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SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
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Executive Summary

Title: The Evolution Of Modern Russian Warfare

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Thesis: The purpose of this work is to examine current Russian military methods of waging non-linear warfare through the lens of Soviet operations beginning in 1941 through modern operations. Therefore, what defines the present has a long history. The full spectrum of western definitions characterizing today's actions by Russia as some form of new warfare is inaccurate and demonstrates a lack of appreciation for the actual nature of war.

Discussion: The Soviet partisan movement played a vital role in the development of the unconventional deep fight by facilitating the transition between the deep and close fights while simultaneously affecting German rear operations. Additionally, the partisan movement was pivotal in the ultimate success of the Russians against the German Army of World War II and, therefore, there is a direct connection between the Soviet success in the Great Patriotic War and the current military thought in Russia and has never left the thinking of Russian military leaders. Most recently, the Russians employed partisans in Crimea to conduct information operations, subversion, and sabotage while simultaneously employing "cyber partisans" to influence and organize via social media. The Russians gained extensive knowledge and experience in unconventional warfare operations such as establishing, training, supporting, and tasking a partisan force and the interoperability of that partisan force with formal military and intelligence operations. Although the partisan movement did experience temporary failures, set backs, and lackluster performance, eventually the partisans made a significant impact on Russian successes during World War II as well as developing tactics, techniques, and procedures in the conduct of unconventional warfare demonstrating that Russia is a learning organization. These observations assisted the Russian political and military leaders in using unconventional warfare in future conflicts, and more importantly, in conjunction with political instruments and overt military action. The most recent example of Russian modern warfare is the invasion of Crimea.

Conclusion: This purposeful obfuscation reveals Russia's willingness to see warfare as a system of systems, something defined as extending beyond a call to arms. When the political or economic systems are accomplishing their objective, the military is not used. These systems are interchangeable. This lesson has long roots and prevalent in modern Russian warfare. As these threats multiply and diversify as increasingly "hybrid," "asymmetric," and "ambiguous," it is critical for US military thinkers, politicians, and strategists to first understand Russia to further their understanding of Russian warfare.

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Preface

For the past fifteen plus years, U.S. Armed Forces were focused on the conflicts of Iraq and Afghanistan, including Special Operations. While U.S. service members fought and supported the war on terrorism, great Russian military thinkers, such as General of Army Valeri Gerasimov, were reviewing works from Clausewitz, Isserson, and Svechin. They were studying Russian military history to garner lessons learned from past conflicts, both good and bad. The Russian President Vladimir Putin vowed to amalgamate the former Soviet satellite countries into the Soviet Union and become, once again, a world superpower. While Putin certainly wants to be on the world stage, realistically and for the time being he is content with being a regional power. Currently, Putin lacks the manpower and resources to make Russia what it was at one time during the Soviet Union.

To do this, the Russians had to reinvent their military from a conventionally focused, rigid system of training and command and control and out dated equipment to a more modern fighting force. The Russians had to revamp their planning process and they way they defined the characteristics of war. The key to this was the preparation of Russian general staff, their detailed operational planning, coordination, and effective implementation of all facets of government power, with a strategic surprise being paramount to the effectiveness of the campaign. The U.S. and its western allies are dumbfounded by the actions of the Russian military because the perception was that what the Russians were doing was not effective. Russia is demonstrating how warfare effectively conceals the use of the whole of government approach (diplomacy, information, military, and economic - D.I.M.E. – a system of systems) to minimize or avoid even deploying combat troops. Due to the recent successes of Russia in Georgia and Crimea, an increasing number of state and non-state actors will likely incorporate non-linear warfare into their military doctrine and operations. As these threats multiply and diversify as increasingly “hybrid,” “asymmetric,” and “ambiguous,” it is critical for military thinkers, politicians, and strategists to first understand Russia to further their understanding of Russian warfare.

This work is written with one audience in mind: the professional US soldier. The research done for this work is drawn from open source information. Although the option to use classified material to support my argument was tempting, I found that there is more than enough information on the internet, libraries, and other forms of media. I received excellent guidance and support from Lieutenant Colonel Andrew DelGaudio, USMC and Doctor Matthew Flynn, both from the Marine Corps University Command and Staff College faculty.

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Introduction

According to the United States (U.S.) Marine Corps Doctrinal Publication 1 (MCDP-1) Warfighting, “war is a violent clash of interests between or among organized groups characterized by the use of military forces. These groups have traditionally been established nation-states, but they may also include any non-state group – such as an international coalition or a faction within or outside of an existing state – with its own political interests and the ability to generate organized violence on a scale sufficient to have sufficient political consequences.”¹ Both state and non-state change their tactics, techniques, and procedures in the planning and executing of military operations to respond to an evolving dynamic environment; the nature of war is consistent, while the character of war changes with the times. Although the fundamental law driving military conflict remains the same (hegemony, sovereignty, resources, religion, etc.) the gradual transition from a complicated environment to a complex environment is challenging military leaders around the world and most recently, in Eastern Europe.² Many journalists, politicians, and military professionals define non-linear warfare as the simultaneous combination and employment of multiple military and non-military state tools in conflict, but its successful use ultimately relies on an effective information operations campaign supplemented by coordinated special operations conducting unconventional warfare throughout the entire spectrum of the conflict.³ Simply stated, it is a system of systems.

Unconventional warfare (UW) is defined in Joint doctrine as “activities conducted to enable a resistance movement or insurgency to coerce, disrupt or overthrow a government or occupying power by operating through or with an underground, auxiliary and guerrilla force in a denied area.”⁴ Central to Irregular Warfare (IW), UW involves external parties aiding indigenous actors

against governments. Such aid can involve training, organizing, recruiting, operational advising, coordinated diplomatic support, and even use of kinetic action and logistical support to increase the advantage of indigenous insurgents or rebels. UW establishes the foundation for the execution of non-linear warfare. To understand how states employ UW, it is necessary to understand state interests and how states can use this strategy to harmonize micro and macro-level tactics to subvert unfriendly states and leaders without direct-armed conflict.⁵

The use of unconventional warfare is nothing new, especially in the Russian way of war. Russia has a successful history in the execution of unconventional warfare, as recently demonstrated in its annexation of the Crimea in 2014. The employment of this method by President Putin is reminiscent of other recent Russian military actions, such as Russia's 2008 invasion of Georgia. Here, Russia built combat power through multiple military exercises in the Northern Caucasus inside Russia preceding the invasion. Similarly, before invading the peninsula, Russia mobilized an impressive military force in support of a hasty training exercise. Russia sent approximately 150,000 troops, 90 aircraft, 880 tanks, 1,200 pieces of military hardware, and more than 120 helicopters to participate in the exercises, which involve operations along Russia's western borders, including those with Ukraine.⁶ Russia is demonstrating how warfare effectively conceals the use of the whole of government approach (diplomacy, information, military, and economic - D.I.M.E.) (see Figure 1) to minimize or avoid even deploying combat troops. The purpose of this work is to examine current Russian military methods of waging non-linear warfare through the lens of Soviet operations beginning in 1941 through modern operations. Therefore, what defines the present has a long history. The full spectrum of western definitions characterizing today's actions by Russia as some form of new warfare is inaccurate and demonstrates a lack of appreciation for the actual nature of war. Once

this important conceptual step is taken, one can at last begin to consider how best to counter Russian actions.



Figure 1: Unconventional Warfare, Political Warfare, and Counter-Unconventional Warfare⁷
Colonel (ret.) David Maxwell, “Should America fight more like Iran? Pentagon official raises eyebrows,” Informal Institute for National Security Thinkers and Practitioners – News from the Associate Director, Security Studies Program, (10 April 2015), <http://maxoki161.blogspot.com/2015/04/should-america-fight-more-like-iran.html>. Accessed 11 Dec 2015.

