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Russia's Reflexive Control Theory: Manipulating an Opponent to One's Advantage

Author: Timothy Thomas

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Introduction

For the past few decades, Russian military authors have discussed a concept known as “reflexive control” (hereafter RC). The concept is used in negotiations, in battlefield deception activities, in space activities and deterrence operations, and in a host of other venues. It is discussed in Army, Navy, and Aerospace publications.¹

The term is defined in general as providing a stimulus (information, an action, etc.) to make an opponent to do something for himself (organize in a specific way, develop certain weaponry, maneuver, etc.) that he is doing for the initiator of the action. To utilize the concept, the proponent must know how an opponent thinks and processes information, and what his prejudices, likes, and dislikes are. Targeting can be as detailed as a psychological profile of specific officers in command positions.

This article explains several aspects of this Russian concept. It looks at how various Russian experts define RC; how RC is used in deterrence, systems analysis, deception, negotiations, doctrine, and other venues; and how it has been used in Ukraine and elsewhere. It is a concept that needs to be considered by tacticians and strategists when contemplating Russian military moves and the potential rationale behind their actions.² Ignoring RC invites being controlled by the Russians.

Definitions and Use of RC: 2002-2013

When retired (now deceased) Russian General-Major V. D. Ryabchuk discussed the intellectual confrontation on the battlefield in 2008, he noted that, regretfully, calculations still need to be made on the intellectual potentials of opposing sides, just as are done with both sides’ information or other capability measurements.³ For Russian military officers, intellectual confrontations and calculations of a potential adversary’s capabilities can involve RC. Officers examine objective situations and subjectively think through how to manipulate the environment to their advantage. Their analysis considers the thought patterns and tendencies of potential opponents and, when combined with their own forecasting of potential future actions, results in the forms and methods needed to fulfill the forecast. One of the thoughts involved with the successful use of “thought being the first to enter battle” is formulating a method that sets an enemy up for defeat via the use of RC.

Russian military analysts have defined RC in a standard manner over the years. In earlier articles on RC, this author defined RC according to analysts who wrote mainly in the 1990s (the footnote on the preceding page is where many of these definitions can be found). This section takes up where those definitions left off, examining RC definitions from 2002 to the end of 2013, followed with a section addressing how RC was used in that time period. That is followed by a section that examines RC definitions and use from 2014 to the present time.

¹ A semiannual journal titled *Reflexive Processes and Control* was also published in Russia. It is not known for certain if the journal is still in existence.

² For more information on this concept, see Timothy Thomas, *Recasting the Red Star*, 2011, pp. 118-131; Timothy Thomas, *Russia Military Strategy: Impacting 21st Century Reform and Geopolitics*, 2015, pp. 117-123; and Timothy Thomas, *Kremlin Kontrol*, 2017, pp. 175-198.

³ V. D. Ryabchuk, “Problems of Military Science and Military Forecasting under Conditions of an Intellectual-Informational Confrontation,” *Voennaya Mysl’* [*Military Thought*], No. 5 2008, pp. 67-76.

1. RC is essentially information and psychological effects against persons on the opposing side who are making decisions. It is “a set of measures, interconnected with respect to goal, place, and time, aimed at...forcing the enemy to reject his initial plan and accept knowingly a decision that is disadvantageous for him...”⁴
2. “The objective of reflexive control is to create favorable conditions for the performance of one’s own combat mission by adversely affecting the opposing side’s decision-making.”⁵
3. In WWII, reflexive control was achieved “by implementing an array of measures and activities, interconnected by the goal, place, and time and designed to foil the adversary’s plans by imposing one’s will on the enemy through concealment, masking, deception, feints, decoy actions, and diversionary actions.”⁶
4. “...the question must be not so much about countervailing and deceiving enemy reconnaissance as about the reflexive control of the person, who takes decisions about the actions of adversarial troops (forces), by way of communicating to him relevant false information (and under certain conditions, partly true information).”⁷
5. “Fighting today is primarily intellectual, information-reconnaissance-navigational. Troop control is assuming the form of battle control, which means reflexive control of enemy actions.”⁸
6. “Deterrence does not imply overpowering the adversary on the battlefield, but rather it is intended to impress a vision of defeat on his mind. In fact, deterrence is a reflexive game in visions of victory, defeat, and unacceptable (restraining) damage, among others.”⁹
7. “An important feature of such a war [information] is the extensive use of enemy resources. Influencing his information systems based on the principle of reflexive control, one can achieve desirable actions from opposite sides, that in real practice are often referred to as a provocation.”¹⁰

