian early warning systems to provide the leadership with the reliable warning on the incoming massive precision guided strikes by groups of conventional low-altitude cruise missiles on military and civilian infrastructure targets. Partially, it is simply the lack of criteria for assessing unacceptable damage. The new Russian deterrence strategy demands the establishment of this “modified McNamara criteria” and to introduce a procedure for prospective and actual damage calculation of critical social-military-economic infrastructure and for political-military command-and-control systems under conventional aggression. According to Russian experts, the speed and scope of the prospective strike demands to introduce the automatic intelligence-information system of situation analysis supported by the damage calculation algorithms.¹⁹

Although intellectual activity aimed at formulating a coherent methodology is evident among Russian military theoreticians, one may argue that Russia actually may not need to develop a coherent doctrine. When the asymmetry of stakes is clearly to its advantage, it may be more effective for Moscow to rely only on ambiguity regarding the threshold of destruction. Since the West’s major interests are not at stake, sheer ambiguity could be enough to deter it from getting militarily involved in Russia’s neighborhood. This may be a reasonable argument for general and absolute deterrence. However, criteria and methodology become very relevant when one looks into intra-war coercion that involves escalation dominance and the decision to cross the nuclear threshold in the midst of conventional hostilities.

¹⁸ See sources and discussion in *ibid.*, pp. 123-124.

¹⁹ O. Aksenov, Iu. Tret’jakov, E. Filin, “Osnovnye principy sozdaniia sistemy ocenki tekuchshego I prognoziruemoga uscherba,” *Voennaya Mysl*, no. 6, 2015, pp. 68-74.

“New Generation War”

Current Russian Geopolitical Threat Perception

To grasp contemporary Russian military theory and practice, and the accompanying thinking about nuclear coercion, it is essential to situate the discussion in the context of Russian strategic culture, and within the broader ideational milieu informing its geopolitical threat perception. The current Russian military thought was incepted within a peculiar and enormous strategic frustration, often overlooked by the West. What matters is the narrative that the Kremlin has been telling itself, its citizens, and the world over for the past two decades, even if it sounds like a counterintuitive conspiracy theory. Overall, the discourse within the strategic community demonstrates that many in the Kremlin, and within the entourage of the Russian leadership, in keeping with the traditional Russian siege mentality, genuinely perceive Russia as operating under a long-lasting encirclement which aims to undermine and ultimately destroy it in geopolitical terms. Its current behavior, in its eyes, is a defensive counter-attack following a Western aggression across various domains – in international, military, economic-energy, and internal affairs.²⁰

On the global geopolitical level, Moscow perceives the United States as a usurper that has been unfairly exploiting the unipolar moment since the collapse of the Soviet Union. Washington, in its view, has manifested double standards and hypocrisy in international politics worldwide, expanded the North Atlantic Treaty Organization (NATO) eastward – first to incorporate former Warsaw Pact countries, then former Soviet republics—and then to cultivate and intervene in the rest of Moscow’s “zone of privileged interests,” thus threatening Russian sovereignty. Feeling betrayed and exploited, Moscow found supporting evidence about Western aggressive intentions in the arms control sphere. Moscow saw New START (Strategic Arms Reduction Treaty), supplemented by the deployment of Ballistic Missile Defense (BMD) and the prospect of Conventional Prompt Global Strike (CPGS) capability, as a unified counter-force concept targeting Russia’s shrinking nuclear forces and aimed for nothing less than the degradation of its deterrence potential – the main guarantor of Russian national security against the backdrop of its fundamental conventional military inferiority.

Despite shared concern over global jihad, after the 9/11 terrorist attacks, the U.S. Global War on Terrorism policy has given Moscow more

²⁰ For example see: Bobo Lo, *Russia and the New World Disorder*, Washington, DC, Brookings Institution Press with Chatham House, 2015.

fears than solutions. Moscow has been anxious about U.S. military influence in Central Asia and the Caucasus; Washington's Middle Eastern policy, by default or by design, gradually dismantled parts of Russia's alliance architecture and was seen as threatening the rest of it.

In Moscow's view, under the smoke screen of democratization, Washington carefully orchestrated regime changes across the region, seeking to subordinate regional actors into its sphere of influence, and away from Russia. From Moscow's point of view, the Arab Spring and the Color Revolutions have been links in the same chain, instigated by the United States and serving its aspiration for global dominance.²¹

In the energy sphere, where Moscow seeks to secure uninterrupted demand and supply, it also feels under attack. U.S. competitive strategies in regional energy markets aimed at gaining access to, and cultivating, non-Russian regional sources of energy, encouraged local actors to build energy pipelines and transit corridors outflanking and bypassing Russia, thus preventing it from realizing its energy weapon potential. The battlefields extend domestically as well. Washington's continuous critique of the Kremlin's return to an authoritarian political and economic course, the curtailment of liberal democratic principles and freedoms, is seen as intervention into internal affairs. Moscow sees U.S. funding and support of pro-democracy activities and opposition groups as strategic subversion, not only against the ruling regime, but against Russia as a strong state. U.S. desire to undermine the Kremlin's power at home, aims, in its view, to limit Russia's ability to compete in the international arena.

From the 2008 Georgia War and onward, through the events of the Arab Spring, what is seen as a Western offensive incursion into the zones and spheres of privileged interests, where Moscow considers it has hegemonic rights, has been steadily increasing. In Moscow's view, Western escalation that started to gather momentum since the early 2000s, and reached its culmination in Ukraine in 2014, is directly related to Russia rising from its knees. When Moscow, which perceives itself as a power (*derzhava*) with a historical role in the international arena, started to regain its due status of respected and indispensable actor, after being sidelined into a subordinate role in international politics during the "unipolar moment," the West redoubled its efforts to contain it. Consequently, the Kremlin started to see the current world order not only as unfavorable and unjust, but also as dangerous. Around the same time, Moscow crystallized its view of how the West operationalizes its aggressive aspirations in the military realm, and formulated its own countermeasure – a cross-domain, asymmetrical, non-linear, confrontation frequently dubbed in the West as Russian HW. In Moscow's eyes, however, at this moment of maximum danger, its *modus operandi* is a strategically defensive, counter-offense.

²¹ For example see: Anthony Cordesman, *Russia and the Color Revolution: Russian View of a World Destabilized by the US and the West*, Washington, DC, CSIS, 2014.

Russian New Generation War vs. Western Hybrid Warfare

When exploring the theory and practice of Russian operational art, terminology matters. Utilizing Western terms and concepts to define the Russian approach to warfare may result in inaccurate analysis of Russian *modus operandi*. Applying the Western conceptual HW framework to explain Russian operational art, without examining Russian references to this term, isolating it from Russian ideational context, and without contrasting it with what Russians think about themselves and others, may lead to misperceptions. Utilizing the HW framework that dominates professional discourse to analyze a distinct Russian NGW concept seems like that kind of misrepresentation. Experts have already spotted this analytical mistake of imposing a Western “way of thinking, and strategic understanding about the way to conduct warfare,” on the Russian version of operational art.²² Whatever the reason for this terminological-conceptual inaccuracy, a brief clarification is necessary, to decrease the risk of further misperception.

With few exceptions,²³ Western experts utilize the term HW to describe Russian military theory and practice, particularly regarding the crisis in Ukraine and the potential future standoff on its European periphery – especially in the Baltic area. This categorization may be inaccurate. The current Russian thinking and waging of war is different from HW, as perceived in the West, even if similar in some regards. Russian sources do not define their approach as HW and seldom use this term, usually in conjunction with the Western way of waging war, which they try to counteract. Until recently, HW was not at all part of the Russian official lexicon. Before the 2014 events in Ukraine, the term appeared in Russian professional discourse either in reference to the U.S. threat perception or to categorize one of the recent trends in the U.S. way of war.²⁴ Since 2014, it has been often used to refer to the Western standoff with Russia.

The term “HW” became widespread in professional Western lexicon in the mid-late 2000s, as the U.S. defense establishment and its allies around the world have been co-exploring emerging forms of warfare. Initially, the empirical context that had stimulated this knowledge development hardly had any Russian connection. Although some experts qualified the Russian *modus operandi* during the 2008 Georgia War as

²² Janis Berzins, “Russian New Generation Warfare is Not Hybrid Warfare,” in Artis Pabriks and Andis Kudors, *The War in Ukraine: Lessons for Europe*, Riga, University of Latvia Press, 2015, p. 43. Also see McDermott, *Russia’s Conventional Military Weakness*, *op. cit.*

²³ For example see: Berzins, “Russian New Generation Warfare,” *op. cit.*, pp. 40-52; Roger McDermott, “Does Russian Hybrid Warfare Really Exist?,” *Eurasia Daily Monitor*, vol. 12, no. 103, 3 June 2015.