The Soviet Partisan Movement

The great Russian military thinkers of the 1930s, Major General Alexander Svechin of the Academy of General Staff of the Red Army, Marshal of the Soviet Union Mikhail Tukhachevsky, commander of the Volga Military District and Brigade Commander Georgii Isserson the Department Head of the Operations Department at the Frunze Academy, shaped the traditional paradigm of Soviet warfare and the way the Soviet military perceived war from that

point on. War was no longer a series of interrupted encounters with the outcome of the entire war decided by one decisive battle. Instead, it was considered a continuous chain of synchronized combat efforts in space and time throughout the depths of the battlefield.⁸ Carl Von Clausewitz best describes this phenomenon as “In war the result is never final.”⁹ Most recently, General of the Russian Army Valeri Gerasimov reinforced Brigade Commander Georgii Isserson in stating that, “each war is a separate case. It requires its own logic of actions and uniqueness. It is not worth a penny of research in the field of military science if military theory cannot provide some measure of prediction.”¹⁰ The Soviet partisan movement played a vital role in this unconventional deep fight by facilitating the transition between the deep and close fights while simultaneously affecting German rear operations. Additionally, the partisan movement was pivotal in the ultimate success of the Russians against the German Army of World War II and, therefore, has never left the thinking of Russian military leaders. Most recently, the Russians employed partisans in Crimea to conduct information operations, subversion, and sabotage while simultaneously employing “cyber partisans” to influence and organize via social media.¹¹

The Soviet partisan movement established itself during the onset of Operation Barbarossa, the German invasion of Russia during World War II in 1941. This undertaking used elements of past resistance movements coupled with recent advancements in communications, transportation, and weapons to wreak havoc in the German rear. During this first phase of the resistance, the early partisan movement members were small in number and consisted of scattered Red Army unit remnants led by Red Army officers and commissars, all who were bypassed by the advancing German army.¹² These stragglers and guerrillas attacked supply chains, field hospitals, and rear guard units. This forced the Germans to commit more time and resources to deal with the partisans. The Germans mobilized a German reservist force of World

War I veterans and contracted local home guards to act as a rear area security force.¹³ In addition to the resistance movement, the Red Army used airborne operations behind enemy lines (on Russian soil) to conduct sabotage, espionage, reconnaissance, and terrorist missions. Additionally, these forces provided supplies and other support to partisan operations. These paratroopers destroyed German and Romanian infrastructure such as rail lines, bridges, roads, and pipelines to create panic, identify German sympathizers, and demoralize German troops. These missions were carried out by relatively small six to eight man units where almost all of them were from the districts in which they were operating, giving them a significant advantage over the enemy and increasing their will to accomplish the mission due to the resolve to defend their homes. However, these units were poorly trained, too often inaccurately inserted, and had marginal success.¹⁴ Still, they contributed to the overall success of the Red Army through Communist Party tasking.¹⁵

The Communist Party directed its members, in conjunction with the People's Commissariat of Internal Affairs (NKVD – would later become the KGB), to infiltrate enemy lines and establish and lead a partisan force to conduct sabotage operations, foment rebellion, and dissuade those who were or thought of assisting the occupying force in any way.¹⁶ During this second phase of the partisan movement, partisan membership increased dramatically and the partisans were more organized. Additionally, the NKVD established annihilation battalions¹⁷ whose primary mission was internal security of the Russian rear, defense against German airborne attack, and the destruction of all installations not destroyed by the Red Army during their retreat. These units were often comprised of political prisoners, so if they died they were an IO victory while eliminating “enemies of the state” for the post war.¹⁸ In the event these annihilation battalions found themselves in front of a German advancement, they would allow

themselves to be passed by and operate as part of the partisan unit in the German rear conducting sabotage operations and keeping Russians loyal to Russia.¹⁹

The partisan movement was gaining momentum in Russia and, as the Germans penetrated far into Russia, and after some three months of bitter fighting, a resistance movement arose in the now vast area of German occupied Russia. The NKVD recruited, trained, and led partisan forces with the help of Communist Party cells. Joseph Stalin in a famous radio broadcast stated his “scorched earth” policy:

In case of the forced retreat of Red Army units, rolling stock must be evacuated; the enemy must not be left a single engine, a single railroad car, not even a single pound of grain or gallon of fuel. Collective farmers must drive off their cattle, and turn over their grain to safekeeping of the state authorities for transportation to the rear. All valuable property, including non-ferrous metals, grain, and fuel that cannot be withdrawn must be destroyed without fail. In areas occupied by the enemy, partisan units, mounted or on foot, must be formed; sabotage groups must be organized to combat the enemy units, to foment partisan warfare everywhere, blow up bridges and roads, damage telephone and telegraph lines, set fires to the forests, stores, and transport. In occupied regions, conditions must be made unbearable for the enemy and all his accomplices. They must be hounded and annihilated at every step, and all their measures frustrated.²⁰

Here was an appeal to partisan warfare from the head of state, emphasizing the importance of this act to the Russian cause. Additionally, the Russian leader announced he established a State Committee of Defense to stiffen the resistance of the entire nation at all levels.²¹ The partisan movement, now in its third phase of development of aiding the Soviet advance, matured in capacity and capability, and played a key role in the Soviet defeat of the Germans in World War II.

The Soviet government formalized the training, employment, and oversight of the partisans in occupied territories. Central oversight provided synergy and amplified the partisans and Red Army into something much greater than the sum of their parts, but required the Soviet government to view the operating environment as a multidimensional entity. This allowed the Soviet government to view the assigned area and forces as a single, fused entity in relation to time, events, space, or purpose. Furthermore, it allowed the Soviet government to connect the

effects of its forces to all aspects of the operational environment, enabling it to assess all the kinetic and non-kinetic effects of the partisan and Red Army's actions (single battle concept). Partisan members constituted staffs within the Red Army field commands and Soviet Army intelligence. NKVD counter-intelligence personnel were attached to partisan staffs to control all Soviet intelligence operations in German occupied areas. These attachments also assisted the partisans with espionage, reconnaissance in support of combat operations, reconnaissance of base security, and political espionage. In addition, guidebooks supplanted training covering topics such as political espionage, intelligence gathering, anti-partisan tactics, partisan propaganda, German use of native personnel, and methods of partisan recruitment.²²

Additionally, the partisans re-established the Communist Party in the German rear to unite the people, enhance anti-German/pro-Communist fervor, prevent further defection of Soviet citizens, and most importantly, set the conditions for post-war Russia. It was also a great partisan recruitment tool. These rear area Communist Party groups organized the locals to support the partisans by collecting food, clothing, and transportation in support of partisan missions. These groups were supplied with training and equipment to support the Soviet propaganda machine. Individuals were trained as editors, writers, printers, and artists to broadcast and disseminate propaganda material in German occupied areas and over the illegal partisan radio stations. The subject matter consisted of Red Army and partisan victories, German intentions to reduce Russia to a colonial status, stories of German atrocities, the German slave labor program, and the promise the Red Army would prevail. The target of the propaganda was primarily indigenous native units in German service. By late spring of 1942, these units had prompted massive defections, and therefore hampered German security and intelligence operations.²³

The Russians gained extensive knowledge and experience in unconventional warfare operations such as establishing, training, supporting, and tasking a partisan force and the interoperability of that partisan force with formal military and intelligence operations. Although the partisan movement did experience temporary failures, set backs, and lackluster performance, eventually the partisans made a significant impact on Russian successes during World War II. The movement also helped develop tactics, techniques, and procedures in the conduct of unconventional warfare.²⁴ These observations assisted the Russian political and military leaders in using unconventional warfare in future conflicts, and more importantly, in conjunction with political instruments and overt military action. More specifically, the Russians used their experience in dealing with the anti-Soviet resistance in Lithuania.

The Anti-Soviet Resistance in Lithuania

On 23 August 1939, the Soviet Union and Germany signed the Molotov-Ribbentrop Pact, a treaty of non-aggression. The Soviets, in response to the deteriorating European security situation, hoped to buy the Red Army time to retrain before the assumed inevitable clash with Germany.²⁵ Additionally, Eastern Europe was divided into German and Soviet spheres of influence. Finland, Estonia, Latvia, and Bessarabia were apportioned to the Soviet sphere by the “secret protocols.” Poland was to be divided, and the areas east of the rivers Narev, Vistula, and San went to the Soviet Union, while Germany would occupy the west. On September 28, 1939, the three Baltic States were given no choice but to sign a pact of "Defense and Mutual Assistance," which permitted the Soviet Union to station troops in Estonia, Latvia, and Lithuania. The same day, a supplementary German-Soviet directive transferred most of Lithuania from the German to the Soviet sphere of interest. This pact gave the Soviet Union the land buffer that it desired to the west, prevented the Soviet Union from entering the war against

Germany, and prevented Germany from having to fight a war on two fronts. The corrupt Lithuanian government voted unanimously to join the Soviet Union on July 21, 1940. Although Lithuania disappeared from the map of Europe, the majority of Western countries did not recognize the annexation, similar to Crimea today. Initially the resistance was a purely idealistic phenomenon lacking in action and mostly passive in nature. The loss of independence fueled outrage and dissent amongst the Lithuanian people and triggered resistance throughout the country.