A somewhat hidden military reference and definition of RC (one had to know what one was looking for) was offered in 2011. It is listed here out of chronological order, since it appeared in an official MOD document titled “Conceptual Views on the Activities of the Armed Forces of the Russian Federation in Information Space.” The term “information war” was defined as follows:

⁴ Stanislav Ermak and Aleksandr Raskin, “Are All Methods Good in Battle? On Some Aspects of Reflexive Control of the Enemy,” *Armeyskiy Sbornik [Army Journal]*, No. 7 2002, p. 44. The author would like to thank Dr. Harold Orenstein for his translation of this article from Russian to English.

⁵ A. V. Raskin and V. S. Pelyak, “On Network-Centric Warfare,” *Voennaya Mysl' [Military Thought]*, No. 3 2005, p. 46.

⁶ I. N. Vorobyov and V. A. Kiselev, “The New Strategy of the Indirect Approach,” *Voennaya Mysl' [Military Thought]*, No. 9 2006, pp. 2-5.

⁷ V. N. Karankevich, “How to Learn to Deceive the Enemy,” *Voennaya Mysl' [Military Thought]*, No. 9 2006, pp. 44-46.

⁸ I. N. Vorobyov and V. A. Kiselyov, “From Present-Day Tactics to Network-Centric Action,” *Voennaya Mysl' [Military Thought]*, No. 8 2011, pp. 19-27.

⁹ S. G. Chekinov and S. A. Bogdanov, “Strategic Deterrence and Russia’s National Security Today,” *Voennaya Mysl' [Military Thought]*, No. 3 2012, pp. 11-20.

¹⁰ Nikolay Khorunzhyy, “Does Russia Need a Cyber Command?” *Kovrov VPK.name*, 23 August 2013.

Conflict between two or more States in information space with the goal of inflicting damage to information systems, processes, and resources, as well as to critically important structures and other structures; undermining political, economic, and social systems; carrying out mass psychological campaigns against the population of a State in order to destabilize society and the government; as well as forcing a State to make decisions in the interests of their opponents.¹¹

The last line, “forcing a State to make decisions in the interests of their opponents,” is key. There is no difference between this statement and those from the definitions offered by many theorists over time. In 1974, for example, K. V. Tarakonov stated that “RC is understood as the process of one of the sides giving reasons to the enemy from which he can logically infer his own decision, predetermined by the first side.”¹²

These definitions indicate that Russian military planners consider the use of RC when they develop an operation. To avoid being deceived, the militaries of other nations should at least take RC into consideration as they contemplate the battlefield information they are receiving about Russian operations and the picture that is developing before them. As the definitions above demonstrate, the use of RC even extends beyond the battlefield.

When examined over time, it is possible to view the wide use and application of RC in Russian planning and strategic actions. It enriches military art, is used against decision-makers, enables wide-spread misunderstanding and deception among Western experts, corrupts computer networks, and manipulates social media, among other uses. Some twenty different ways that Russia uses RC are looked at here. Several examples will be discussed that cover the time period 1995-2012. More contemporary uses are then described in the next section.

Enriching the arsenal of military art. In 1995, when discussing information weapons, scientists at the Russian Academy of Sciences’ Systems Analysis Institute noted that transmitting false or distorted information influences decision-making and thus how combat operations are conducted. Such techniques reflexively control the enemy and enrich the arsenal of military art,¹³ that is, they offer deceptive ways that tactics, operational art, and strategy might be considered and implemented.

Negotiations. The following year, 1996, the same publication noted that “simulated negotiations incorporate both conventional marketing techniques and specialized methods of psychological support during negotiations, including techniques based on reflexive control.”¹⁴ Thus, negotiators should be aware of RC.