²⁴ For example see: Andrei Novikov, “Sovremennye transformatsii terrorisma,” *Voennyi Diplomat*, no. 1, 2007, pp. 64-68; A. V. Serzhantov and A. P. Martofliak, “Analiz osobennostei sovremennykh voennykh konfliktov,” *Voennaya Mysl*, no. 5, May 2011, pp. 36-44; Igor’ Popov, “Matritsa Voin Sovremennoi Epokhi,” *NVO*, no. 10, 22 March, 2013; Aleksandr Bartosh, “Gibridnye Voiny v Strategii SSha I NATO,” *NVO*, no. 36, 10 October 2014; Oleg Vladykin, “Voina Upravliaemogo Khaosa,” *NVO*, no. 38, 24 October 2014.

hybrid, Israeli and Western combat experiences against non-state and state actors in the Middle East served as the main source of empirical evidence and source of intellectual inspiration to hybrid-warfare conceptualization. The definition of military hybridity, which the then discourse generated and distributed, saw it as a simultaneous employment of conventional, sub-conventional, and possibly non-conventional warfare for the sake of political objectives, or as the blurring of political and jihadi identities of the actors.²⁵ The passing reference made then to the Russian experience was hardly contributory, as it ignored Russian NGW conceptualization, which was then non-existent or was just emerging, and totally neglected the intellectual sources of the Russian approach to warfare, that indeed, traditionally, compounded several forms of military, clandestine, and special operations. While Middle Eastern hybrid actors have been driven by the prospect of “victory by non-defeat,” the Russian NGW theory of victory, in contrast, minimizes kinetic fighting but seeks to defeat the adversary, emphasizing non-military forms of influence, and maximizing cross-domain coercion. Thus, despite some resonance between the two, Russian NGW and Western HW are essentially different constructs and have different intellectual sources.

Over the last several years, Russian experts have been energetically conceptualizing the changing character of war. This activity, aimed at analyzing the emerging military regime and at distilling relevant military innovation, has been an old Soviet-Russian military tradition.²⁶ Expressed either in Revolution in Military Affairs (RMA) terminology or in the classification of generations of warfare, it provides an analytical framework, methodological apparatus, and professional jargon for designing military transformation. Leading up to the 2014 doctrine, Russian understanding of the changing character of war matured into a corpus of ideas under the rubric “NGW” (*voini novogo pokoleniia*), or “Gerasimov Doctrine” – two terms used interchangeably elsewhere and in this paper. Based, among others, on the lessons learned from recent conflicts, mainly U.S. campaigns and defense transformation of the last decade, this is the latest Russian attempt to foresee and forecast the evolution of the Information Technology (IT)-RMA into a new era.²⁷ This corpus of ideas, circulating in Russian strategic community, shapes its military practice.

²⁵ Frank Hoffman and James Mattis, “Future War: The Rise of Hybrid Wars,” *Proceedings*, 2005; Frank Hoffman, “Hybrid Warfare and Challenges,” *Joint Force Quarterly*, no. 52, 2009; David Johnson, *Military Capabilities for Hybrid War: Insights from the Israeli Defense Forces in Lebanon and in Gaza*, Santa Monica, CA, RAND, 2010.

²⁶ Emerging military regime refers, in Russian-Soviet military thought, to the nature of warfare and to its discontinuities – fundamental changes taking place in operations and organizations under the impact of new means of war. See Adamsky, *Culture of Military Innovation*, *op. cit.*, pp. 47-48.

²⁷ This burst of intellectual activity resonates with the wave of Military Technical Revolution (MTR)/RMA theorization in the 1980s. In a way, the current debate is a prolongation on the then theme, as its starting points are IT-RMA weapons systems and the principles of the operational art emerging during Operation Desert Storm – that Russian experts see as the first NGW. Sergei Chekinov and Sergei Bogdanov, “O Kharaktere I Soderzhanii Voiny Novogo Pokoleniia,” *Voennaya*

With some variance, Russian primary sources²⁸ frame the strategic thought and operational art debate along similar lines: first, they offer an overview of the current “military regime”. This outline of trends characterizing the current evolution of warfare is neither a reference to “Western” nor to “Russian” ways of war, but equally relates to both, as mechanization of warfare in the 1920s or nuclear revolution in the 1950s did. Then, articles and publications refer to how this new type of military conflict projects on Russia and discuss how Russia should react. Three themes coexist in the NGW discussion, which is thus equally about the military threat from the West, about Russian response, and about the changing character of war.²⁹

The essence of NGW is reflected in the statements of the Russian Chief of the General Staff (CGS) and Military Doctrine. To Gerasimov, and to other experts, NGW is an amalgamation of hard and soft³⁰ power across various domains, through skillful application of coordinated military, diplomatic, and economic tools. In terms of efforts employed in modern operations, the ratio of non-military and military measures is 4 to 1, with these forms of non-military strategic competition being under the aegis of the military organization. Regime change brought by Color Revolutions, and especially by the Arab Spring (and recent events in Ukraine) are seen, within the NGW theory, as a type of warfare capitalizing on indirect action, informational campaign, private military organizations, special operation forces, and internal protest potential, backed by the most sophisticated conventional and nuclear military capabilities.³¹

Under the changing character of warfare the following phases and new forms of struggle³² predominate: (1) peacetime groups of forces start military action (without war declaration or preparatory deployment); (2) highly maneuverable stand-off combat actions conducted by combined-arms forces; (3) degradation of the adversary’s military-economic potential by swift destruction of military and state critical infrastructure; (4) massive employment of Precision-Guided Munitions (PGMs), special operations,

Mysl, no. 10, 2013, pp. 15-16; Also see: Vasiily Burenok, “Oblik Griaduschikh I Novykh Sistem vooruzheniia operedelit’ tol’ko nauka,” *VPK*, no. 10 (478), March 2013, pp. 13-19.

²⁸ Mainly articles in military periodicals, especially by the experts of the CMSR, departments of the GS, research institutes of the MoD, Gerasimov’s programmatic speeches, and the last version of the Military Doctrine.

²⁹ Similarly, the text, subtext, and context of the 2014 military doctrine refer to the drivers of the Western conduct, outline the new methods of warfare that the West is using against Russia, and outline the countermeasures.

³⁰ Including economic warfare (sanctions, boycotts, and financial subversion), energy blackmail and pipeline diplomacy, cultivation of political opposition, agents of influence, and other active measures.

³¹ Valerii Gerasimov, “Tsennost’ Nauki v Predvidinii,” *VPK*, no. 8 (476), 27 February 2013. Also see: Nachialnik General’nogo Shtaba, V. V. Gerasimov: “O Sostoianii Vooruzhennykh Sil RF I Merakh po Povysheniiu ikh Boesposobnosti,” *Konferentsiia Voennaia Bezopasnost’ Rossii v 21 Veke*, 5 December 2013; Russian Military Doctrine, 2014; Chekinov and Bogdanov, “O Kharaktere,” *op. cit.*

³² The choice of terminology, as well as direct reference at the end of the article, reflects an intellectual influence of Georgy Isserson’s works.

unmanned weapon systems, weapons based on new physical principles, and involvement of “military-civilian component” (armed civilians) in combat activities; (5) simultaneous strike on enemy forces and other targets in the entire territorial depth; (6) simultaneous military action in all physical domains and in the informational space; (7) employment of asymmetric and indirect methods; (8) managing troops and means in a unified informational sphere.³³

Thus, in the ideal type NGW campaign, the “informational-psychological struggle” first takes a leading role, as the moral-psychological-cognitive-informational suppression of the adversary’s decision-makers and operators assures conditions for achieving victory. Second, asymmetrical and indirect actions of political, economic, informational, and technological nature neutralize the adversary’s military superiority. “Indirect strategy in its current technological look” is primarily about using informational struggle to neutralize the adversary without, or with a minimal, employment of military force, mainly through informational superiority (both digital-technological and cognitive-psychological). Third, the complex of non-military actions downgrades the adversary’s ability to compel or to employ force, and produces a negative image in the world public opinion that eventually dissuades the adversary from initiating aggression. Fourth, the side initiating NGW employs a massive deception and disinformation campaign (along the lines of the traditional strategic-operational *maskirovka* concept) to conceal the time, scope, scale, and the character of the attack.³⁴ Fifth, subversion-reconnaissance activities conducted by special operations, covered by informational operations, precede the kinetic phase of the campaign. Sixth, the kinetic phase starts with space-aerial dominance aimed at destroying critical assets of civilian industrial-technological infrastructure and centers of state and military management that will force the state to capitulate. Operating under no-fly zones (along the lines of anti-access/ area denial principles), private military companies and armed opposition prepare an operational setup for the invasion. Seventh, by the phase of the territorial occupation, most of the campaign goals have been achieved, as the ability and will of the adversary to resist have been broken and have evaporated.³⁵

Two unique innovations stand out in this exposition offered by Russian military theoreticians: orchestration of the non-military and military measures ratio (4 to 1) aimed at minimizing kinetic engagements and the addition of the informational domain to the space-aerial, naval, and ground ones.³⁶ Achievement of the NGW campaign’s strategic goals depends on establishing informational superiority over the adversary and then waging

³³ Gerasimov, “Tsennost’ Nauki,” *op. cit.* The numbers indicate particular sequence of operational efforts, and equally, apply to Russian and Western approaches to waging campaign, thus reflecting the general character of contemporary operations.