The Soviet Union, aware of the civil dissonance because of annexation, focused its efforts on identifying and registering formal political figures and other potential, anti-Soviet, influential individuals. These people faced imprisonment, torture, or deportation to Siberia.²⁶ Despite Soviet persecution of dissidents, numerous underground organizations formed throughout the country although they lacked a centralized, cohesive chain of command. The most prominent of these early partisan groups was the Lithuanian Activist Front (LAF) headquartered in Berlin. The LAF organized the revolt of June 22, 1941, resisting the Sovietisation of Lithuania and looking to overthrow the Soviet rule. Simultaneously, German forces entered Lithuania June 22, 1941, as Germany began the campaign against the USSR. In many villages, Nazi occupation was well received due to promises of sovereignty. An unpopular fact also associated with this movement was the anti-Semitic activities the villages supported in Lithuania for the Germans as directed by the Wannsee Conference.²⁷ Almost immediately after seizing the Lithuanian capital, the Germans attempted to mobilize Lithuanians for assistance in their war against the Allies. The Lithuanians, however, resisted these attempts, and successfully prevented the establishment of a Lithuanian SS formation in the service of Germany, unlike the other Baltic States.²⁸

The Red Army, fighting multiple enemies on multiple fronts, retreated into the heart of the Soviet Union. On 23 June, as the revolution spread throughout the Soviet Union, the partisans were growing in numbers and areas they controlled. The Lithuanian provisional government, established 24 June 1941, was short-lived lasting about thirty days and was replaced by a German civil administration. This caused pro-Nazi partisan groups to turn on their German occupiers. By the end of 1944, the Red Army invaded and regained control of Lithuania.²⁹

During the Soviet reoccupation of Lithuania, the cruel actions of the Soviets, such as murder, torture, execution of civilians, and the destruction of private property provoked the resistance movement into violence.³⁰ In the first year of the partisan warfare, while World War II was still ongoing, about 10,000 Lithuanians were killed by the Soviet government – about half of the total deaths that the nation suffered in the war. Men avoided conscription to the Red Army; instead, they hid in the forests and spontaneously joined the Lithuanian partisans. The most active organizer of partisan recruitment and resistance during the Soviet reoccupation of 1944 was the Lithuanian Liberation Army (LLA). The LLA mission was to mobilize the resistance, defend the country, obstruct the formation of occupying bodies, and resist Red Army conscription in order to hold democratic parliamentary election and re-establish the sovereign nation of Lithuania. They had a formal chain of command and rank structure, required partisans to take an oath of loyalty to the country and the partisan movement, possessed an ability to train and equip partisans, and even had military uniforms. These newly formed Lithuanian troops displaced to the forests to train, plan, rest, and refit became known as the *Forest Brothers*.³¹ By the spring of 1945, about 30,000 Lithuanians were actively fighting Soviet rule. Their leadership was partly comprised of former Lithuanian Army officers with combat experience in World War I and/or II. Military discipline, training, and support of the local people caused the Russian Red

Army and NKVD to refine their tactics in order to collect information and conduct effective operations against the partisan movement.

Initially, learning nothing from the Germans, Soviet countermeasures were heavy-handed. In 1944, Red Army commanders seriously considered a proposal to deport the entire Lithuanian population to Siberia.³² Soviet leadership ignored all recommendations for less aggressive measures to deal with the partisans and ordered the execution of civilians suspected of supporting the resistance and the burning of their farms and villages. Soviet soldiers carried out these orders and committed atrocities. By 1947, the Soviets had to admit their measures were as ineffectual as they were cruel. If anything, they only made the partisans stronger by increasing their civilian support. To counter Soviet aggression and increase efficiency, the partisans decentralized their command and control by organizing into smaller groups and dividing their area of operations into districts. The Soviets called upon their members who had experience in WW II partisan warfare to suppress the revolts in western Ukraine. One such man was Major A.M. Sokolovof the Soviet Internal Affairs (MVD - *Ministerstvo Vnutrennikh Del* - (formerly NKVD)), or secret police.³³

The biggest problem in Lithuania, the Russian experts decided, was the lack of reliable intelligence. Russian agents who attempted to infiltrate the partisan bands were quickly captured and killed by the wary Lithuanians. To counter this, the MVD turned to captured former Lithuanian insurgents who were amenable to being bribed, retrained, and sent to rejoin active partisan groups. Their knowledge of partisan jargon and ability to pass tests of loyalty made them more useful. Eventually, the MVD organized fake partisan bands that engaged in staged battles with Soviet troops. The survivors of the engagement (actually MVD agents) fled to genuine partisan bands, which welcomed them as battle-tested reinforcements. Additionally,

these MVD partisan groups would liberate MVD held prisoners and deceptively obtain information on partisan meeting places, link up procedures, etc. Using this newly acquired information, these groups then made contact with partisan units and killed them and their families acting in the name of partisans.³⁴ These agents, who received training in surveillance, interrogation, and torture from a special Soviet secret police school, were known as spetsgruppy (“special forces”) by the Soviets and sribai (“destroyers”) by the Lithuanians. They were extremely effective. Recently gained information from the Soviet archives reveals that by 1949 spetsgruppy had infiltrated partisan units to their very highest levels. Soviet agents identified insurgent leaders and their civilian supporters, and even penetrated Lithuanian expatriate organizations in the West.³⁵

These *maskirovka*, or deception operations, spread paranoia and provoked counterproductive partisan reprisals against suspected collaborators. The partisans responded by organizing reprisal actions against the collaborators with the Soviets. It is estimated that the partisans killed 19,000 such collaborators.³⁶ This aspect of the partisan warfare allowed the Soviets to portray the guerrilla fighters as “murderous bandits”. This led to the sharp decline of the partisan movement effectiveness and recruitment in Lithuania. The Soviets declared organized partisan resistance was completely destroyed by 1952.³⁷ The Russians refined and implemented the lessons learned during the WW II Soviet partisan movement in unconventional warfare to successfully counter the Lithuanian partisan movement from 1946 to 1952. These lessons included the knowledge of partisan tactics, techniques, and procedures. The Russians used an emphasis on political views to identify threats, to infiltrate the partisan units causing distrust, and allow the guerrillas to turn on themselves – divide and conquer. Unfortunately for the Russians, the lessons learned during WW II did not carryover to their conflict in Afghanistan.

Afghanistan

Russian military involvement in Afghanistan has a long history, going back to Tsarist expansions in the so-called "Great Game" between Russia and Britain. This interest in the region continued on through the Soviet era, with billions in economic and military aid sent to Afghanistan between 1955 and 1978. However, few in the west took notice until the Soviets took the city of Kabul in 1979. This was the first time in several decades that the Russians fought an unconventional war against an enemy that used guerrilla style tactics. Up to this point, the Russians had successfully conducted and thwarted unconventional means of warfare. However, during the Soviet-Afghan War, the Russians made significant mistakes to include not reviewing past lessons learned and not preparing for the type of war they would be fighting in, causing strategic defeat. Additionally, the Russians failed to learn from their mistakes in World War II in terms of emphasizing politics to thwart the resistance movement but instead resorted to violence.

After World War II, the Soviet Union made a concerted effort, often in competition with western powers, to win over Afghanistan and bring them into the Soviet sphere of influence. As of 1946, the Afghan government could be characterized as a limited democracy headed by a monarch but governed under a parliamentary structure.³⁸ In 1953, Lieutenant General Mohammad Daoud Khan assumed the office of prime minister and commenced to internally modernize the country and broaden its international economic ties by propositioning the Soviet Union to engage in talks with Afghanistan regarding economics and security. Eventually the relationship flourished and in 1956 the Soviet Union agreed to train and equip the Afghan army. Additionally, the Soviet Union improved the infrastructure of the country spending an excess of 1 billion US dollars by the mid-1970s.³⁹

Daoud was overthrown during the 1978 Afghan Spring Revolution. Intense opposition from factions of the Marxist People's Democratic Party of Afghanistan (PDPA) was sparked by the repression imposed on them by Daoud's regime and the death of a leading PDPA member, Mir Akbar Khyber.⁴⁰ The mysterious circumstances of Khyber's death sparked massive anti-Daoud demonstrations in Kabul, which resulted in the arrest of several prominent PDPA leaders.⁴¹ On April 27, 1978, the Afghan army, which had been sympathetic to the PDPA cause, overthrew and executed Daoud along with members of his family. Nur Muhammad Taraki, Secretary General of the PDPA, became President of the Revolutionary Council and Prime Minister of the newly established Democratic Republic of Afghanistan.

Taraki agreed to a more concrete and long-term relationship with the Soviet Union and the newly proclaimed Democratic Republic of Afghanistan (DRA). Political turmoil ensued as power struggles amongst various political parties erupted, fractioning the government and splintering the population. Hafizullah Amin, Taraki's key rival, seized power in September of 1979. The Soviet Union placated Amin through general political talks but did not trust him. Amin perpetuated a policy of rapid modernization along socialist principles, antagonizing an already uncertain population that remained devoted to the Muslim way of life.⁴²

The agreed upon purpose for Russian intervention was to assist the Afghan people and the Democratic Republic of Afghanistan (DRA) to suppress the revolution of mercenary bandits and their foreign sponsors (US, China, and several Islamic states).⁴³ The Soviet Union viewed Afghanistan as a very limited insurgency that could be defeated with minimal Soviet involvement. The plan was to "smash" the insurgency while the DRA army was being resuscitated, and then have the DRA army take over and claim victory over the insurgency. The invasion also provided the opportunity for the Soviet Union to instill a pro-Soviet government.