¹¹ “Conceptual Views on the Activities of the Armed Forces of the Russian Federation in Information Space,” *Ministerstvo Oborony Rossiyskoy Federatsii [Ministry of Defense of the Russian Federation]*, 2011, at ens.mil.ru.

¹² Clifford Reid, “Chapter Fourteen: Reflexive Control in Soviet Military Planning,” in Brian D. Daily and Patrick J. Parker, editors, *Soviet Strategic Deception*, Lexington Books, 1987, p. 294.

¹³ Vitaliy Tsygichko and Dmitriy Chereshekin, “Perspective: A Weapon that May Be More Dangerous Than a Nuclear Weapon: The Realities of Information Warfare,” *Nezavisimoye Voysssennoye Obozreniye [Independent Military Review]*, 18 November 1995.

¹⁴ Petr Shlayev, “The Human Aspect of the Problem: Arms Exports and Ergonomics,” *Nezavisimoye Voyennoye Obozreniye [Independent Military Review]*, 24 February 1996.

Military doctrine and deception. A very important use of RC was noted in 1997 in the journal *Military Thought*. Major-General A. F. Klimenko stated that Russia's military doctrine contains recommendations on how military force might be applied in specific situations. He noted that "the property of reflexive control of the other, competing, side is set forth in it."¹⁵ Reflexive and normative functions are "programmed" into military doctrine and can accomplish their RC role in such open publications.¹⁶ Very few U.S. analysts have ever considered the publication of Russian military doctrine to be a RC operation.

Space and RC. In 2002, authors Stanislav Ermak and Aleksandr Raskin discussed RC methods in general and as they apply to space. Coercive pressure, transmitting false information, influencing an opponent's decision-making algorithm, and information and psychological effects were discussed in the general section. They then noted that a special role for RC was provided in space information resources for enemy control. To be effective, a holistic idea of the armed struggle process in front of a commander must be viewed as an integrated system, where the creativity of a commander to adjust to this view of reality is essential to the successful use of RC.¹⁷ Today, Russia's space troops have developed an "inspection satellite" than can inspect other orbiting satellites for their function. They can also be turned into space interceptor satellites.¹⁸ As a result, they can be used for RC measures such as deterrence by indicating that their value or use has been discovered and therefore neutered to a degree—when in fact they might not have been.

Deterrence theory and RC. RC is used extensively in deterrence theory. In 2003 three academicians at the Russian Academy of Military Science noted that "Reflexive control of the adversary as he makes decisions in the course of a conflict" becomes a significant component of nuclear concepts. The purpose of control is to convince the adversary of the uselessness of nuclear blackmail and military pressure on the country, where the "victim" strives to make an "aggressor" understand that the attacking side will also suffer the consequences of an attack.¹⁹ Two years later, in 2005, one of the authors of this article (V. Kovalev) stated that even U.S.-Russian joint nuclear deterrence modeling "provides excellent opportunities for reflexive control over the Russian side."²⁰ Of interest, of course, is that Kovalev ascribed RC to U.S. thought, even though it is strictly a Russian concept.

RC, decision-makers, and stratagems. In 2005 A. V. Raskin and V. S. Pelyak stated that RC's objective "is to create favorable conditions for the performance of one's own combat mission by adversely affecting the opposing side's decision-making."²¹ Influencing decision-makers is clearly

¹⁵ A. F. Klimenko, "Theoretical-Methodological Problems of the Formation of Russia's Military Doctrine. The Techniques for their Resolution," *Voennaya Mysl'* [*Military Thought*], No. 3 1997, pp. 6-14.

¹⁶ Ibid.

¹⁷ Ermak and Raskin, pp. 44-46.

¹⁸ S. Valchenko, N. Surov, and A. Ramm, "Russia Sends Inspector into Orbit: Military Test Operations of Maneuvering Identification and Intercept Satellite," *Izvestiya Online* [*News Online*], 26 October 2017.

¹⁹ S. Yu. Malkov, V. I. Kovalev, and B. Konyakhin, "On the Question of a Methodology for Selection of Rational Strategies to safeguard Strategic Stability and Nuclear Deterrence in the Modern Era," *Strategiskaya Stablnost* [*Strategic Stability*], No. 3 December 2003.

