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Assessing Vostok-2018

Michael Kofman

Russia's annual strategic exercises offer an important window into the evolution of the Russian armed forces, their ability to mobilize, deploy, and command large groupings of forces, together with the latest capabilities. The recently held Vostok-2018 (September 11-17), which as the name suggests focused on the Russian Eastern Military District, offered an important deviation from the typically held command-staff strategic exercise which the Russian General Staff organises every September. In a standard exercise, an operational-strategic command (OSK) takes in forces from other districts and fields them in a particular strategic direction, organizing a hypothetical fight together with the General Staff in the theatre of military operations (IVD). But in 2018, Vostok was changed into strategic manoeuvres. Under this framework two military districts, Central and Eastern, divided into opposing forces to conduct manoeuvres in different strategic directions. China's official involvement in the annual exercises, which is a first, made the event politically significant in Sino-Russian relations, and a mutually agreed upon political signal sent by both sides to international observers.

Unlike previous such exercises, Vostok-2010 and 2014, this event represents more of an "in-progress report" for the Russian armed forces. When he was first appointed Chief of General Staff in late 2012, Valery Gerasimov was dismayed with the Russian armed forces inability to move across the country and effectively engage in drills or training events at ranges distant from their home garrisons. The recently reformed military had become a permanent standing force, but it had little experience or credibility in being able to deploy to Russia's borders in the event of conflict and successfully engage an adversary. The high tempo of snap readiness checks, drills, joint exercises, together with modernization investments under the State Armament Program, were meant to turn the Russian armed forces into a combat credible force, able to effectively deter large scale conventional conflict. Nowhere is this challenge more difficult than the Russian Far East, a vast region that is sparsely populated and lacks much transportation infrastructure.

Vostok-2018 was also as an opportunity for political signalling, featuring a large review of forces and photo opportunities similar to that of Zapad-1981. Russian pronouncements that the exercise would feature 297,000 soldiers – which would have been fully a third of the entire Russian military – was meant to underscore the state's resilience and undiminished military potential in the face of political and economic pressure from the United States.

In reality, the exercise was rather smaller, probably not exceeding 50,000 participants in the actual exercises, with most of the major events taking place at the Tsugol training range. The official numbers given likely represent the total forces on paper from the Central and Eastern Military Districts: often the Russian General Staff will count an entire brigade or division as having participated even when their contribution is only one unit. A large number of units were raised on alert on August 20th, in advance of the exercise, but few had any connection to the actual events. Official statements by Russian commanders also suggest that the exercise was much smaller in reality: Colonel General Alexander Lapin, commander of the Central Military District (CMD), stated that 7,000 troops participated at Tsugol from his district. Together with aviation and airborne units sent, it is unlikely that the CMD's involvement exceeded 15,000-20,000 soldiers.

The reason for dramatically inflated figures for every Vostok exercise is straightforward: Moscow is unconcerned that announcing fantastical figures would engender a security dilemma in the region. Moreover, political agreements governing military exercises in Europe such as the Vienna Document have no jurisdiction east of the Ural mountains. As such, the Russian leadership can count unit participation however it likes, without stoking NATO fears. At the same time, including China in the exercise was a prudent measure to alleviate any inherent suspicions Beijing might have that these strategic manoeuvres were aimed at them, or a manifestation of Russian security apprehensions. Since most of the exercise events took place in Zabaykalsky Krai, a land-locked region bordering China and Mongolia, this was an important precaution. Moscow's effort at engaging the Chinese military is quite clever, intended to foster greater partnership, engendering stronger military ties, while at the same time demonstrating to their strategic partners the capability of the Russian armed forces in an effort to bolster coercive credibility.

Vostok featured elements of both contact and non-contact warfare, from a series of attack, defence and flanking manoeuvres by battalion tactical groups, to blunting massed aerospace attacks, and effecting precision strikes

against critical infrastructure at operational depths. Going into the exercise Valery Gerasimov said he wanted to see non-standard solutions practiced, code for the Chief of General Staff not wishing to see Russian units arrive at ranges to execute pre-rehearsed manoeuvres, i.e. put on a five-day bit of military theatre for him and Defence Minister Sergey Shoigu. It remains unclear whether or not he got what he wanted, but Shoigu indicated this type of exercise might be held every five years, pegged to implementation of the State Armament Program, the implication being that strategic manoeuvres would be used as a form of in-process review and reflection on the current state of the Russian armed forces.

Although every strategic exercise is designed to be a stress test for the Russian armed forces and supporting civilian agencies, Vostok had four principal areas of focus: logistics, mobilization, command and control, and tactical innovation. Emphasis was placed on the logistics, combat service support, and combat engineer components of the Russian armed forces. Command and control of forces in combined arms manoeuvre, along with integration with other services remains a prominent feature, as does experimentation with the force structure itself. The Russian military continues to work on integrating recon-strike and recon-fire contours, connecting targeting in real time from drones, soldiers or aircraft, with artillery fires at the tactical level or strike assets distributed among the services. There was also a mobilization component aimed at taking in reservists to help fill out combat service support units and integrating civilian authorities into the exercise under the model that 'everyone fights'.