Very quickly, the Soviets realized that the populace despised the current government, fueling the insurgency, and therefore the insurgency dwarfed the DRA army's capacity and resources to respond effectively. Paradoxically, the Soviet intervention intensified the struggle by providing a terribly fragmented and unorganized resistance with a common focus and enemy, just as the Russians did during the German invasion of World War II. Additionally, the Soviet intervention denied the DRA the credibility necessary for DRA legitimacy and survival. Ignoring past successes in dealing with resistance movements, specifically knowing the type of war they are fighting and knowing their enemy, the Soviets made a number of assumptions based on "like" areas of operation they studied, specifically Iran. They failed to use their ties with their Afghan allies and Russian personnel on the ground to answer specific questions about the enemy (disposition, motivation, organization, size, source(s) of support, etc.).

The Russian heavy handedness with the local populace caused violent reaction and further support for the insurgency as it did with the Lithuanian partisans decades before. The military and diplomatic strategies of increasing DRA military capacity and infrastructure improvements had minimal positive effect compared to the enormous efforts put forward by the Soviet Union. Another important lesson, which emerges from the early years of Soviet operations against the insurgency in Afghanistan, is the inflexibility of the lower level commanders to adapt to the unconventional and non-standard tactical solution. This is attributed to the convention orientation and rigid training of both the troops and officer cadre, which have little utility in a fluid counter insurgency scenario. Although the Russians made early tactical adjustments to their strategy, the Russians continued to utilize large military formations by the rules of classical conventional warfare without effect with the hopes of winning through overwhelming military force.⁴⁴

Soviet journalist A. Bovin, writing for the publication *Izvestiia* of December 1988 sums it up

best:

The overall effect of the presence of Soviet troops and their participation in combat operations clearly proved negative. We ourselves handed the counter-revolutionary forces some powerful means of influencing public perceptions. The foreign intervention stirred patriotism, and the appearance of infidels spawned religious intolerance. On such a field, even a tie would have been miraculous.⁴⁵

The Soviets were slow in devising a counter insurgency strategy to meet the growing threat in Afghanistan. More often than not, the response was reactive rather than proactive. There were deficiencies in Soviet employment philosophy as well as training, which were based on rigid drills and command and control structure. Under this system, the Soviet forces were no match for the decentralized and agile insurgents. The Russians deployed their Special Forces (Spetnaz) to conduct counter insurgency operations. However, they failed to adequately adapt to the Afghan tactical situation. So that even this effort, while promising, was futile. While Afghanistan proved a disaster, helping even to shake the foundation of the USSR and help cause the collapse of that nation, something came from this clash. The Soviet Union took these observations and severe losses of blood and treasure and revamped its overall approach to combat by utilizing a holistic unconventional approach to defeating its adversaries, a term embraced today by Russia and is known as Non-Linear Warfare. The world witnessed Russian Non-Linear Warfare for the first time during the invasion of Georgia.

The Invasion of Georgia

Following Georgian independence in 1991, secessionists seeking to remain part of Russia seized control of the majority of Abkhazia and portions of South Ossetia before cease-fire agreements were reached in 1992 and 1994.⁴⁶ These conflicts remained unresolved and formed the roots for the five day war between Russia and Georgia. In August 2008, the Russian Army invaded Georgia however, the reason for the invasion is still debated.⁴⁷

What is not debated is that numerous, coordinated Russian cyber attacks that accompanied the military campaign. This represents the first instance of a large-scale computer network attack (CNA) conducted in conjunction with major ground combat operations. The cyber attack had a significant informational and psychological impact on Georgia: it effectively isolated the Caucasus state from the outside world. The Russians, using observations from their conflicts with partisans, used “cyber partisans” to infiltrate behind enemy lines and conduct sabotage operations to dismantle enemy command and control capabilities and create a diversion for the employment of ground forces.⁴⁸ On the international front this is known as a frozen conflict - a situation in which active armed conflict has been brought to an end, but no peace treaty or other political framework resolves the conflict to the satisfaction of the combatants. Therefore, legally the conflict can start again at any moment, creating an environment of insecurity and instability. The Russians rediscovered the need for political action as the primary purpose in war.

On the surface, cyber power would not appear to be particularly useful in a war with Georgia. Only seven percent of the citizens used the internet daily,⁴⁹ which might cause one to disregard Georgia’s critical cyber vulnerability. However, like partisan warfare of the past, aggressors can use the cyberspace domain as a means to gain an advantage (military, economic, or political) over an adversary to set the conditions for follow on actions. More than half of Georgia’s thirteen internet connections to the outside world passed through Turkish or Azerbaijani Internet service providers, many of which were in turn routed through Russia.⁵⁰ Georgia’s internet infrastructure suffered from a lack of internal connections known as internet exchange points.⁵¹ Consequently, a Georgian user’s request for a Georgian web site would more than likely be routed through Russia.⁵² As a result, pro-Russian forces and/or offensive Russian cyber assailants could employ cyber warfare to affect a large percentage of Georgia’s access to,

and use of, the Internet. Lacking control of the infrastructure required for external or internal Internet use, Georgia could neither disperse network traffic nor cut internet connectivity from abroad as defensive measures without ceding the cyber advantages of internet access if the state came under cyber attack.⁵³ This gave the Russians instant access to the public to spread pro-Russian and anti-Georgian propaganda and control the information going to the international community. Additionally, the Russians interrupted GEOCELL, the Georgian cell phone service provider, cutting off command and control capabilities for the Georgian military. Additionally, the Russians monitored Georgian leadership cell phone conversations. Targeting cyber infrastructure as a valued political asset reveals Russia's appreciation of lessons learned from past partisan activities.

Security experts have identified two phases of the Russian cyber campaign against Georgia. The first phase commenced on the evening of 7 August when Russian hackers targeted Georgian news and government websites.⁵⁴ Russian Military Forecasting Center official Colonel Anatoly Tsyganok said these first actions were a response to Georgians hacking South Ossetian media sites earlier in the week.⁵⁵ The fact that the alleged counterattacks occurred only one day prior to the ground campaign has led many security experts to suggest that the private hackers supporting the attack knew about the date of the invasion beforehand.

In the first phase of the attack, the Russian hackers primarily launched distributed denial of service (DDoS) attacks.⁵⁶ One way to categorize DDoS attacks is to differentiate between semantic and brute force attacks. A semantic DDoS takes advantage of either a feature or bug in some software on the target system. A brute force (or "flooding") DDoS attack occurs when the

target system receives more Internet traffic than it can handle, which exhausts the command and control resources of the server, rendering it unavailable.⁵⁷

The DDoS attacks during this phase were primarily carried out by botnets or groups of computers on the Internet (termed "bots" or "zombies") that have been infected with a piece of software known as malware.⁵⁸ The malware allows a "command and control" server to issue commands to these bots. Often, botnets launch spam email campaigns, but they can also be used to launch wide-scale DDoS attacks. The hijacking of the zombie computers typically occurs in the same manner as infections with other viruses (e.g., email scams, fake websites, infected documents). The communication from the command and control computer to the zombies are conducted over seemingly innocuous channels on the network (such as a channel normally used for Internet chat) to prevent discovery. Criminal organizations, such as the Russian Business Network (RBN), use and lease botnets for various purposes. The botnets used in the onslaught against Georgian websites were affiliated with Russian criminal organizations, including the RBN, meaning that Russia utilized any means necessary and available assets to conduct war.

In this first phase, the attacks primarily targeted Georgian government and media websites. The Russian botnets relied on a brute force DDoS to attack these targets.⁵⁹ The Georgian networks, due to their fragile nature, were more susceptible to flooding than the Estonian networks that Russian hackers attacked a year earlier (either a rehearsal or the employment of lessons learned from the Estonia cyber attack).⁶⁰

In the second phase, Georgian media and government websites continued to receive the attacks. The Russian cyber operation expanded to inflict damage upon an expanded target list including financial institutions, businesses, educational institutions, Western media (BBC and

CNN), and a Georgian hacker website.⁶¹ The assaults on these servers not only included DDoS, but defacements of the websites as well (e.g., pro-Russian propaganda on government sites such as a picture comparing Georgian President Mikheil Saakashvili to Adolf Hitler).⁶² In addition, several Russian hackers utilized publically available email addresses of Georgian politicians to initiate a spam email campaign. Cyber warfare was just part of the overall campaign to annex Abkhazia and South Ossetia. This cyber warfare campaign isolated Abkhazia and South Ossetia and prevented outside (international) interference and it provided the Russians with an unadulterated and captive audience for their propaganda machine. Most importantly, it displayed the technical prowess of the Russian government to further demonstrate the importance of political success in war as a priority in any war.