³⁴ In NGW, a special disinformation operation is a complex of interrelated moves conducted through diplomatic channels by the state and non-state mass media, leaks from command-and-control organs, and deceiving statements by the senior political and military leadership.

³⁵ Chekinov and Bogdanov, “O Kharaktere,” *op. cit.*

³⁶ *Ibid.*

the campaign's decisive battles on the informational front. Thus, the early (soft) phases of the NGW campaign are more decisive than the final (kinetic) ones. The second innovation of Russian military thought is an emphasis on asymmetrical and indirect approaches; however, one should not overstate the uniqueness of this novelty.

Western analysts should not assume that Russian emphasis on increasing role of indirect-asymmetrical actions across military and non-military domains is an innovative Russian practice imported from the West. The Russian quest for asymmetry is neither fundamentally novel, nor purely of "Western" origin. Russian experts follow Western professional discourse and are familiar with its conceptual apparatus; however, it would be inaccurate to argue that Russians are importing Western terminology or giving it a new meaning. For at least a half decade preceding the 2014 Military Doctrine, the Russian General Staff has systematically explored the role of asymmetry in modern warfare, learned lessons from historical evidence worldwide, followed Western discourse on the subject, and generated insights for the benefits of the military theory and practice.³⁷

Informed, to a certain degree, by the Western debate, "asymmetry" and "indirect approach" have much deeper, idiosyncratic roots in Russian military tradition. Cunning, indirectness, operational ingenuity, and addressing weaknesses and avoiding strengths are expressed in Russian professional terminology as military stratagem (*voennaia khitrost'*) and have been, in the Tsarist, Soviet, and Russian Federation traditions, one of the central components of military art that complement, multiply, or substitute the use of force to achieve strategic results in military operations.³⁸ According to Gareev, "deceit of the adversary and cunning stratagem, dissemination of disinformation, and other, the most sophisticated, malice (*kovarnye*) means of struggle," have been, historically, integral parts of the military profession.³⁹ The previous burst of asymmetry conceptualization in Russian military thought traces back to the 1980s when Soviet experts sought effective, asymmetrical countermeasures to the U.S. Strategic Defense Initiative. One of its architects, and one of the leading Russian defense intellectuals, Andrei Kokoshin, has been popularizing the term "asymmetrical approach" in professional discourse since the 1990s.⁴⁰ Long

³⁷ Sergei Chekinov, and Sergei Bogdanov, "Assymetrichnye deistviia po obespecheniiu voennoi bezopasnosti Rossii," *Voennaya Mysl*, no. 3, 2010, pp. 13-22.

³⁸ Genrikh Antonovich Leer, *Metod voennykh nauk*, Saint-Petersburg, 1894, pp. 53-53; *Strategiia*, Saint-Petersburg, 1898, pp. 203-204; V. Lobov, *Voennaia Khitrost'*, Moscow, Logos, 2001; I. Vorob'ev and V. Kiselev, "Strategiia nepriamykh desitvii v novom oblike," *Voennaya Mysl*, no. 9, 2006; "Voennaia Khitrotsot'," in *Voenno-Entsiklopedicheskii Slovar'*, Moscow, Voenizdat, 2007.

³⁹ M. Gareev, "Voennaia nauka na sovremennom etape," *VPK*, no. 13 (481), April 2013, pp. 3-9.

⁴⁰ S. K. Oznobishev, V. Ia. Potapov and V. V. Skokov, *Kak Gotovilsia Asimetrichnyi Otvet na Strategicheskuiu Iadernuiu Initsiativu: Veikhov, Kokoshin I drugie*, Moscow, URSS, 2010; Andrei Kokoshin, "Asimetrichnyi Otvet," *SSha: Ekonomika, Politika Ideologiiia*, no. 2, 1987; "Asimetrichnyi otvet na SOI kak primer strategicheskogo planirovaniia v sfere natsional'noi bezopasnosti," *Mezhdunarodnaia Zhizn'*, no. 2, 2007.

before the publication of the 2014 doctrine, referring to asymmetry and indirect approach turned into a *bon ton* figure of speech among military brass and political leadership, discussing the correlation of forces and countermeasures to the West.⁴¹

Russian theory of victory can be labeled as asymmetrical, as it is a competitive strategy playing one's strengths to opponent's weaknesses. However, essentially, the Russian approach, at least in its own eyes, is also symmetrical – the nature of the threat shapes the nature of the response. Moscow saw the United States waging a new type of (hybrid) warfare elsewhere, felt threatened, sought adequate countermeasures, and is now erecting a firewall against what it sees as a Western HW campaign aimed at Russia and combining both soft and hard power elements. Since the boundaries between internal and external threats are blurred, the threat is perceived as a cohesive whole, and the military is expected to address it in a holistic manner. The rising importance of pressuring adversaries by non-military results in an unorthodox multi-dimensional merge of soft and hard power, operating non-military activities in conjunction with military (conventional and non-conventional), covert, and overt operations, special forces, mercenaries, and internal opposition to achieve strategic outcomes.⁴² NGW is less about traditional military or economic destruction but targets the adversary's perception and is more about affecting the opponent's will and manipulating his strategic choices. Consequently, the role of *informational struggle* looms unprecedentedly large in current Russian military theory and practice.

Informational Struggle: Leitmotif of the New Generation Warfare

Since, according to NGW, the main battlefield is consciousness, perception, and strategic calculus of the adversary, the main operational tool is informational struggle, aimed at imposing one's strategic will on the other side. Perception, consequently, becomes a strategic center of gravity in the campaign. It is difficult to overemphasize the role that Russian official doctrine attributes to the defensive and offensive aspects of informational struggle in modern conflicts. In NGW, it is impossible to prevail without achieving informational superiority over the adversary.⁴³ "Strategic operation on the theater of informational struggle," aimed at achieving this superiority, blurs war and peace, front and rear, levels of war (tactical, operational, and strategic), forms of warfare (offense and defense), and forms of coercion (deterrence and compellence).⁴⁴ Moscow assumes that this trend equally relates to everyone and perceives informational struggle as a way of striking back against what it sees as U.S. information warfare. These abuses of soft power that serve as instruments of interference in the

⁴¹ See: Putin, Rogozin, Ivanov, Shoigu; Vladimir Surkov (under the pseudonym of Nathan Dubovitsky), "Bez Neba," *Russkii Pioner*, 12 March 2014.

⁴² For the most skillful synthesis and in-depth analysis of the force build-up and deployment principles in NGW see Janis Berzins, *Russia's New Generation Warfare in Ukraine: Implications for Latvian Defense Policy*, Riga, Latvia MoD, April 2014, and Berzins, "Russian New Generation Warfare," *op. cit.*

⁴³ Iu. Gorbachev, "Kibervoina uzhe idet," *NVO*, no. 13, 12-18 April 2013.

⁴⁴ Sergei Modestov, "Strategicheskoe sderzhivanie na teatre informatsionnogo protivoborstva," *Vestnik Akademii Voennykh Nauk*, no. 1 (26), 2009.

internal affairs of sovereign countries intensified, according to Moscow, against the backdrop of the changing character of war. The emerging corpus of ideas on informational struggle aims to counteract what Russian experts see as the indirect approach, soft power, and technologies of “managed chaos,”⁴⁵ one of the main tools of Western HW.⁴⁶

Informational struggle, in the Russian interpretation, comprises both technological and psychological components designed to manipulate the adversary’s picture of reality, misinform it, and eventually interfere with the decision-making process of individuals, organizations, governments, and societies to influence their consciousness. Sometimes referred to as “reflexive control,” it forces the adversary to act according to a false picture of reality in a predictable way, favorable to the initiator of the informational strike, and seemingly independent and benign to the target.⁴⁷ Moral-psychological suppression and manipulation of social consciousness aims to make the population cease resisting (*otkaz ot soprotivleniia*), even supporting the attacker, due to the disillusionment and discontent with the government and disorganization of the state and military command and control and management functions.⁴⁸ The end result is a desired strategic behavior.

Despite the puzzlement of several intelligence communities with what they qualify Moscow’s innovative “cyber warfare,” the Russian approach demonstrates remarkable historical continuity. Russian conceptualization of informational (cyber) struggle, in NGW frames, is an outgrowth of three corpora of professional knowledge. The first source of influence is a Soviet MTR/RMA thesis from the 1980s that envisioned military organizations of the post-industrial era as reconnaissance-strike complexes. Accordingly, one can defeat the adversary not by kinetic destruction, but by disrupting decision-making processes within its system of systems, through an electronic warfare (EW) strike on Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems. This became a source for the “digital-technological” impetus of the Russian approach. Second, since informational influence is aimed primarily at an adversary’s decision-making, the Russian approach is informed by the tradition of “active measures” and *maskirovka* – one of the main virtues of the Soviet-Russian

⁴⁵ V. Kariakin, “Khaosmiatezh – simvol nastupivshei epokhi,” *Natsional’naia Oborona*, no. 6, 2015.