²⁰ V. Kovalev, "Temptation for a Preventive Strike: What's 'New' in the Liberal Theory of Deterrence from the Standpoint of a Representative of 'Caveman' Thinking," *Voyenno-Promyshlennyy Kuryer* [*Military-Industrial Courier*], 9 November 2005.

²¹ Raskin and Pelyak.

the main purpose of RC. In 2006 it was noted that RC uses military stratagems to control an enemy force. It is implemented with an array of measures interconnected by goal, place, and time to foil an adversary's plans through concealment, masking, deception and so on.²²

Computer networks and systems. The wide use of information technologies in military troop and weapon control system promotes the use of RC in computer networks and enemy control systems. It is possible to distort true information and substitute it with false data or perform other actions. This can be used to "compromise the military political leadership of an enemy-country in the eyes of its people, to persuade some into betrayal."²³ RC is also used in systems analysis, where a "decision-maker in the first system demonstrates to a decision-maker in the second system false intentions and thus encourages it to make decisions favorable for itself,"²⁴ which are actually beneficial to the first system.

Information-psychological aspect of information war. In 2008 well-respected authors I. N. Vorobyov and V. A. Kiselev wrote that modern strategic operations are stressing the increased role of information-psychological support, which is an integral part of information war. Information-psychological support has for some time included the use of reflexive control of the behavior of an enemy force, employing complex military-political and diplomatic measures to deceive the enemy.²⁵

Make abstract knowledge a strength. In 2009 A. V. Pervov discussed the reflexive approach as a way of safeguarding Russian national security, since in the 21st century there are more nontraditional ways of waging war.²⁶ Now it is possible to influence leaders, the population, and even decision-makers in ways not possible in the past. The reflexive approach intends to control cognitive subjects, the importance of which is expressed in the statement "the first into battle is thought."²⁷ The idea is to turn abstract knowledge into strength, if one can think in a nonstandard way through the construction of cause and effect relationships that may have to be adjusted as a situation develops. The reflexive approach forms structures of behavior for participants, and the goal is to get the enemy to act in accordance with an externally imposed scenario.²⁸

Reflexive approach, reflexive analysis, reflexive control, and air defense. In 2011 S. A. Nesterov and V. V. Stepanov noted the following: the reflexive approach suggests an unorthodox way of thought, a sign of one's intellectual frame of mind (for example, air defense preparation). Reflexive analysis is the tool to implement the reflexive approach, a way to construct the enemy's probable objectives and how to achieve them, by analyzing his train of thought (weapons to be used). Reflexive control is control that exercises one's intellectual superiority over the enemy. Control is

²² Vorobyov and Kiselev, "The New Strategy..."

²³ Karankevich.

²⁴ F. G. Kolomojets, "Systems Analysis: Recommendations for Problem Identification, Formulation, and Study," *Voennaya Mysl'* [Military Thought], in English, Volume 3, 2007, Eastview Publications.

²⁵ I. N. Vorobyov and V. A. Kiselev, "The Evolution of the Principles of Military Art," *Voennaya Mysl'* [Military Thought], in English, Volume 3 2008, Eastview Publications.

²⁶ A. V. Pervov, "The Reflexive Approach as An Important Tool of a Mechanism for Safeguarding Russia's National Security," *Vestnik Akademii Voennykh Nauk* [Journal of the Academy of Military Science], No. 3 2009, p. 20. The author would like to thank Dr. Harold Orenstein for his translation of this article from Russian to English.

²⁷ Ibid., p. 21.

²⁸ Ibid., p. 22.

efficient if it includes the moves the enemy is forced to make by the friendly commander (tactical masking, false maneuvers, ways to gain time, etc.).²⁹

Deterrence as a reflexive game. In 2012, in an article on air and space defense, it was noted that the development of mechanisms to penetrate the enemy's process for arriving at operational solutions presupposes misinforming people via a reflexive command and control operation. The reflexed person thinks he is acting in an advantageous way, but is actually doing something that rather is advantageous for the disinformation administrator.³⁰ The same year other authors argued that since information rivalry is now a key component of modern geopolitics, a dangerous trend is reflexive control, since deterrence is a reflexive game of visions of victory, defeat, or unacceptable damage. Deterrence offers a demonstration of resolve, which can be accomplished with reflexive control.³¹