In conjunction with an effective cyber campaign, the Russians took full advantage of local discontent among Russian speakers in Abkhazia and South Ossetia to promote internal opposition that diverted national governments and created a permanent (internal) front, very similar to the partisans of World War II who operated behind German lines. Through these partisans, Russia empowered the regimes in Abkhazia and South Ossetia and pursued aggressive information operations in both territories to create Georgia as an enemy among the local population. Russia also attempted to change the ethnic landscape in Abkhazia by bringing Russian military personal and their families to reside in Abkhazia, therefore creating the basis for long-term influence.⁶³ Additionally, Russia sent peacekeeping forces to Abkhazia and South Ossetia to prevent the spread of the color revolutions that were successful in other parts of the area. In July of 2008, these peacekeeping forces conducted exercise “Caucasus 2008” consisting of at least 8000 troops, 700 military vehicles and more than 30 aircraft. According to Russian

officials, the main purpose of the exercise was to train for anti-terror operations and to practice peace-enforcement operations in zones of conflict.⁶⁴

Geopolitically, the war in Georgia showed Russian determination to attempt to rebalance the world order and undermining the hegemony of the United States. This conflict was the first time since the fall of the Soviet Union that the Russians employed their military against an independent state, demonstrating Russia's willingness to wage a full-scale military campaign to attain its political objectives. However, Russia also showed great restraint in allowing their cyber partisan activities to dominate the initial phase without a full-scale military intervention. The failure of the Western security system to respond swiftly to Russia's attempt to forcibly revise the borders of a member country of the Organization for Security and Cooperation in Europe (OSCE) revealed the system's weaknesses.⁶⁵ Russian troops withdrew from the buffer zones in Georgia to the newly recognized independent states of Abkhazia and South Ossetia on 9 October 2008.

The overall success of the conflict was due in part to the preparation of Russian general-staff, their detailed operational planning, coordination and effective implementation of all facets of government power, with a strategic surprise being paramount to the effectiveness of the campaign all designed to keep the war at a limited level to making politics decisive. Ruslan Pukhov, the director of the Center for Analysis of Strategies and Technologies said that "the victory over the Georgian army ... should become for Russia not a cause for euphoria and excessive joy, but serve to speed up military transformations."⁶⁶ These military transformations, as well as demonstrating that politics short of military action matter most, are realized during the invasion of Crimea.

The Invasion of Crimea

The Russian Campaign in Crimea was an impressive demonstration of strategic communication employment, sharing many similarities with their intervention in South Ossetia and Abkhazia in 2008, while at the same time being essentially different, reflecting the operationalization of the new military guidelines to be fully implemented by 2020. This successful non-linear campaign or “New Generation Warfare” was executed without a shot fired and by the destruction of the morale of the Ukrainian military leading to all of their 190 bases surrendered.⁶⁷ The restraint displayed by the Russians, once again, prove that the focus of political success via any means has very deep roots learned primarily from the near disaster of World War II. Instead of relying on a mass deployment of tanks and artillery like wars of the past, the Russians deployed less than 10,000 assault troops, mostly naval infantry, already stationed in Crimea. These naval units were backed by a few battalions of airborne troops and Spetsnaz (all denying they were Russian soldiers) against 16,000 Ukrainian military personnel.⁶⁸ New Generation Warfare, according to the Russians, is divided into 4 components: Political Subversion, Proxy Sanctum, Intervention, and Coercive Deterrence.⁶⁹ Political Subversion involves the use of mass media outlets for information operations, the encouragement of underground resistance (partisans), and highlighting government corruption. For example, components of Russia’s foreign policy in Ukraine, specifically to increase the number of Russian speakers in Ukraine and the number of Ukrainian citizens who identify with the Russian culture, are part of Political Subversion. Additionally, the surreptitious organization of pro-Russian demonstrations in the city of Sevastopol in February 2014 is another example. Proxy Sanctum is a step up in intensity through cyber attacks, the seizure of local government buildings, arming and training the underground resistance, and the employment of certain Special Operations Force

(SOF) units to conduct unconventional warfare. The numerous cyber attacks against the Ukrainian and Crimean governments as well as the mobilization of spetsnaz forces in Crimea illustrates this stage. Intervention is indicated as an increase in intensity of information warfare and SOF operations. Additionally, surreptitious introduction of heavy weapons to the resistance force and integrating these forces into Russian equipped, supported, and led higher level formations, similar to the partisans during World War II functioning under the NKVD umbrella. On February 27, 2014 pro-Russian resistance force assisted by spetsnaz captured several government buildings including the parliament in Simferopol and demonstrates this effort.⁷⁰ Coercive Deterrence is essentially strategic coercion or the deliberate and purposive use of overt threats to influence another's strategic choices.⁷¹ Russia's nuclear threats and large-scale regional military exercises characterize this stage. Dr. Philip Karber, president of the Potomac Foundation, argues that as the level of intensity increases, there is a shift from covert operations to overt operations, however covert operations are continuous. (see Figure 2). Although Karber's argument sounds linear in nature (contrary to the definition of war), it is actually a non-linear process. Before the commencement of boots on the ground military operations, Russia led with a strong and effective information operations campaign. This new form of warfare is not new at all and should not be characterized as such. In order for the U.S. to better understand and anticipate future Russian actions the U.S. must get past using "trendy" words to define war such as "Hybrid" and "New Generation".

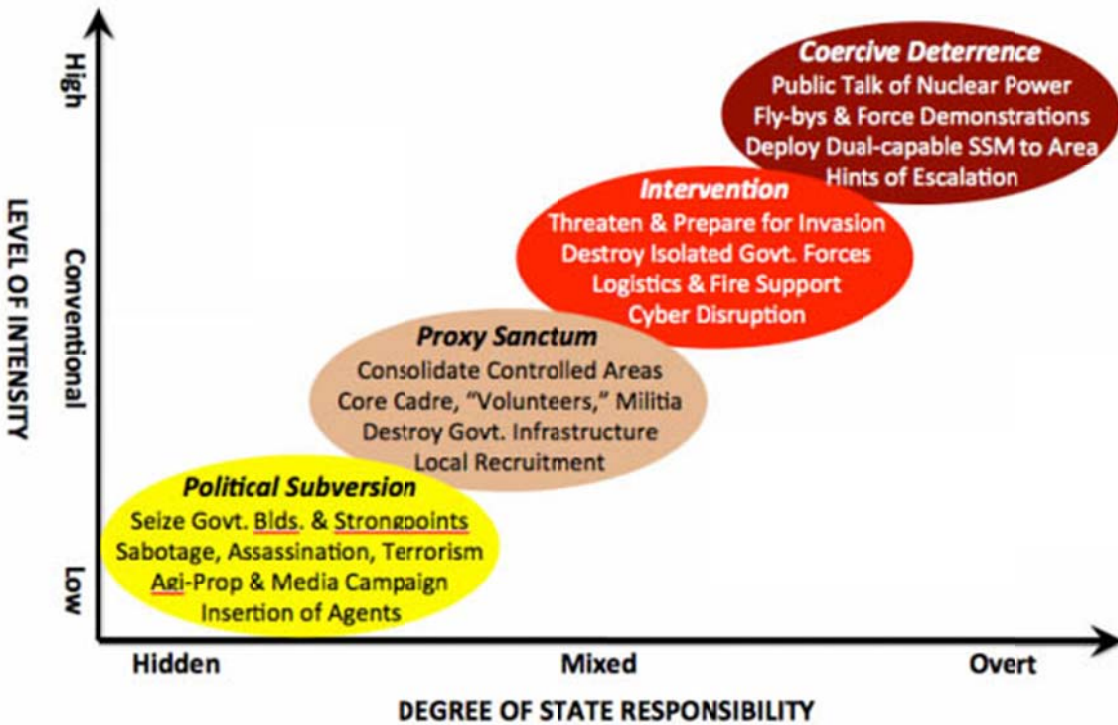


Figure 2: Karber New Generation/Hybrid Warfare Framework⁷²

Bret Perry, *Non-Linear Warfare in Ukraine: The Critical Role of Information Operations and Special Operations*, Small War Journal (14 August 2015), http://smallwarsjournal.com/jrnl/art/non-linear-warfare-in-ukraine-the-critical-role-of-information-operations-and-special-opera#_edn4.