⁴⁶ Before events in Ukraine introduced the issue of the Russian troll armies, Russian military experts assumed that the columns of non-attributed agents of influence and information warfare fighters had been operating in the social networks’ theaters of operations, controlled by Western intelligence. Chekinov and Bogdanov, “O Kharaktere,” *op. cit.*, pp. 17-18.

⁴⁷ For reflexive control see: M. D. Ionov, “O Refleksivnom Upravlenii Protivnikom v Boiu,” *Voennaia Mysl’*, no. 1, 1995; Fedor Chausov, “Osnovy Refleksivnogo Upravleniia,” *Morskoi Sbornik*, no. 9, 1999; N. I. Turko and S. A. Modestvov, “Refleksivnoe Upravlenie Razvitiem Strategicheskikh Sil Gosudarstva,” in *Sistemnyi Analiz na Poroge 21 Veka*, Conference Proceedings, Moscow, 1996; S. Leonenko, “Refleksivnoe Upravlenie Protivnikom,” *Armeiskii Sbornik*, no. 8, 1995.

⁴⁸ Chekinov and Bogdanov, “O Kharaktere,” *op. cit.*

intelligence and military art – a repertoire of denial, deception, disinformation, propaganda, camouflage, and concealment. It aims to manipulate the adversary's picture of reality and to produce favorable operational conditions for promoting one's strategic goals. This became a basis for the "cognitive-psychological" motive. Finally, a unique Soviet definition given to the science of cybernetics (*kibernetika*) left its imprint. Seen as a discipline in the intersection of exact, social, and natural sciences, Soviet scientific society defined cybernetics as science exploring the nature of creation, storage, transformation, utilization, and management of information and knowledge, in complex systems, machines, contiguous living organisms, or societies. In a nutshell, it is a discipline dealing with decision-making management of the highest order.⁴⁹

These three sources of inspiration shaped Russian informational (cyber) warfare conceptualization and account for the differences from Western HW. From the start, the Soviet-Russian definition of cybernetics included both digital-technological and cognitive-psychological spheres. Current Russian doctrines and policy perceive cyber space as an integral part of the broader informational space. Russian official terminology differentiates between: *informational space* – all spheres where societal perception takes shape; *information* – content shaping perception and decision-making; and *informational infrastructure* – technological media that gives digital and analog expression to the first two, essentially cognitive-perceptual, components. Russian national security theory and practice addresses these three as one integrated whole and emphasizes perception (*soznanie*) as the center of gravity of any type of activity in the informational theater of operations, be it offense, defense, or coercion.⁵⁰ Informational struggle/warfare (*bor'ba/protivoborstvo, voina*), reflecting the field's dual

⁴⁹ See: Vladimir Slipchenko, *Voiny Shestogo Pokoleniia*, Moscow, Olma Press, 2002; Vladimir Slipchenko, *Voiny Novogo Pokoleniia*, Moscow, Olma Press, 2004; I. N. Chibisov, and V. A. Vodkin, "Informatsionno-udarnaia operatsiia," *Armeiskii sbornik*, no. 3, 2011, pp. 46-49; Vorob'ev and Kiselev, "Strategiia," *op. cit.*; K. I Safetdinov, "Informatsionnoe protivoborstvo v voennoi sfere," *Voennaia Mysl'*, no. 7, 2014, pp. 38-41; V. I. Kuznetsov, Y. Y. Donskov, and A. S. Korobeinikov, "O sootnoshenii kategorii "radioelektronnaia borba" i "informatsionnaia borba," *Voennaia Mysl'*, no. 3, 2013, pp.14-20; V. A. Balybin, Y. Y. Donskov, and A. A. Boiko, "O terminologii v oblasti radioelektronnnoi borby v usloviakh sovremennogo informatsionnogo protivoborstvo," *Voennaia Mysl'*, no. 9, 2013, pp. 28-32; P. I. Antonovich, "O syshchbosti i sodержanii kibervoiny," *Voennaia mysl'*, no. 7, 2011, pp. 39-36; Y. I. Starodubtsev, V. V. Bukharin and S. S. Semenov, "Tekhnosfernaia voina," *Voennaia Mysl'*, no. 7, 2012, pp. 22-31; Dima Adamsky, *The Culture of Military Innovation*, *op. cit.*

⁵⁰ For the selected sources on this aspect of Russian operational art see: Safetdinov, 2014; *Doktrina Informatsionnoi Bezopasnosti; Kontseptual'nye Vzgliady na Deiatel'nost' Rossiskikh VS v Informatsionnom Prostranstve*, 2011; *Strategiia Natsionalnoi Bezopasnosti; Kontseptsiiia Obshchestvennoi Bezopasnosti*, 2013; *Voennaia Doktrina*; A. A. Strel'tsov, "Osnovnye zadachi gosudarstvennoi politiki v oblasti informatsionnogo protivoborstva," *Voennaya mysl'*, no. 5, 2011, pp. 18-25; Antonovich, 2011; V. I. Kuznetsov, Y. Y. Donskov, and O. G. Nikitin, "K voprosu o roli i meste kiberprostranstva v sovremennykh boevykh deistviakh," *Voennaia Mysl'*, no. 3, 2014, pp. 13-17; Sergei Chekinov and Sergei Bogdanov, "Vliianie nepriamykh deistvii na kharakter sovremennoi voiny," *Voennaia Mysl'*, no. 6, 2011, pp. 3-13.

nature, includes EW, computer network operations (CNO), psychological operations (PSYOPS), and *maskirovka* activities that enable an integrated informational strike (*informatsionnyi udar*) on the adversary's decision-making. Digital-technological and cognitive-psychological components of this informational strike are synthetically interconnected and mutually complementing. Seeing informational struggle as tool of strategic coercion, Russia defines informational sovereignty as digital-cognitive independence and envisions international regulation of informational (cyber) space in a much broader sense than the West. Initially, the term "cyber" mainly referred to the adversarial, Western, digital attacks on Russian informational infrastructure. Incrementally, it acquired a broader meaning in Russian professional discourse, but it is still an integral subcomponent of informational struggle.⁵¹

Informational struggle is not a codified concept of operations. However, the contours of this widely used tool are straightforwardly identifiable. Three main characteristics predominate. First, Russia's approach to informational struggle is *holistic (kompleksnyi podhod)*, that is, it merges digital-technological and cognitive-psychological attacks. While digital sabotage aims to disorganize, disrupt, and destroy a state's managerial capacity, psychological subversion aims to deceive the victim, discredit the leadership, and disorient and demoralize the population and the armed forces. Second, it is *unified (edinstvo usilii)*, in that it synchronizes informational struggle warfare with kinetic and non-kinetic military means and with effects from other sources of power; and it is *unified* in terms of co-opting and coordinating a spectrum of government and non-government actors – military, paramilitary, and non-military. Finally, the informational campaign is an *uninterrupted (bezpriryvnost')* strategic effort. It is waged during "peacetime" and wartime, simultaneously in domestic, the adversary's, and international media domains and in all spheres of new media. The on-line "troll" armies wage battles on several fronts: informational, psychological, and, probably, digital-technological. This enables the creation of managed stability-instability across all theaters of operations.⁵²

⁵¹ "Informatsionnoe protivoborstvo," in *Voenno Entsiklopedicheskii Slovar'*, Moscow, Voenizdat, 2007; For doctrinal publications see: *Doktrina Informatsionnoi Bezopasnosti Rossiiskoi Federatsii*, 2000; *Kontseptual'nye Vzgliady na Deiatel'nost' Rossiskikh VS v Informatsionnom Prostranstve*, 2011; *Strategiia Natsionalnoi Bezopasnosti Rossiiskoi Federatsii do 2020 goda*, 2009; *Kontseptsiia Obshchestvennoi Bezopasnosti Rossiiskoi Federatsii*, 2013; *Voennaia Doktrina Rossiiskoi Federatsii*, 2014; A. A. Strel'tsov, "Osnovnye zadachi gosudarstvennoi politiki v oblasti informatsionnogo protivoborstva," *Voennaia Mysl'*, no. 5, 2011, pp. 18-25; Kuznetsov, Donskov, and Korobeinikov, "O sootnoshenii," *op. cit.*, pp. 14-20; Balybin, Donskov, and Boiko, "O terminologii," *op. cit.*, pp. 28-32; P. I. Antonovich, "O sushchnosti i sodержanii kibervoiny," *Voennaia Mysl'*, no. 7, 2011, pp. 39-46; Kuznetsov, Donskov, and Nikitin, "K voprosu," *op. cit.*, pp. 13-17.