RC and Internet phishing. Authors Andrei Soldatov and Irina Borogan described a 2012 RC episode in their book *The Red Web*. Supporters of opposition candidate Alexi Navalny began receiving a surge of messages promoting a rally against Putin. The e-mails' only sentence was "Instructions for your actions in the rally against Putin." When accessed, the document contained malicious macros and loaded a hidden piece of software, called Trojan.Gen. It overwrote files with common extensions and eventually caused the computer to crash.³² Thus, the goal was to get Navalny's supporters to do something for themselves (access instructions for a rally against Putin) that they were actually doing for the Russian authorities who had planted the virus, getting them to download it and ruin their computers. In effect, this implies that government-directed phishing attempts are a type of RC activity in Russia.

Definitions and Use Since 2013 and Ukraine...Some Recent Examples to Consider

In 2018 the journal *Military Thought* published three volumes of definitions of military terms. One of the volumes defined reflexive terms. The use of these definitions stretches from 2011-2014, and the year in which each appeared is listed after the definition. They were not listed above because they were not published as a comprehensive unit until 2018. Those relating to RC are:

Reflexive control: 1. The process of transmitting to an enemy "justification" for making a decision. 2. Special effects against an enemy for the purpose of "persuading" him to make a decision that has been predetermined by the controlling side. (2013)

Reflexive control: Control with the help of stimulation for the desired decisions. Under contemporary conditions and, moreover, in the foreseeable future, the role of control based on intellectual superiority over an enemy is becoming a decisive factor. One of the sides effectively

²⁹ S. A. Nesterov and V. V. Stepanov, "A Reflective Approach: How Surface Warships Prepare for and Fight Off an Air Attack," *Voennaya Mysl'* [*Military Thought*], No. 8 2011, pp. 28-36.

³⁰ Oleg N. Shevchenko, Petr N. Marushchenko, and Varvara Petrovna Obrazovtsova, "Winning...with the Help of Deception: Today Within the Content of Maskirovka Development of a Mechanism for Penetration into the Process of the Enemy's Arriving at a Solution for an Operation is Moving to the Fore," *Vozdushno-Kosmicheskaya Oborona Online* [*Air-Space Defense Online*], 14 May 2012.

³¹ S. G. Chekinov and S. A. Bogdanov, "Strategic Deterrence and Russia's National Security Today," *Voennaya Mysl'* [*Military Thought*], No. 3 2012, pp. 11-20.

³² Andrei Soldatov and Irina Borogan, *The Red Web*, Public Affairs: New York, 2015, pp. 162-163.

controls battle if the situation develops in accordance with its own plans. However, this is possible when control encompasses the entire battle process, including enemy operations imposed upon him by the other side. (2011)

Reflexive control of an enemy: Control in all spheres of confrontation, aimed at achieving the operational goal, forcing an enemy to reduce the degree of realization of his operational and combat capabilities, reflect his initial plan, and make irrational decisions. In addition, it is also necessary to conduct measures against the subject of protection against similar effects on the part of the enemy. The following are the result of reflexive effects against an enemy: predetermined conclusions about the enemy from an assessment of the conditions of combat, one's own forces, and enemy forces; the result of understanding the method for achieving the operational goal, necessary for the reflexive combat system; determination of enemy operations; and others. (2013)

Information packet: A specific technique of reflexive control of an enemy, which can be the transmission of risks, motivation, transmission of certainty, transmission of a reflexive depiction of the situation, formation of stereotypes, delay, dispersion, etc. Within the framework of a method of reflexive control, an information packet is implemented through the totality of simulacra, embodied both in a nonrepresentational form (simulation) and in a representation form (disguise). (2014)

Method of reflexive control of an enemy: The systematic totality of information packets sent to the enemy for the purpose of creating favorable conditions for accomplishing a combat task. (2014)

Reflex: The ability to take the position of an "observer," "researcher," or "controller" with respect to one's body, thoughts, actions. (2013)