Russia’s information operations and use of cyber warfare in the Ukraine can be characterized by a high level of sophistication, orchestration, and planning; far superior to those used in Georgia but equal in sophistication (based on the technology of the time) to that of the partisan movement during World War II. Rather than adopting a singular, uniform information operations strategy, Russia deployed a well-planned information operations strategy within Ukraine while simultaneously employing a different information operations approach outside of Ukraine against Western media. Internally in the targeted state, Russia’s investment in spreading the Russian language and culture for the previous decade essentially expanded the audience they could influence. Russia subsequently targeted this Russian speaking, Russian sympathizing section of the Ukrainian population with information operations utilizing the full spectrum of

media outlets (e.g. internet, radio, television, social media, etc.) in order to secure their popular support for military actions in Ukraine.⁷³ Externally, the combination of disinformation and criticism through various media outlets delivered in multiple languages such as English, Arabic, French, Spanish, German and other popular languages to disrupted the Western narrative. As a result, Russia was able to utilize these media outlets to create an information space supporting military operations in Ukraine⁷⁴ well before there were Russian boots on the ground.

Simultaneously, the Russians utilized cyberspace to influence, cripple, and demoralize Ukrainian leadership, military, and society. What western observers call something short of outright war, the Russians call war.

The head of Ukraine's Computer Emergency Response Team (CERT-UA) during the Ukrainian revolution and Russian invasion, Nikolay Koval, states that cyber attacks rose in parallel with ongoing political events, in both number and severity.⁷⁵ In 2012, Russian (or pro-Russian) hackers vandalized Ukrainian government websites with politically motivated digital graffiti. In 2013, Ukrainian network defenders discovered new and more menacing forms of malware, such as RedOctober, MiniDuke, and NetTraveler. In 2014, hacktivist groups such as *CyberBerkut* published stolen Ukrainian Government documents, however counter-intuitively; there was minimal proxy use by the Russians during the cyber warfare campaign. Additionally in Crimea, attacks ranged from cutting network cables to commandeering satellites. In eastern Ukraine, cyber espionage such as the use of location data from mobile phones and Wi-Fi networks has aided in targeting Ukrainian army units, a technique not used during the Georgia crisis. Additionally, the region was isolated from the rest of Ukraine by Internet censorship and regular forensics checks on citizens' computers and mobile devices. Compared to Georgia, the

cyber attacks in the Crimea and parts of the Ukraine are much more sophisticated and commenced years before the actual military conflict.

In the past, the Russian military as a whole have taken the heavy handed approach with large troop formations to deal with host nation populations and anti-Russian groups, as previously mentioned during the partisan movement in Lithuania and in Afghanistan. However, to reach their “New Generation Warfare” objectives, required a different approach, including not leading with overt military action. These objectives include causing chaos and disrupting civil order, while seeking to provoke excessive responses by the state’s security organs, thus delegitimizing the Ukrainian government. Russia’s unconventional warfare campaign included funding, arming, tactical coordination, and fire support for resistance force operations. This conflict proved the importance of professional, light, and mobile special purpose ground units. The newly established Command of Special Operations Forces, together with Russian GRU *spetsnaz*, Airborne Forces (VDV), and Marines, played a decisive role in Russia’s actions in Crimea.⁷⁶ The growing power, accuracy, and range of small arms and light weapons enabled small units to execute missions previously tasked to larger military units.⁷⁷ The change in approach reflected population centric mindset. These smaller, specialized forces focused on engaging the population and winning over hearts and minds to garner support for the Russian government. These specialized forces were considered polite and professional as they worked with the population, encouraged Ukrainian soldiers to defect, and only fired their weapons in the air to deter individuals from traveling along certain lines of communication. Additionally, to reduce civilian intimidation and give Russia plausible deniability, the *spetsnaz* wore no unit or national insignia (politics by other means). This change in tactics is best explained by General of

Army Valeri Gerasimov, Chief of the General Staff of the Armed Forces of the Russian Federation.

General Gerasimov explained in an article in a Russian publication in January of 2015 that one of the major changes in conducting war is the application of political, diplomatic, economic, and other non-military means with coordinated military effort.⁷⁸ Informational resistance opens a plethora of asymmetrical possibilities to reduce the combat potential of an enemy. He goes on to quote the great Soviet war theorist Brigade Commander Georgii Isserson who predicted, "War is not announced beforehand anymore. It begins before troops are deployed. Mobilization and reinforcement begins not after offensive war starts as it did in 1914, rather it happens unnoticed, gradually before the official start."⁷⁹

This purposeful obfuscation reveals Russia's willingness to see warfare as the totality of conflict, something defined as extending beyond a call to arms. This lesson has long roots and is in full relief today. Russians see this evolution clearly, and so now must the west. As these threats multiply and diversify as increasingly "hybrid," "asymmetric," and "ambiguous," it is critical for US military thinkers, politicians, and strategists to first understand Russia to further their understanding of General Gerasimov and Russian warfare.

Conclusion

"The overuse of jargon or trendy words distorts the thought process and training of the commander's mind."

- Carl von Clausewitz

Russia is employing a variety of military and nonmilitary methodologies in an unprecedented manner that surprised the international community. However, the methods are not new, only the technology that supports them. States have used propaganda, unconventional warfare, economic warfare, information operations, and other elements of warfare for years. The Russian partisan movement established in the wake of the German armies' invasion of Russia in

1941 was, in both conception and scope, the greatest irregular resistance movement in the history of warfare.⁸⁰ It combined the elements of resistance movements of the past with modern technology (of 1941) such as communications, transportation, and weapons to aid the Red Army in the defeat of the Nazi onslaught. However, it would not be until approximately 2008 that the west would witness Russia employing lessons learned from World War II.

Russia is one of the first actors (state or non-state) to employ these methods of war in an effective, simultaneous, coordinated manner against another state. The nature of warfare enables the aggressor—in this case Russia—to disrupt and control its adversary’s decision-making cycle and attain rapid gains. Due to the recent success of Russia in Georgia and Crimea, an increasing number of state and non-state actors will likely incorporate non-linear warfare into their military doctrine and operations. As these threats multiply during a time of fiscal constraints and diversify as increasingly hybrid, asymmetric, and ambiguous, it is critical for military thinkers, politicians, and strategists to further their understanding of Russian warfare. However, the US inaccurately labels techniques of war as a new type of war such as “hybrid” war and “unrestricted” war. The US needs to discontinue the use of “trendy” terminology to classify the ancient practice of war as something new as it creates undue confusion and friction across the services and the government. This confusion and friction make it difficult for military leadership to get the strategy right to serve policy.

Despite their success, Russia has struggled as much as the United States in accepting the asymmetrical “norm”, that is, battle that feeds political goals attached to acts of war. This similarity may make the West anxious, but whole of government short of an outright declaration of war is the United States post-1945 to the present. So Russia has caught up, not started something new.

Bibliography

- Amstutz, Bruce. "Afghanistan: The First Five Years of Soviet Occupation." Washington DC: National Defense University, 1986.
- Arnoldy, Ben. "Cyberspace: New Frontier in Conflicts," *The Christian Science Monitor*, August 13, 2008, available at <www.csmonitor.com/USA/Military/2008/0813/p01s05-usmi.htm>
- Baumann, Dr. Robert. *Russian-Soviet Unconventional Wars in the Caucasus, Central Asia, and Afghanistan*. Fort Leavenworth: Leavenworth Papers Number 20.
- Berzins, Janis. *Russia's New Generation Warfare In Ukraine: Implications For Latvian Defense Policy*. National Defence Academy of Latvia Center for Security and Strategic Research, April 2014.
- Bovin, A. "A Difficult Decade." *Investiia*. 23 December 1988, as translated in CDSP 40 no-51.
- Bumgarner and Borg. "Overview by the US-CCU of the Cyber Campaign Against Georgia in August of 2008." In *Cyberwar Resources Guide*, Item #138, 2–3, www.registan.net/wp-content/uploads/2009/08/US-CCU-Georgia-Cyber-Campaign-Overview.pdf.
- Cecie, Michael. "The Russian Invasion of Ukraine." *Foreign Policy Research Institute* (March 2014). <http://www.fpri.org/articles/2014/03/russian-invasion-ukraine>
- Clausewitz, Carl von. *On War*. Ed. and trans. Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984.
- Daumantas, Juozas. "Fighters for Freedom". New York: Manyland Books, 1975.
- European Commission Report. "Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia." <https://www.icrc.org/casebook/doc/case-study/georgia-russia-iiffm-south-ossetia-conflict-case-study.htm>.
- Gaouette, Nicole. "Sanctions-Strapped Russia Outguns the U.S. in Information War." Bloomberg L.P., (2 April 2015). <http://www.bloomberg.com/politics/articles/2015-04-02/sanctions-strapped-russia-outguns-the-us-in-information-war>.
- Geers, Kenneth. *Cyber War in Perspective: Russian Aggression against Ukraine, NATO*. CCD COE Publications, Tallinn, 2015.
- Genocide and Research Center of Lithuania. "The Anti-Soviet Resistance in the Baltic States." Genocide and Research Center of Lithuania 1999.
- Gerasimov, General of Army Valeri. Chief of the General Staff of the Armed Forces of the Russian Federation. See: <http://www.vpk-news.ru/articles/14632>.