⁵² See: K. I. Saifetdinov, "Informatsionnoe protivoborstvo v voennoi sfere," *Voennaia Mysl'*, no. 7, 2014, pp. 38-41; Chibisov, and Vodkin, "Informatsionno-udarnaia operatsiia," *op. cit.*; Vorob'ev, "Informatsionno-udarnaia operatsiia," *op. cit.*; Strel'tsov, 2011; "Sredstva Informatsionnoi bor'by (informatsionnoe oruzhie)," in *Voenno-Entsiklopedicheskii Slovar'*, Moscow, Voenizdat, 2007;

In addition to these unique, but largely known characteristics, the main novelty and distinctiveness of informational struggle is the role that it plays in current Russian operational art. Informational struggle warfare is a *leitmotiv* of the Russian version of “NGW” as it knits together all operational efforts, serving as a kind of DNA that choreographs coercion activities across non-military and military (nuclear and non-nuclear) domains. Its role of systemic integrator is expressed both verbally and graphically in Gerasimov’s programmatic speech. This unique role of informational struggle is a fundamental difference between the Russian approach and the Western HW model. First, in the Western HW theory, the notion of information struggle, even if mentioned, is not as central as in the Russian version. Second, as opposed to HW, Gerasimov’s doctrine emphasizes to a much lesser extent the use of kinetic force and aims to achieve campaign goals while minimizing the use of force. Against this backdrop of hard power de-emphasized to the minimum necessary, perception turns into center of gravity and informational struggle into the main tool of victory. Seizing territory or achieving the desired outcome with minimal or no fatalities, is different from the Western view of HW as a strategy that seeks victory through non-defeat.⁵³ Finally, the informational strike is about breaking the internal coherence of the enemy system – and not about its integral annihilation.⁵⁴ Gerasimov’s doctrine indeed presumes the use of force, but it is, primarily, a strategy of influence, not of brute force. Consequently, the issue of cross-domain coercion dominates it.

Vorob’ev, “Informatsionno-udarnaia operatsiia,” *op. cit.*, pp. 14-21; S. I. Bazylev, I. N. Dylevskii, S. A. Komov, and A. N. Petrunin, “Deiatel’nost’ Vooruzhennykh Sil Rossiiskoi Federatsii v informatsionnom prostranstve: printsipy, pravila, mery doveriia,” *Voennaia Mysl*, no. 6., 2012, pp. 25-28; Kuznetsov, Donskov, and Korobeinikov, “O sootnoshenii,” *op. cit.*, pp. 14-20; Antonovich, 2011; Gerasimov, *op. cit.*, (February and December) 2013; Safetdinov, 2014; Strel’tsovo, 2012; Kuznetsov, Donskov, and Nikitin, “K voprosu,” *op. cit.*, pp. 13-17; S. Chekinov and S. A. Bogdanov, “Vliianie nepriamykh deistvii na kharakter sovremennoi voiny,” *Voennaia Mysl*, no. 6, 2011, pp. 3-13; “Priroda i Soderzhanie vojn novogo pokoleniia,” *Voennaya Mysl*, 2013; A. A. Varfolomeev, “Kiberdiversiia i kiberterrorizm: predely vozmozhnostei negosudarstvennykh subiektov na sovremennom etape,” *Voennaia Mysl*, no. 12, 2012, pp. 3-11.

⁵³ Itai Brun and Carmit Valensi, “The Other RMA,” in Dima Adamsky and Kjell Inge Bjerga (eds.), *Contemporary Military Innovation*, London, Routledge, 2012.

⁵⁴ One may argue that the difference does not appear to be gigantic. It seems that it could either be used in a limited fashion to weaken an adversary and force some concessions upon it, or for a bigger purpose, to subdue an adversary and control it.

Cross-Domain Coercion: Change and Continuity

Constantly evolving Russian thinking about coercion recently supplemented *regional nuclear deterrence* (RND) concepts with two additional variations on the same theme: *non-nuclear* and *informational* deterrence. Amalgamation of these three models into a unified strategy manifests the most up-to-date Russian version of cross-domain coercion.

Non-nuclear Deterrence

Since the mid-2000s, Russian defense intellectuals, in conjunction with staff work of Russian military on nuclear deterrence,⁵⁵ have been popularizing a pre-nuclear deterrence theory.⁵⁶ A prelude to nuclear use,⁵⁷ the concept suggests improving deterrence credibility by increasing the number of rungs on the escalation ladder. It was based on a threat of launching long-range conventional PGMs against targets inside and outside the theater of operations. Selective damage to the military and civilian infrastructure should signal the last warning before the limited low-yield nuclear use.⁵⁸ However, given the slow procurement of advanced capabilities, Russian experts then envisioned the “pre-nuclear deterrence” only as a distant prospect and did not see any non-nuclear alternative to deterring conventional aggression.⁵⁹

⁵⁵ V. M. Burenok and O. B. Achasov, “Neiadernoe sderzhivanie,” *Voennaya Mysl*, no. 12, 2007; V. V. Sukhorutchenko, A. B. Zelvin and V. A. Sobolevskii, “Napravlenie issledovaniia boevykh vozmozhnostei vysokotochnogo oruzhiia,” *Voennaya Mysl*, no. 8, 2009; R. G. Tagirov, Iu. A. Pecahtnov and V. M. Burenok, “K voprosu ob opredelenii urovnei nepriemlimosti posledstviia,” *Vestnik AVN*, no. 1, 2009.

⁵⁶ A. G. Saveliev, *K Novoi Redaktsii VoЕННОi Doktriny*, Moscow, URSS, 2009, p. 182.

⁵⁷ Viktor Litovkin, “Andrei Kokoshin: My budem dumat o budushchem,” *NVO*, 20 May 2011; Viktor Litovkin, “Bomba spravliaet iubilei,” *NVO*, 26 November 2010; Igor’ Varfolomeev, “Ladernaia deviatka,” *KZ*, 25 May 2011; Viktor Ruchkin, “Balans interesov,” *KZ*, 28 December 2010.

⁵⁸ A. Kokoshin, *Obespechenie strategicheskoi stabilnosti*, Moscow, URSS, 2009, pp. 183-6; A. Kokoshin, *Ladernye konflikty v XXI veke*, Moscow, Media Press 2003, pp. 87-91; Nikolay Efimov, *Politiko-Voennye Aspekty*, *op. cit.*, pp. 152-155.

⁵⁹ V. V. Matvichiuk and A. L. Khriapin, “Sistema strategicheskogo sderzhivaniia,” *Voennaya Mysl*, no. 1, 2010; V. V. Matvichiuk and A. L. Khriapin, “Metodicheskii podkhod k otsenke effektivnosti,” *Strategicheskaiia Stabil’nost’*, vol. 46, no. 1, 2009, pp. 51-55; S. A. Bogdanov and V. N. Gorbunov, “O kharaktere vooruzhennoi bor’by,” *Voennaya Mysl*, no. 3, 2009; V. P. Grishin and S. V. Udaltsov, “Ladernoe

In the 2010 doctrine, “non-nuclear deterrence” received a passing reference. It was defined as armed forces’ peacetime mission and stated that the Russian Federation (RF) presumes the usage of the high precision weapons to prevent military conflicts, as part of the “strategic deterrence activities of a forceful character” (*strategicheskoe silovoe sderzhivanie*).⁶⁰ The latter has two ends – prevention of war (in peace time) and de-escalation of conflict (in war time), supported by forceful (military) and non-military means (political-diplomatic, legal, economic, informational-psychological, and spiritual-moral). Back then, however, Russia lacked a unified system of strategic deterrence that would include conventional options (codified theory, methodological apparatus, and procedures supporting it), as well as a coordinating organ orchestrating it across all domains. The General Staff identified the creation of such a unified system, based on the complex measures of military and non-military character, as the most important national security task.⁶¹

During the years leading up to the publication of the 2014 doctrine, a great leap forward towards this cross-domain deterrence has been evident. Annual military exercises since 2011 demonstrated the growing role given to advanced conventional munitions, relative to the previous decade, when the nuclear arsenal’s role on the theater of operations steadily grew, towards its peak in the *Zapad 2009* and *Vostok 2010* exercises. Assuming that modern non-nuclear means of war (PGMs, ballistic and cruise missiles, and informational (cyber) capabilities) can generate battlefield and deterrence effects compatible with nuclear weapons, Russian experts, more than before, emphasized deterrence (and probably compellence) as a function of non-nuclear, hard, and soft instruments of power.⁶² Leading up to (and following) the events in Ukraine, an assumption emerged in the Russian strategic community that the relevance of strategic nuclear deterrence (and probably compellence) is limited to a very narrow set of scenarios, unless it is skillfully integrated with other forms of strategic coercion. The 2014 doctrine, according to a Russian Institute of Strategic Research senior expert, reflects this assumption by emphasizing the non-nuclear forceful deterrence based on

sderzhivanie,” *Vestnik AVN*, no. 1, 2008; V. V. Korobushin, “Nadezhnoe strategicheskoe iadernoe sderzhivanie,” *Strategicheskaja Stabil’nost’*, vol. 46, no. 1, 2009, pp. 14-18; A. A. Protasov and S. V. Kreidin, “Sistemy upravleniia voiskami,” *Strategicheskaja Stabil’nost’*, vol. 46, no. 1, 2009, pp. 23-26; Iu. D. Bukreev, “Puti povusheniia beospo- sobnosti sukhoputnykh voisk,” *Strategicheskaja Stabil’nost’*, vol. 46, no. 1, 2009, pp. 32-34; V. V. Korobushin, V. I. Kovalev and G. N. Vinokurov, “Predelusokrascheniia SlaS Rossii,” *Vestnik AVN*, vol. 28, no. 3, 2009; A. V. Muntianu and R. G. Tagirov, “Nekotorye problemnye voprosy v obespechenii voennoi bezopasnosti,” *Strategicheskaja Stabil’nost’*, vol. 53, no. 4, 2010, p. 69; A. V. Muntianu and R. G. Tagirov, “O nekotorykh aspektakh vlieniia globalizatsii,” *Strategicheskaja Stabil’nost’*, vol. 54, no. 1, 2011, pp. 25-28; Iu. A. Pechatnov, “Metod formirovaniia ratsionalnogo sostava grupirovki osnaschennoi vusokotochnum oruzhiem,” *Strategicheskaja Stabil’nost’*, vol. 53, no. 4, 2010, pp. 58-64.