Reflexive approach: ... This is a parameter of a person's intellectual state. The principal instrument of the reflexive approach is reflexive analysis, the content of which in time of war is a reproduction of probable enemy goals, methods of achieving them, logic of reasoning, and assumed methods of obtaining necessary situational information. When employing the method of reflexive analysis, the process of justifying decision by taking into account one's own situational conditions assumes modeling enemy activities during the decision-making process, i.e., it is a complex reflexive process that requires, in turn, modeling the enemy's impression about the activities of the decision-maker himself. Reflexive functions include obtaining additional information about the process, organization, identifying the enemy's goals and plans, and formulating one's own preemptive goals and plans. (2011)

Reflexive technologies: The totality of methods, means, and techniques for information-psychological effects against an enemy, integrated by priority tasks and ensuring the most effective achievement of the goal of the operation (combat). Reflexive technologies in the organization and conduct of the confrontation of combat systems are the most important instrument in developing a plan for and making a decision about an operation and combat. Reflexion of an enemy in the process of preparing for and conducting contemporary operations (combat) includes a system of

special organizational measures in various spheres of confrontation of combat systems: informational, cognitive, socio-cultural, and physical. (2013)³³

In addition to these definitions, there were several reports of RC's use since 2013, most in relation to the situation that developed in Ukraine or in relation to social media. Three important articles from 2013, 2015, and late 2017 on RC by Russian analysts include those by V. L. Makhnin, who writes often in military journals about a host of topics; V. G. Kazakov and A. N. Kirishin, who have written on RC in Russia's *Journal of the Academy of Military Science*; and F. Chausov, a prominent RC analyst who writes on the topic for the *Navy Journal*.

1. V. L. Makhnin

The friendly embrace and RC. In 2013, writing in the Russian journal *Military Thought* about the conflict in Ukraine, V. L. Makhnin noted that going from the reflection of cooperation to that of conflict can break the will of the adversary's military and political leaders. This is known as strangling the enemy in a "friendly" embrace.³⁴ One is reminded of the Putin-Poroshenko meeting for a truce after Russia's occupation of Crimea, which was immediately followed by a Russian military invasion of Ukraine. Was Poroshenko strangled in the "friendly" embrace? One should closely observe recent cease-fires to see if the same "friendly" embrace repeats itself.

Supply of interests and reasons for RC. Makhnin stated that the organization of the reflexive process between opposing combat systems is related to the development and implementation of a series of measures to supply the reflexed combat system with interests, motivations, and reasons. These measures combine to create a desired operational-tactical situation and provide an incentive for making desired inferences and conclusions that benefit the friendly decision-maker.³⁵ The use of the reflexive process leads to the use of false-real, information, and psychological images of objects, processes, and phenomena.³⁶ Reflexive influence using simulacra paralyzes the adversary's (decision-maker's) intelligent (creative) activity.

Use of analogies and RC. Yet another way to induce reflection may be the most interesting and it involves the use of analogies. One is reminded of the use of the fascist and Nazi analogy in reference to people fighting in Maidan Square against Ukrainian President Viktor Yanukovych, an analogy drawn to acquire support from the Russian population. Older Russians well-remember the devastation of the Nazi onslaught against Stalingrad and Leningrad in World War II, and so this parallel/analogy touches a raw nerve. Thus, in this case RC was inflicted on the Russian population and succeeded through analogy.

The pace of conflict and RC. RC can cause an opponent to slow down his operations, abandon plans, and make irrational decisions, which could be exactly what is happening in Ukraine. Makhnin describes what he terms as creative and destructive reflexive functions (a commander's concept that is based on a tested way of action or an old idea). The former develops "in a

³³ N. N. Tyutyunnikov, *Military Thought in Terms and Definitions, Volume 1*, Armed Forces of the Russian Federation, 2018, pp. 218-221.

³⁴ V. L. Makhnin, "Reflexive Processes in Military Art: The Historico-Gnoseological Aspect," *Voennaya Mysl'* [*Military Thought*], No. 1 2013, p. 40.

³⁵ Ibid., p. 34.