- Giradet, Edward. *Afghanistan: The Soviet War*. New York: St Martins Press, 1985.
- Howell, Edgar. *The Soviet Partisan Movement*. Fort Bliss: Department of the Army, 1956.
- Hooper, Major A.S. *The Soviet Fighting Forces*. Great Britain: Besley and Copp LTD, 1942.
- Hutchinson, Walter. *We Are Guerillas*. Great Britain: Hutchinson & Co, 1942.
- Isserson, Georgii S. *The Evolution of Operational Art*. Combat Studies Institute Press US Army Combined Arms Center, Fort Leavenworth, Kansas, 2013.
- Joint Publication 1-02. “Department of Defense Dictionary of Military and Associated Terms.” October 2015.
- Karber, Philip. *Lessons Learned from the Russo-Ukrainian War*. Johns Hopkins Applied Physics Laboratory and Army Capabilities Center, 6 July 2015.
- Kalinin, Mikhail. *Why We Win: The Strength of the Soviet State*. Soviet War News, 1945.
- Kaszeta, Daniel J. *Lithuanian Resistance to Foreign Occupation 1940–1952*. *Lituanus*, Vol. 34, No. 3 (Fall 1988) http://www.lituanus.org/1988/88_3_01.htm.
- Macias, Amanda. “A detailed look at how Russia annexed Crimea.” *Business Insider*. March 2015. <http://www.businessinsider.com/how-russia-took-crimea-2015-3>.
- Mao Tse Sung. *The Turning Point In World War II*.
https://www.marxists.org/reference/archive/mao/selected-works/volume-3/mswv3_10.htm.
- Minasyan, Sergey. “‘Hybrid’ vs. ‘Compound:’ War: Lessons From The Ukraine Conflict.” PONARS, Eurasia Policy Memo No. 401, November 2015
- Maxwell, David. “Should America fight more like Iran? Pentagon official raises eyebrows.” Informal Institute for National Security Thinkers and Practitioners – News from the Associate Director, Security Studies Program, 10 April 2015.
<http://maxoki161.blogspot.com/2015/04/should-america-fight-more-like-iran.html>.
- McDermott, Roger N. “Russia's Conventional Armed Forces and the Georgian War”. *Parameters*, XXXIX: 65–80.
- Mironov and Polikaov. “Afghanistan: The beginning of a New Life.” *International Affairs*, March 1979: 24.

- Nichol, Jim. "Russia-Georgia Conflict in August 2008: Context and Implications for U.S. Interests." *Congressional Research Service*, 3 March 2009. <https://www.fas.org/sgp/crs/row/RL34618.pdf>
- Pallin & Westerlund. "2009 Russia's War in Georgia: Lessons and Consequences." *Small Wars & Insurgencies*. 20:2, 400-424.
- Perry, Brett. *Non-Linear Warfare in Ukraine: The Critical Role of Information Operations and Special Operations*. Small Wars Journal, 2015. <https://www.smallwarsjournal.com/printpdf/27014>.
- Pukov, Ruslan. "The Tanks of August." Moscow Center for Analysis of Strategies and Technologies, 2010.
- Rothstein, Arthur. *Soviet Foreign Policy During the Patriotic War*. London, 1946.
- Saunders, Paul J. "Why America Can't Stop Russia's Hybrid Warfare." *National Interest* June 23, 2015: 1-2. <http://national-interest.org/feature/why-america-cant-stop-russias-hybrid-warfare-13166>.
- Shakarian, Paulo. "The 2008 Russian Cyber Campaign against Georgia." *Military Journal*. <https://www.questia.com/library/journal/1P3-2532870891/the-2008-russian-cyber-campaign-against-georgia>.
- Siroky, David S. *The Fog of Non-Linear War*. School of Politics and Global Studies, Arizona State University 2015.
- Stalin, Joseph. Radio Broadcast. 3 July 1941, <https://www.marxists.org/reference/archive/stalin/works/1941/07/03.htm>.
- Tikk et al., Eneken. *Cyber Attacks Against Georgia: Legal Lessons Identified*. Tallin, Estonia: Cooperative Cyber Defense Centre of Excellence, 2008.
- U.S. Department of State. "Background Note: Georgia." www.state.gov/outofdate/bgn/georgia/index.htm
- Woehrel, Steven. "Ukraine: Current Issues and U.S. Policy." *Congressional Research Service*. 12 February 2015. <https://www.fas.org/sgp/crs/row/RL33460.pdf>

Endnotes

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- ¹ United States (U.S.) Marine Corps Doctrinal Publication 1, “Warfighting”, (Dept. of the Navy Headquarters United States Marine Corps Washington D.C. 1997), 9.
- ² Non-linear Warfare - the concept goes by many names, e.g. Three Warfares, New Generation Warfare, Hybrid Warfare, Gray Zone Conflict, Unrestricted Warfare, Fourth Generation Warfare, etc. and it hotly debated amongst military professionals and academics in the United States.
- ³ As Clausewitz stated in *On War*: “before you embark on a war, you must understand the war.” Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984), 80.
- ⁴ Joint Publication 1-02, “Department of Defense Dictionary of Military and Associated Terms,” Oct 2015, 445.
- ⁵ David S. Siroky, *The Fog of Non-Linear War* (School of Politics and Global Studies, Arizona State University 2015), 2.
- ⁶ Carolina Vendil Pallin & Fredrik Westerlund, “Russia's war in Georgia: Lessons and Consequences,” *Small Wars & Insurgencies*, 20:2, 414.
<http://dx.doi.org/10.1080/09592310902975539> accessed 30 Nov 15
- ⁸ Georgii S Isserson, *The Evolution of Operational Art* (Combat Studies Institute Press US Army Combined Arms Center Fort Leavenworth, Kansas, 2013), 5
- ⁹ Clausewitz, 80.
- ¹⁰ General of Army Valeri Gerasimov, Chief of the General Staff of the Armed Forces of the Russian Federation, February 19, 2016. See: <http://www.vpk-news.ru/articles/14632> for original article.
- ¹¹ This term is used by the author to draw a connection between the 1941 Partisan movement and cyber warfare.
- ¹² Edgar Howell, *The Soviet Partisan Movement* (Fort Bliss: Department of the Army, 1956), 43.
- ¹³ *Ibid.*, 63.
- ¹⁴ *Ibid.*, 63.
- ¹⁵ The Soviets organized the partisan movement increasing its overall efficiency and effectiveness. This was the first evidence of the Soviet government support to a centrally directed irregular movement.
- ¹⁶ *Ibid.*, 45.
- ¹⁷ Also known as destruction battalions or *istrebitels*, operating in the western Soviet Union. They were also paramilitary units under the control of NKVD that performed tasks of internal security in the Eastern Front. See: https://en.wikipedia.org/wiki/Destruction_battalions
- ¹⁸ Particularly true of people from the Baltic Republics when they were retaking them in 1944.
- ¹⁹ Edgar Howell, *The Soviet Partisan Movement* (Fort Bliss: Department of the Army, 1956), 43.
- ²⁰ Joseph Stalin, Radio Broadcast, 3 July 1941.
<https://www.marxists.org/reference/archive/stalin/works/1941/07/03.htm>. Accessed 30 Nov 2015
- ²¹ Arthur Rothstein, *Soviet Foreign Policy During the Patriotic War* (London,1946),21-24.
- ²² *Ibid.*, 51
- ²³ Mao Tse Sung, *The Turning Point In World War II*,
https://www.marxists.org/reference/archive/mao/selected-works/volume-3/mswv3_10.htm. Accessed 18 Nov 2015.
- ²⁴ *Ibid.*

²⁵ Genocide and Research Center of Lithuania, “The Anti-Soviet Resistance in the Baltic States,” (Genocide and Research Center of Lithuania 1999), preface.

²⁶ *Ibid.*, 25.