⁶⁰ See paragraphs no. 22 and no. 27 of the Military Doctrine of the Russian Federation, March 2010.

⁶¹ Matvichuk and Kriapin, “Sistema,” *op. cit.*

⁶² For example see: I. S. Ivanov, *Iadernoe Oruzhie I Strategicheskaja Stabil’nost’*, Moscow, RMSD, 2012.

military, political, diplomatic, technical, and economic means, with informational warfare being its main integrating component.⁶³

The 2014 doctrine codified these ideas circulating in the Russian expert community. Non-nuclear deterrence (*neiadernoe sderzhivanie*), a complex system “of foreign policy, military and non-military measures aimed at preventing aggression by non-nuclear means,” is the doctrine’s main innovation. The doctrine refers to the use of PGMs as one of the forceful tools of strategic deterrence;⁶⁴ however, the repertoire of non-nuclear means is much broader and will be outlined below. Non-nuclear deterrence does not substitute for but complements its nuclear analogue, as part of the “forceful measures” of strategic deterrence system – a complex of interconnected measures of forceful (nuclear and non-nuclear) and non-forceful character. Non-nuclear deterrence (and possibly compellence) may be in a form of force demonstration, to prevent escalation, and even in a form of limited use of force, as a radical measure of coercion (*krainiia mera vozdeistviia*) aimed at de-escalating hostilities.⁶⁵ Current Russian campaign design in Syria concurs some of these notions. Moreover, against the backdrop of Russian operations in Syria the view that non-nuclear coercion is a distant alternative to the nuclear one may undergo further transformation, and this form of coercion may play an even more prominent role in future cross-domain campaigns.

Non-nuclear deterrence attributes a special role to the targeting of the adversary’s non-military assets and to activating non-military forms of influence. Threats of financial and economic disruptions as well as those of energy sources should be activated in conjunction with the military component of coercion, such as special operation forces and strategic strike systems.⁶⁶ Threatening the adversary’s assets with massive strikes of advanced non-nuclear PGMs, coupled with host of activities by sabotage-reconnaissance groups (*diversionno-razvedovatel’nye gruppy*), signals resolve and capability and communicates the scale of unacceptable political, economic, social, and technological damage that will be imposed on the adversary unless he changes his strategic behavior and avoids military engagement. According to Gerasimov, this intimidation by force (*ustrashenie siloi*), as a method of asymmetrical-indirect action, combines political isolation, economic sanctions, naval and aerial blockades, employment of internal opposition, military interventions under the pretext of the peacemaking-humanitarian missions, and activation of special operations in conjunction with information (cyber) campaign.⁶⁷

Current Russian “non-nuclear deterrence” *modus operandi* rests on relatively solid conceptual foundations. Several years prior to the current

⁶³ Sergei Ermakov, “Iadernoe oruzhie vytesniat informatsionnye technologii,” *Pravda*, 15 December 2015.

⁶⁴ Military Doctrine, 2014.

⁶⁵ “Strategicheskoe sderzhivanie,” and “Demonstratsionnye deistviia,” in *Voenno-Entsiklopedicheskii Slovar’*, Moscow, *Voenizdat*, 2007.

⁶⁶ Leonid Ivashov, “Nado derzhat’ Ameriku pod Pricelom,” *Pravda.ru*, 08 January 2015.

⁶⁷ Gerasimov, “Tsennost’,” *op. cit.*

doctrine, the General Staff's work on an indirect approach in modern warfare recommended incorporating "asymmetrical activities" (*assimetrichnye deistviia*) into the Russian national security practice.⁶⁸ Back then, General Staff experts utilized the term "asymmetrical measures" in a manner that corresponds with the current definition of "non-nuclear deterrence," yet without referring to it in such way. To them, the sophistication of modern weaponry and the threat of military operations' catastrophic consequences force actors to employ the non-military means of strategy. While in the past the "strategy of brute force" dominated military affairs, and "indirect approach" had a secondary role, the situation has been reversed. By employing asymmetrical means, the "weak player" can inflict serious damage to the "stronger" one, even impose its political will, without traditional decisive battlefield victory. Success in such a campaign is not a function of the correlation of forces but of a skillful orchestration of military and non-military (political, psychological, ideological, informational) means. Today, the ability to master an "indirect approach" manifests operational art excellence, and its culmination is to employ variety of means, primarily informational dominance, to neutralize the enemy without the use of force.⁶⁹

An "asymmetrical approach" employs "a complex of forms, means and ways unequal (*netozhdestvennye*) to those of the adversary" that prevents military confrontation or mitigates its consequences. "Asymmetrical actions in the military field may include: *measures causing apprehension of the adversary* with regards to intentions and responses of RF; *demonstrating resolve and capabilities* of the RF groups of forces to repulse the invasion with unacceptable consequences for the aggressor; military actions aimed to deter potential aggressor by assured destruction of the most vulnerable military and other strategically important and dangerous objects, that convince him that aggression is doomed to fail."⁷⁰ To deter and prevent aggression against the RF, the experts call for employment of "asymmetrical measures, of a systemic and complex nature and incorporate political, diplomatic, informational, economical, military, and other efforts."⁷¹

Deterring attacks that would result in "unacceptable consequences," according to the General Staff experts, "can be a result of defensive (direct) actions, and a function of asymmetrical measures," compensating for, or minimizing adversary's military superiority, through "inflicting unacceptable damage in other spheres of national security."⁷² "Combining defensive actions aimed at repulsing aggression and asymmetrical ones (i.e. cross-spectrum retaliation), based on effective conventional PGMs, coupled with employment of sabotage-reconnaissance groups (*diversionno-razvedovatel'nye gruppy*), creates important preconditions to compel (*prinuzhdenie*) the adversary to cease military activities on conditions

⁶⁸ Chekinov and Bogdanov, "Assymetrichnye deistviia," *op. cit.*

⁶⁹ Beyond the conceptual realm, it is difficult to estimate to what extent this concept is backed by a sufficient number of credible conventional capabilities.

⁷⁰ *Ibid.* p. 20.

⁷¹ *Ibidem.*, p.20.

⁷² *Ibidem.*, p. 21.

favorable to the RF. This approach becomes especially relevant since European economy and infrastructure include high number of vital objects," sensitive to unacceptable damage.⁷³ Keeping the competitors' territories under the threat of non-nuclear and nuclear strikes is considered by some Russian experts as the most effective way to generate a deterrent effect.⁷⁴

The coercion mechanism is straightforward. An "adversary's understanding that the result of his initiating of military activities can be not a victory and the achievement of designated goals, but ecological and social-political catastrophe, is an effective deterring factor." This, presumably, may be achieved by both nuclear and non-nuclear means for escalation management. Thus, "possible aggression prevention and repulsion, should combine direct (symmetrical) actions, presuming preparation and conduct of decisive military operations aimed at defeating of the invading groups of forces, with realization of asymmetrical measures, that essentially aim at inflicting unacceptable damage in other (non-military) spheres of security."⁷⁵ This influencing of the adversary's calculus and behavior by threat, be it deterrence or compellence, even if it involves the limited use of force, is a strategy of coercion (*sderzhivanie, prinuzhdenie, silovoe vozdeistvie*) *par excellence*. To ensure credibility of this coercion strategy in a NGW framework, *informational deterrence* enters the center of the stage.