³⁶ Ibid., p. 37.

situation when the struggle goes on at a slow pace and, accordingly, the operational-tactical situation changes slowly as well, when the opponents' objectives are clear, and the way to reach them has been figured out."³⁷ Clearly the slow pace of the conflict in Ukraine has offered Russia the opportunity to thwart opinions that have developed against Russian support for the separatists and to keep Ukrainian forces from taking control of pro-Russian-controlled territory.³⁸

2. V. G. Kazakov and A. N. Kirishin

Controlling friendly forces and RC. In 2015 V. G. Kazakov and A. N. Kirishin wrote an article on RC for the *Journal of the Academy of Military Science*. It appeared to be an expanded version of an article they wrote in 2013. They stated that control of one's own troops is as important as control of the enemy. Such combat operations need the creation of "favorable conditions to execute combat tasks with the help of deception and covert control of the enemy."³⁹

Controlling an enemy force and RC. Military art has long used deception, defined as a "premeditated action aimed so as to create in another an impression of facts that do not correspond to reality."⁴⁰ It appears that the theory of RC is another method, which the authors understand in the following way:

Generally understood as the process of transmitting to the enemy the 'bases/foundations' for making a decision. At the same time, Lefebvre [Russian RC expert, believed by many to be its founder] believes that RC is a special action against the enemy, with the aim of 'persuading' him to make a decision that has been predetermined by the controlling side.⁴¹

To impact an enemy at the tactical level, leaders must be preempted in the sphere of thinking and planning to examine a situation in a specific way. If an enemy force is to be placed in the position of a controlled system, it must become a victim of what is known as "reflexive superiority." This requires knowing how an opponent makes decisions so that the proper "information packets" [targeted at an opponent's decision-making] can be developed and distributed to an opponent, which can result in a reflexive controlling action.⁴² Simulation and concealment are two aspects of deception that help form the foundation of reflexive interaction.⁴³

Developing an RC force. The most probable areas where command and control and RC can be combined are in the process of decision-making in general and in the planning of combat operations. To reflexively control the enemy, a specially designated force and means should be developed to study opponents, that is, a specific Table of Organization and Equipment (TO&E)⁴⁴ with information-psychological confrontation qualifications. These forces would develop and

³⁷ Ibid., p. 44.

³⁸ Ibid.

³⁹ V. G. Kazakov and A. N. Kirishin, "All-Inclusive Command and Control of Combat Operations," *Vestnik Akademii Voennykh Nauk* [*Journal of the Academy of Military Science*], No. 4 2015, p. 36. The author would like to thank Dr. Harold Orenstein for his translation of this article from Russian to English.

⁴⁰ Ibid., p. 37.

⁴¹ Ibid.

⁴² Ibid.

⁴³ Ibid., p. 38.

⁴⁴ Ibid., p. 39.

transmit recommendations to the commander on how to use RC measures together with command and control actions against an opponent.⁴⁵ These forces would be expected to accomplish the following:

Here the implementation of the RC method at stages of immediate preparation for and execution of the combat mission is carried out by means of sending the appropriate information packets to the enemy. It should be recalled that an information packet within the framework of a RC method is implemented through the totality of simulacra, which are embodied in both a nonrepresentational form (simulation) and a representational form (concealment). Information packets are sent to the enemy with the goal of creating favorable conditions for executing a combat mission.⁴⁶

Information packets and RC. Information packets are designed to conceal existing combat situations or describe a nonexistent situation.⁴⁷ Such situations are subject to two sets of reflection, information and actual operations. Information reflection is how the enemy views friendly forces and their condition based on their system of intelligence and the enemy's assessment of an opponent's potential. Operational reflection is the principles and features of an enemy's decision-making within the information he has about the condition of his opponent's force and combat operations plans. Combat experience also counts when such decision-making is conducted.⁴⁸

3. F. Chausov

Defining RC. Chausov has written a few articles for the publication *Naval Journal* on RC. His definition of RC is, as of the writing of this article, the most recent that has been observed in military publications:

The method (technique) of reflexive control of an enemy is the devices and techniques for implementing measures and actions that incite the enemy to act in a corresponding way that is advantageous for our side...Reflexive control can make it possible to change the enemy's goals and his methods of operation in favor of one's own forces, i.e., to contribute to the creation of favorable conditions to accomplish the assigned mission.⁴⁹

Reflexive analysis. In the 2011 article cited above, Nesterov and Stepanov discussed reflexive analysis, and Chausov, a reflexive control expert, returned to the topic in 2017. It will be important, he noted, to foresee future situations for the use of forces and means based on calculations and modeling; and to forestall an enemy's command and control processes. He stated that information technologies now make it possible to exclude the formation of a situation that would be disadvantageous for the Russian side using reflexive analysis of the situation. Battle control is possible if command and control effects can be applied to both one's own forces and the enemy's.