²⁷ The Wannsee Conference was a meeting of senior officials of Nazi Germany with the purpose to ensure the cooperation of administrative leaders of various government departments in the implementation of the final solution to the Jewish question, whereby most of the Jews of German-occupied Europe would be deported to Poland and murdered. The subsequent Hunger Plan was to inflict deliberate mass starvation on the Slavic civilian populations under German occupation by directing all food supplies to the German home population and the Wehrmacht on the Eastern Front. According to the historian Timothy Snyder, "4.2 million Soviet citizens (largely Russians, Belarusians, and Ukrainians) were starved" by the Nazis (and the Wehrmacht) from 1941–1944.”

²⁸ In the early stage of the war, Germany forced occupied personnel to join the Germany army. The German army later created a policy to allow only Germans to fight in the army, thus foreigners were sent to the Waffen SS. The Germans later established the 20th SS Division in Estonia and 15th and 19th SS Divisions in Latvia.

²⁹ Genocide and Research Center of Lithuania, “The Anti-Soviet Resistance in the Baltic States,” (Genocide and Research Center of Lithuania 1999), 25.

³⁰ Juozas Daumantas, “Fighters for Freedom” (New York: Manyland Books, 1975), 33.

³¹ Daniel J Kaszeta, “Lithuanian Resistance to Foreign Occupation 1940–1952,” *Lituanus*, Volume 34, No. 3 (Fall 1988), http://www.lituanus.org/1988/88_3_01.htm. Accessed 15 Nov 2015.

³² Genocide and Research Center of Lithuania, “The Anti-Soviet Resistance in the Baltic States,” (Genocide and Research Center of Lithuania 1999), 27.

³³ Major A.M. Sokolov of the Soviet MVD successfully suppressed revolts in western Ukraine and was brought to Lithuania as a counterinsurgency specialist. He enhanced Soviet intelligence and infiltrated the partisan organization.

³⁴ Genocide and Research Center of Lithuania., 31.

³⁵ *Ibid.*, 31.

³⁶ V. Stanley Vardys, “The Partisan Movement In Postwar Lithuania”, *Lituanus: Lithuanian Quarterly Journal Of Arts And Sciences*, Volume 15, No.1 (Spring 1969): http://www.lituanus.org/1969/69_1_02.htm. Accessed 6 Jan 2016.

³⁷ *Ibid.*

³⁸ Mironov and Polikaov, “Afghanistan: The beginning of a New Life,” *International Affairs*, March 1979: 54.

³⁹ Dr. Robert Baumann, *Russian-Soviet Unconventional Wars in the Caucasus, Central Asia, and Afghanistan* (Leavenworth Papers Number 20), 129.

⁴⁰ Henry S. Bradsher, *Afghanistan and the Soviet Union* (Duke Press Policy Studies, 1983), 72–73.

⁴¹ A. Z. Hilali, "The Soviet Penetration into Afghanistan and the Marxist Coup," *The Journal of Slavic Military Studies*, 2005, Volume 18, Issue 4, 709.

⁴² Bruce Amstutz, “Afghanistan: The First Five Years of Soviet Occupation” (Washington DC: National Defense University, 1986), 24.

⁴³ *Ibid.*, 132.

⁴⁴ Edward Giradet, *Afghanistan: The Soviet War* (New York: St Martins Press, 1985), 34.

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- ⁴⁵ A. Bovin, "A Difficult Decade," *Investiia*, 23 December 1988, as translated in CDSP 40 (no-51), 10-11.
- ⁴⁶ U.S. Department of State, "Background Note: Georgia." www.state.gov/outofdate/bgn/georgia/index.htm.
- ⁴⁷ Russia accused Georgia of aggression against South Ossetia and officially launched a large-scale land, air and sea operation against Georgia on 8 August with the stated aim of peace enforcement. At the time, the Georgians accused the Russians of attacking first and their actions were in retaliation.
- ⁴⁸ This term is used by the author to draw a connection between the 1941 Partisan movement and cyber warfare.
- ⁴⁹ Eneken Tikk et al., *Cyber Attacks Against Georgia: Legal Lessons Identified* (Tallin, Estonia: Cooperative Cyber Defense Centre of Excellence, 2008), 5.
- ⁵⁰ *Ibid.*, pg?
- ⁵¹ Ben Arnoldy, "Cyberspace: New Frontier in Conflicts," *The Christian Science Monitor*, August 13, 2008. www.csmonitor.com/USA/Military/2008/0813/p01s05-usmi.htm.
- ⁵² *Ibid.*
- ⁵³ Eneken Tikk et al., *Cyber Attacks Against Georgia: Legal Lessons Identified* (Tallin, Estonia: Cooperative Cyber Defense Centre of Excellence, 2008), 5.
- ⁵⁴ European Commission Report, "Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia." <https://www.icrc.org/casebook/doc/case-study/georgia-russia-iiffm-south-ossetia-conflict-case-study.htm>. Accessed 4 Dec 15.
- ⁵⁵ *Ibid.*
- ⁵⁶ A denial of service attack is a cyber attack that attempts to prevent the legitimate use of a computing resource.
- ⁵⁷ European Commission Report.
- ⁵⁸ John Bumgarner and Scott Borg, "Overview by the US-CCU of the Cyber Campaign Against Georgia in August of 2008," in *Cyberwar Resources Guide*, Item #138, 2-3. www.registan.net/wp-content/uploads/2009/08/US-CCU-Georgia-Cyber-Campaign-Overview.pdf. Accessed 6 Dec 15.
- ⁵⁹ *Ibid.*, 2.
- ⁶⁰ *Ibid.*, 3.
- ⁶¹ U.S. Department of State, "Background Note: Georgia," www.state.gov/outofdate/bgn/georgia/index.htm. Accessed 5 Dec 15
- ⁶² Paulo Shakarian, *The 2008 Russian Cyber Campaign against Georgia*, <https://www.questia.com/library/journal/1P3-2532870891/the-2008-russian-cyber-campaign-against-georgia>. Accessed 1 Dec 2015
- ⁶³ Paul J. Saunders, "Why America Can't Stop Russia's hybrid warfare," *National Interest* (June 23, 2015): 1-2. <http://nationalinterest.org/feature/why-america-cant-stop-russias-hybrid-warfare-13166>. Accessed 30 Nov 15.
- ⁶⁴ Carolina Vendil Pallin & Fredrik Westerlund, "Russia's War in Georgia: lessons and consequences," *Small Wars & Insurgencies*, 20:2, 415.
- ⁶⁵ Roger N. McDermott, "Russia's Conventional Armed Forces and the Georgian War," *Parameters*, XXXIX: 72. Accessed 8 December 2015.
- ⁶⁶ Ruslan Pukov, "The Tanks of August" (Moscow Center for Analysis of Strategies and Technologies, 2010), 100.

⁶⁷ Janis Berzins, *Russia's New Generation Warfare In Ukraine: Implications For Latvian Defense Policy*, National Defence Academy of Latvia Center for Security and Strategic Research, April 2014: 4.

⁶⁸ *Ibid.*, 5.

⁶⁹ Philip Karber, *Lessons Learned from the Russo-Ukrainian War*, Johns Hopkins Applied Physics Laboratory and Army Capabilities Center (6 July 2015), 44.

⁷⁰ Amanda Macias, *A Detailed Look At How Russia Annexed Crimea*, *Business Insider* (24 March 2015).

⁷¹ *Strategic Coercion: Concepts and Cases*, edited by Lawrence Freedman (Oxford University Press, 1998).

⁷² Bret Perry, *Non-Linear Warfare in Ukraine: The Critical Role of Information Operations and Special Operations*, *Small War Journal* (14 August 2015).

http://smallwarsjournal.com/jrnl/art/non-linear-warfare-in-ukraine-the-critical-role-of-information-operations-and-special-opera#_edn4. Accessed 8 December 2015. Karber has a 5th level of intensity that is not relevant to this paper, Negotiated Manipulation.

⁷³ Nicole Gaouette, "Sanctions-Strapped Russia Outguns the U.S. in Information War," *Bloomberg L.P.*, (2 April 2015). <http://www.bloomberg.com/politics/articles/2015-04-02/sanctions-strapped-russia-outguns-the-us-in-information-war> . Accessed 4 December 2015.

⁷⁴ *Ibid.*

⁷⁵ Kenneth Geers (Ed.), "Cyber War in Perspective: Russian Aggression against Ukraine, NATO," CCD COE Publications, Tallinn 2015, 55.

⁷⁶ Sergey Minasyan, "'Hybrid' vs. 'Compound' War: Lessons From The Ukraine Conflict," PONARS Eurasia Policy Memo No. 401, November 2015: 4.

⁷⁷ *Ibid.*, 5.

⁷⁸ General of Army Valeri Gerasimov, Chief of the General Staff of the Armed Forces of the Russian Federation. See: <http://www.vpk-news.ru/articles/14632> for original article.

⁷⁹ *Ibid.*, 2.

⁸⁰ *Ibid.*, 4.