Informational Deterrence

From ancient times, information enabled the deception, surprise, and intimidation (deterrence) of the adversary, but, according to the General Staff experts, this effect rarely went beyond the tactical realm. Today, however, under the sophistication of means of informational influence, "indirect approach" and "informational struggle" may solve the campaign's strategic goals and significantly downgrade the adversary's determination to resist.⁷⁶ Consequently, informational struggle is perceived as one of the primary tools of non-nuclear deterrence. The idea of *strategic influence*, and not of massive *brute force*, became the essence of NGW and is the leitmotif of the campaign's planning. A host of ways and means on all fronts is employed to achieve this effect. The term "informational deterrence" (*informatsionnoe sderzhivanie*) is not mentioned in the doctrine, but is widespread in the professional discourse and refers both to digital and cognitive-psychological aspects of the struggle. According to Russian experts, this type of coercion may, under the changing character of war, assure strategic stability and shape the adversary's strategic calculus towards and during the hostilities.⁷⁷

In Russian discourse, the term emerged initially to refer to U.S. discourse on cyber deterrence. Informational (cyber) struggle is perceived

⁷³ *Ibidem.*, p. 22.

⁷⁴ Ivashov, "Nado," *op. cit.*

⁷⁵ Chekinov and Bogdanov, "Assymetrichnye deistviia," *op. cit.*, p. 22.

⁷⁶ *Ibid.*, pp. 20-23.

⁷⁷ A. Manoilo, "Upravlenie psikhologicheskoi voinoi v sisteme informacionnoi gosudarstvennoi politiki," *Politika I Obschestvo*, no. 2, 2004.

as one of the most cost-effective tools of non-nuclear coercion due to its ability to produce strategic effects without massive kinetic devastation. Its appeal is in its ability to produce a host of significant strategic effects below the level of unacceptable damage, compatible to one, that in the nuclear realm would invite nuclear retaliation.⁷⁸ As such, informational deterrence is a crisis management tool aimed at the adversary's leadership and population that can prevent military aggression without direct employment of military force.⁷⁹ "Psychological intimidation" can credibly deter the aggressor for a long period and in some cases even to completely dissuade him from his aggression. Thus, "informational deterrence" can evaporate aggression and prevent the forceful stage of the conflict altogether.⁸⁰ Russian thinking about informational deterrence is genuinely cross-domain as, according to Russian views, it aims to prevent not only informational (cyber) aggression, but can coerce an opponent's behavior in other fields of activity, including kinetic conventional operations. Informational pressure (*informatsionnoe davlenie*) on the adversary, its armed forces, state apparatus, citizens, and world public opinion is aimed at producing favorable conditions for strategic coercion. Exemplifying this point, Russian experts refer to the U.S. informational campaign as preparing conditions for regime change across the Middle East during the Arab spring.⁸¹

Russian experts argued that in order to achieve an informational deterrence effect, one should supplement the deterrence mechanism based on the digital-technological component of informational struggle with a means of "reflexive control." "Strategic deterrence on the theater of informational struggle," or simply "informational deterrence," incorporates digital-technological and cognitive-psychological forms of influence, through the threat of massive special influence on the informational resources of the potential adversary.⁸² Distinct from and broader than its nuclear or conventional analogues, informational deterrence is a new form of strategic influence, based on a complex of interrelated political, diplomatic, informational, economic, military, and other means of deterring, reducing, and preventing threats and aggression by the threat of unacceptable consequences. Preventive political-diplomatic activity, through effective informational struggle aimed at preventing and resolving conflict situations becomes the primary tool of strategic deterrence. Ideally, effective strategic coercion (both deterrence and compellence) should enable the attainment of political goals, without resorting to conventional military, let alone nuclear means, although their constant readiness and inclusion into the deterrence program is required.⁸³

⁷⁸ For example see: Pavel Sharikov, "V Boi Idut Kibervoiska," *NVO*, 13 April 2013; "Informatsionnoe Sderzhivanie," *RSMD*, 05 September 2013.

⁷⁹ A. Manoilo, "Upravlenie *psikhologicheskoi* *voinoi* v sisteme *informacionnoi gosudarstvennoi politiki*," *Politika I Obschestvo*, no. 2, 2004.

⁸⁰ A. Manoilo, "Kontseptsii politicheskogo regulirovaniia *informatsionno-psychologicheskoi* *voiny*," *Mir I Politika*, 12 May, 2012.

⁸¹ Chekinov and Bogdanov, "O Kharaktere," *op. cit.*, p. 19.

⁸² Modestov, "Strategicheskoe," *op. cit.*

⁸³ M. Gareev, "Strategicheskoe sderzhivanie – vazhneishee napravlenie natsional'noi bezopasnosti," *Stratgicheskaiia Stabil'nost'*, no. 1, 2009.

If non-military actions of informational deterrence are deemed ineffective, the state should switch to employing means of “forceful deterrence” (*silovoe sderzhivanie*) aimed at assuring the potential aggressor that the costs of aggression will outweigh the expected benefits. To “insinuate” this to a potential aggressor, the Russian strategic community should: “demonstrate readiness” to deploy groupings of forces in the expected area of aggression; “ultimately announce the readiness of the Russian side to immediately use its nuclear weapons in case of threat to sovereignty and territorial integrity of the state,” “announce an unlimited use of PGMs to destroy” critical civilian nuclear-electronic, chemical and hydro energy infrastructure; and to substitute and combine all of the above “to employ special informational operation to deceive the enemy with regards to Russian readiness to repulse aggression.”⁸⁴

Cross-Domain Coercion

The Western term *cross-domain coercion* is probably the best description of the Russian art of orchestrating *non-nuclear*, *informational*, and *nuclear* influence within a unified program for the sake of coercion (both to deter and to compel). This art, not yet doctrinally outlined, has manifested itself during the recent standoff in Ukraine and seems rather straightforward. Informational struggle choreographs all threats and moves across conventional and nuclear, military, and non-military domains to produce the most optimal correlation of trends and forces. It is a coercion “master of ceremonies”: by nuclear manipulations, it constructs a *cordon sanitaire* that enables immune maneuver space (*strategicheskii prostor*), a sphere of the possible, within which other forms of influence can achieve tangible results with, or preferably, without the use of force. Ideally, the image of unacceptable consequences, produced by this cross-domain coercion should paralyze Western assertiveness and responsiveness. Uninterrupted informational deterrence waged on all possible fronts against all possible audiences, augmented by nuclear signaling, and supplemented by intra-war coercion, constitutes an integrated cross-domain campaign. The main rationale of this enterprise is to deescalate, or dissuade the adversary from aggression, and impose Russia’s will, preferably with minimal violence.

The standoff in Ukraine demonstrated how nuclear muscle flexing is skillfully choreographed with conventional and sub-conventional applications of military force and non-military tools of influence. Special operations of unprecedented reach and scale were deployed in a clandestine manner throughout the depth of operations and were coordinated with information warfare, both technological (cyber and electronic) and cognitive-psychological. These efforts were synchronized with political, diplomatic, and economic measures regionally and worldwide, to ensure the most favorable conditions in the theater of operations. Simultaneously, Moscow concentrated forces, waged deception operations, conducted alert exercises and snap inspections in various military districts to disorient neighboring states, to divert their attention, and, often, to conceal the direction of the main effort. At the next stage, by demonstrating resolve and capability to use force and by facilitating the flow of volunteers

⁸⁴ Chekinov and Bogdanov, (2013) pp. 23-24.

and arms to opposition forces, Moscow has been trying to coerce Kiev into accepting its terms of political settlement.

The nuclear component of the coercion program supplemented the above activities and featured uninterrupted. Informational strikes inflated Moscow's willingness to brandish nuclear capabilities and limited nuclear strikes, through actions on the ground, including statements about turning adversaries into "radioactive dust."⁸⁵ This nuclear signaling aimed to distance Western support out of fear of escalation, possibly also to soften further sanctions, to enable waging effective intra-war coercion against a weaker Ukrainian enemy, and in the hope of discrediting Western extended deterrence (through showing that the West has abandoned Ukraine militarily and economically), and thus signaling to Kiev that its campaign is doomed to fail. The informational deterrence campaign built on the image constructed during the past decade of exercising deterring and de-escalatory nuclear first strikes. To vividly refresh these memories, Russian nuclear-armed strategic bombers, ships, and submarines, also armed with conventional cruise missiles and PGMs, undertook regional and global, aerial, and naval exercises and patrols, sometimes in a rather aggressive manner, in the immediate proximity of NATO borders and forces, with occasional cross-border infiltrations. Long Range (Strategic) Aviation sorties near the Black Sea and in the High North, with reported launches of cruise missiles, the leadership's statements about strategic nuclear force modernization, elevated alerts, snap inspections and tests, and disseminating rumors about deploying NSNWs (*Iskander* SSMs and Tu-22Ms) in Crimea served this end. Russian signaling of unacceptable damage and intolerable escalation aimed to demoralize the adversaries, to discredit Western extended deterrence, to dissuade a more direct Western involvement, to deter or downgrade Western conventional response reinforcements and to coerce adversaries into accepting Moscow's worldview.