⁴⁵ Ibid., p. 41.

⁴⁶ Ibid., p. 40.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ F. Chausov, "Command and Control of Battle on the Basis of a Reflexive Analysis of the Situation," *Morskoi Sbornik [Navy Journal]*, No. 6 2017, p. 52. The author would like to thank Dr. Harold Orenstein for his translation of this article from Russian to English.

Reflexive control of the enemy is the highest form of a commander's manifestation of his intelligence and talent. A combination of direct and indirect actions is needed.⁵⁰

Chausov stated that a reflexive analysis of the situation involves both one's perception of a situation and "living through the situation" from the vantage point of one's opponent. Such situational analysis helps explain why a situation will develop in one way or another and allows Russian commanders to utilize reflexive activity over reactive activity. RC is a technology of disorganizing the enemy's network command and control cycle of "find-assess-make a decision-strike."⁵¹ Chausov notes the following about the decision-making between two sides in confrontation and ways to influence the situation towards one's own interests:

This instrument is reflexive analysis, the content of which is the reproduction of the enemy's probable goals, methods of achieving them, the logic of his thinking, and assumed methods of obtaining the necessary information about the situation. Reflexive analysis is a mirror of complex military thinking, which determines the degree of practically implementing a systemic approach and the basis of a creative approach to accomplishing the tasks assigned to commanders in combat.⁵²

He adds that it is the information component that includes the transmission of information (a justification) to the enemy so that he makes a decision that satisfies the friendly commander's plan.⁵³

Reflexive control techniques. These techniques are information-psychological effects; the formation and transmission of false information to make an enemy develop new goals and methods of operation; virus attacks on integrated information network domains; special software effects; and radio-electronic suppression of elements of the network infrastructure.⁵⁴ Knowledge of the enemy's concepts and doctrine are vital to success.⁵⁵ In this regard, military institutions should prepare military specialists for the use of reflexive analysis.⁵⁶

Conclusions

The twenty or so areas listed above indicate the extensive reach of RC's use in Russian military thought. Two issues are important to remember when considering RC. First, there are various venues (computers, systems, space, deterrence, doctrine, etc.) that Russia employs to deceive an adversary. RC is not employed constantly everywhere, but its use should always be postulated and considered when Russian operations are examined. Second, it is important to stress that Russia understands how to think and process information like an opponent (or is learning to do so) and to focus on concepts of interest to him. Without the logic and vocabulary of enemy thought, Russian RC specialists would not know where, when, or how to insert specially developed information for the enemy consumer to digest, process, and act on according to a Russian plan.

⁵⁰ Ibid., pp. 50-51.

⁵¹ Ibid., pp. 51-52.

⁵² Ibid., p. 53.

⁵³ Ibid., p. 54.

⁵⁴ Ibid., p. 52.

⁵⁵ Ibid., p. 53.

⁵⁶ Ibid., p. 54.

The latter point is important for Western analysts to consider carefully. Trying to describe Russian actions by looking at its use of the grey zone or hybrid operations misses the point. Some good could come from looking at how Russia might utilize U.S. concepts, but the most important and useful way to look at Russian military or geopolitical operations is through the lens of their concepts and vocabulary, that is, look at their use of terms like equal security, forms and methods, reflexive control, trends, new-type warfare, strategy (it is different than the U.S. definition of strategy), information-technical and information-psychological aspects of information war, and so on. It is important to define these terms and address how they might be used. As President Putin said, “Listen to us now.” We need to do this better if we are to understand their intentions and goals. And if we do, Putin may be surprised by what we find out and by how we intend to put such knowledge to use.