Crimea offered a laboratory with the most favorable conditions to test NGW cross-domain coercion. Under the negligible risk of Western response, Russia achieved its objectives. From the Russian point of view, the prospect of Western intervention was bleak, corrosion in NATO and the US extended deterrence became somewhat evident⁸⁶, and NATO was confused in seeking a countermeasure to this *modus operandi* and in finding how not to leave Russian activities unpunished without undesired escalation. Happening under different operational conditions from the campaign in "Novorossiia," the Crimean version of cross-domain coercion demonstrated that this strategy would not always be replicated in the same

⁸⁵ Dmitry Kiselev, in "Vesti Nedeli," Program on *Russia 1 TV Chanel*, 16 March 2014.

⁸⁶ Despite such Russian perception, it should be noted that Western extended deterrence never was explicitly at stake in Ukraine: Ukraine is not a NATO ally, and no formal defensive commitments have been made by NATO to defend that country. The Budapest Memorandum does not constitute such as binding document and did not involve "the West", and even the provisions of the Memorandum binding the United States and the United Kingdom did not include positive security assurances.

way. Russian operational art will continue to learn lessons and to evolve. In the subsequent stages of this competition of learning, in other parts of the Near Abroad, of the Zone of Privileged Interests, in the Middle East or elsewhere, this art of coercion may manifest itself in other, albeit similar, forms and shapes. Potential expansion of this cross-domain campaign against NATO members demands that it does not escalate to a level activating Article Five of collective defense, and that it maintains an attribution opaqueness that clouds the nature of aggression and aggressor's identity, like "polite men" in Crimea. This may potentially undermine NATO's collective security without a single shot. In line with the Gerasimov doctrine, subversion against cultural, ideological, and patriotic values conducted side-by-side with special ops, cyber warfare, and nuclear pressure will shift the battle into the cognitive or psychological spheres and may render NATO's traditional military supremacy irrelevant.

Conclusion

Russian cross-domain coercion is undoubtedly a unique military innovation. However, it appears to be more of an evolutionary than a revolutionary one, since Gerasimov's doctrine reflects more continuity than change. Its main novelty is not in its essence but in the potential scale of its application and in its constant conceptual evolution and permanent sophistication. Surprise, if experienced by Western intelligence communities from the Russian art of cross-domain coercion driven by NGW, in Crimea, Ukraine, and recently in the Middle East, was most likely a failure of imagination and a poverty of expertise and comprehension, rather than Russian disruptive innovation indistinguishable in advance. It should be noted, however, that Moscow, in all three cases, demonstrated aptitude for organizational and conceptual learning and transformation, and scale of improvisation that are rather unorthodox for the post-Soviet Russian military practice.

Existing sources suggest that, at least until recently, Russian strategic community lacked a clear division of labor in the sphere of cross-domain coercion in general, and as pertains to informational struggle in particular. It seems like the lack of regulations does not constrain, but stimulates Russian military theory development and operational creativity in the theaters of operations. Being in the midst of conceptual learning, and with multiple actors competing for resources and responsibilities, especially in the field of informational (cyber) warfare, the Russian strategic community manifested the coexistence of institutional incoherence and relative operational effectiveness during the recent standoffs.

Although military exercises of the last couple of years indeed have emphasized non-nuclear forms of warfare, and military reform since 2008 has focused on improving NCW, C4ISR, and EW capabilities, the impressive performance in Crimea was not based on exercises simulating Gerasimov's doctrine and seems to be more of improvisation rather than a preplanned strategic-operational design along NGW lines. In the subsequent operations in Ukraine, Moscow tried to replicate its success, but probably learned hard lessons about the limits of force – additional military involvement and mechanical application of earlier practices has not enabled it to settle the situation in Donbass once and for all. Indeed, it has only drawn Russia further into a battle it neither expected nor desired. The Russian strategic community continues its learning process, transforming its doctrine, and conceptualizing a new theory of victory. The standoff in Ukraine is just one of the cases from which Russian experts are learning lessons, in keeping with Gerasimov's call in 2013 to explore new forms of struggle, to come out with military innovations, and to shape the armed

forces accordingly.⁸⁷ The current Russian campaign in the Middle East offers to Russian defense establishment a subsequent laboratory to further refine the Russian art of strategy.

As the contours of Russian campaign design in Syria are slowly emerging, one may assume that it may also draw from the NGW concept, at least in some aspects. Some of the features of the Russian move seem to correspond with the characteristics of campaign planning outlined in this paper. In terms of threat perception, Moscow perceived the situation in Syria as the result of a U.S. effort, albeit one which failed to conduct HW against the incumbent regime along the lines of the Libyan scenario. Moscow's demarche, although driven by the interplay of several factors,⁸⁸ was a countermeasure to such a perceived U.S. effort, but was shaped along similar operational lines. Sophisticated orchestration of hard and soft power across military, diplomatic, and public domains has been already evident. Intensive informational, active measures and diplomatic campaign were synchronized with the military build-up, which enabled, thus far, the generation of some tangible operational results through sophisticated reflexive control.⁸⁹ As such, the campaign design, at least at the initial stage, seems to reflect the NGW guideline of 4:1 ratio of non-military and military activities. Synchronized air and informational struggle strikes that started in late September seem to prepare optimal conditions for the forthcoming ground operation that might be led by non-Russian forces of the Moscow-led coalition. The use of precision-guided munitions, air power, and long-range precision strikes, that campaign already demonstrated, is unprecedented for Russia and confirms the feasibility of conventional coercion outlined in this paper. Also, this impressive demonstration of performance counter-balances the skepticism of Russian commentators who argued in recent years that pre-nuclear deterrence is not a feasible option for Russian military, since it lacks sufficient IT-RMA era capabilities, and thus cannot function as reconnaissance-strike complex.

If the Russian campaign design continues to capitalize on indirect action, informational operations, paramilitaries, and special operation forces supported by the sophisticated Russian IT-RMA capabilities and by military power of its allies, Moscow might minimize its visible presence, blurring, for domestic and international purposes, the line between its involvement and intervention. This does not mean, of course, that Russia will only take on campaign design/management and air power responsibilities without sending operatives into the fray of ground warfare. Indeed, if the "polite people" of the Russian military, together with pro-Russian Chechen fighters and Donbass field commanders, start appearing on the Syrian battlefield, it should come as no surprise. Unlike in Donbass or Crimea, these fighters

⁸⁷ For this reason, the role that military theoreticians like Svechin and Isserson played in exploring the nature of warfare, that resulted in the golden age of Soviet military thought in the 1920s and the 1930s, when changes in the character of war demanded military innovations, appeals to CGS Gerasimov.

⁸⁸ Dmitry Adamsky, "Putin's Damascus Steal: How Russia Got Ahead of the US in the Middle East," *Foreign Affairs*, 16 September 2015.

⁸⁹ Frederick Kagan and Kimberly Kagan, "Putin Ushers in a New Era of Global Geopolitics," *ISW Warning Intelligence Update*, 27 September 2015, p. 5.

will have more issues with blending in. Given their experience and training, though, they can still act as a force multiplier. And if Russia deploys them while keeping mindful of the reasonable sufficiency principle, it can hope to avoid a quagmire in Syria along the lines of the one in Donbass and achieve something closer to the effective campaign in Crimea.⁹⁰

If indeed the Russian campaign design in Syria continues to correspond with characteristics of cross-domain coercion, it may come with a twist of informational struggle (both digital-technological and cognitive-physiological) and nuclear muscle flexing. Moscow may operate the range of informational struggle capabilities (electronic and cyber) for the purpose of a military-diplomatic anti-access/area denial operation against adversarial activities. Establishing such an electromagnetic-cyber *cordon sanitaire* around the operational environment of the pro-Assad coalition can disrupt reconnaissance-strike UAVs, precision-guided munitions, aerial operations, and political-diplomatic demarches. Also, dual-use platforms, both aerial and ground, may appear in the theater of operations and even conduct limited conventional strikes. Such a hypothetical eventuality may never materialize. However, if it does, it should come as no surprise. Although such conventional strikes may produce battlefield effects, the actual operational outcome will be less important. The main expected utility would be an informational/public relations effect that enables Russian coercion signaling for regional and global purposes in the current or future tensions with the West. Such standoff vis-à-vis the US and NATO would be along the lines of Russian cross-domain coercion that has been visible on European and Atlantic theaters during the last several years.

On a more theoretical and concluding note, this research concurs that, emerging in a specific ideational and cultural context, “theories of victory,” operational art, and coercion are social constructions, and their conceptualization, consequently, is not universal, but varies across strategic communities, has national characteristics, and may differ from Western strategic theory. Consequently, a “one-size-fits-all,” non-tailored approach for examining operational art and coercion styles of different actors may result in strategic blunders. Scholars should examine and measure Russian *modus operandi*, especially in the fields of NGW and informational warfare, in a much more idiosyncratic manner. The ability to explore and understand the interplay between national security aspirations, strategic culture, and military tradition in the frames of the emerging version of Russian operational art is crucial to anyone seeking to engage Moscow on a host of geopolitical issues.

⁹⁰ Dmitry Adamsky, “Putin’s Syria Strategy: Russian Airstrikes and What Comes Next,” *Foreign Affairs*, 1 October 2015.

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