Vostok was spread across five combined arms ranges, four air and air defence ranges, and several coastal regions in the Russian Far East. Ground force exercises featured large attacks with artillery and MLRS systems with targeting and battle damage assessments done via drone systems. River fording, bridging, masking of units with smoke and aerosol were all parts of the exercise to simulate the logistical difficulty of getting to the battlefield while under fire. Engineers also setup false targets, inflatable dummy units, practicing various forms of deception on the battlefield. The strategic nuclear component of the exercise involved flights by Tu-95MS bombers, which cut through the U.S. air defence identification zone, earning a free F-22 fighter escort before returning to fire cruise missiles at target ranges in Russia.

Efforts at innovation could be seen in the attempt by the airborne forces to create a new type of air assault detachment, together with an airmobile reserve based on heavy transport helicopters and light vehicles. Colonel General Andrei Serduykov, commander of Russia's airborne forces, was trying new things this year by assembling battalions from three independent air assault brigades to practice large scale heli-borne attacks, some involved as many as 45 Mi-8 helicopters and two large transport Mi-26 helicopters in the action. The Russian airborne also conducted a sizable parachute drop, using 25 transports to deliver 700 soldiers and 51 BMD infantry fighting vehicles, while specialized light utility units were brought in as a ready reserve for the action. Russia's Northern Fleet similarly brought a new force mix, including naval infantry and specialized units from its Arctic brigade, some of which conducted a raid in depth across as much as 270km of terrain.

China's participation included some 3,200 soldiers mounted on tanks, infantry fighting vehicles, APCs and self-propelled artillery, together with 6 aircraft and 24 helicopters. Interactions between Russian and Chinese forces at the tactical level, assuming any serious collaboration even took place, seemed of lower import than the utility of this event as a form of political signalling. China's Minister of Defence, Wei Fenghe, highlighted the importance of Sino-Russian cooperation at the operational and strategic level, while Shoigu announced that they had agreed to hold exercises regularly in the future. In a subsequent interview, Shoigu referred to the Chinese participants as allies. While it is difficult to interpret Vostok, or any other exercise, as a proof of a budding Sino-Russian entente, it is clear the two countries seek to demonstrate that they do not see each other as a threat.

While Western policymakers typically describe alliance formation as some sort of state-level dating, where relationships are formed based on trust, common values, similar political systems and so on, in reality this has little semblance to the history of how powers actually form alliances. Alliance formation behaviour takes place as a form of balancing behaviour in response to threats, therefore the only logical catalyst for a Sino-Russian entente is the threat posed by the United States, and the extent to which the two countries see their respective challenges as worth the risk and liability of closer cooperation. Having identified both countries as great power competitors in the National Defense Strategy, and practical measures to intensify the confrontation in economic and military domains, Washington has taken important steps to further enhance cooperation between its disparate adversaries.

Vostok-2018 strategic manoeuvres illustrate that while much progress remains to be made in improving the capability and capacity of the Russian armed forces, the military as a whole is increasingly greater than the sum of its parts, and certainly much improved from its relatively raw state in 2012-2013. Meanwhile Russian policy has become rather more deft in managing their 'strategic partnership' with China, seeking to leverage military events as part of a broader effort to slowly and incrementally pull the latter into a balancing entente against the United States.

Commercial Interests Underpin Rosneft's Foreign Expansion in Refining

Nazrin Mehdiyeva

Rosneft has emerged as Russia's biggest oil producer and is seeking to increase its footprint globally through the acquisition of upstream and refining assets around the world. Rosneft's investments, while geographically dispersed, are not politically dictated transactions even though they often happen to overlap with and reinforce the state's political preferences.

Rosneft's foreign partnerships and acquisitions have been aimed at supporting the company's growth strategy and diversifying the assets portfolio both geographically and across the hydrocarbons value chain. Until very recently, Rosneft was not diversified enough to be considered a multinational company. According to a 2017 report produced by the Russian Higher School of Economics, Rosneft's foreign assets accounted for only 1.1% of its total assets and less than 2% of its employees were based abroad.

The company's five-year strategy, known as Rosneft-2022, presented in December 2017, envisages growth in annual production by 30 million tonnes of oil equivalent, net of acquisitions, by the end of the period. It also highlights a change in the basket of products in favour of high value-added output, the signing of long-term contracts, optimisation of capacity utilisation and improvement of the level of integration with the company's refineries. Rosneft's international projects will feature prominently in enabling the implementation of the strategy.

While the company's diversification abroad has been increasingly important since its public listing in 2006, non-Western projects and acquisitions have increased in frequency since the imposition of Western sanctions in 2014. The shift has caused many observers to assume that Rosneft's international projects have been driven by political considerations or even dictated by the Kremlin. Such assumptions are false.

Rosneft has been consistent in moving up the value chain and growing its refining capacity. It emerged as Russia's biggest refiner and has been adding downstream assets to its international portfolio since 2011. However, if prior to 2014, priority was given to the European market and partnerships with IOCs, the post-2014 period has witnessed a growing emphasis on Asia and cooperation with its NOCs.

In May 2011, Rosneft completed the acquisition of a 50% stake in the Ruhr Oel joint venture in Germany, becoming a partner with BP. The acquisition made commercial sense because Rosneft received access to the downstream end of the European market. At the time of acquisition, about half of crude volumes for the Ruhr Oel refineries was Urals oil which was transported from Russia through the Druzhba pipeline. As such, the acquisition has not only provided Rosneft with a stable long-term outlet for its oil but also opportunities to increase the volumes of the oil sold to the German refineries. It has also enabled Rosneft to emerge as an active player in producing and selling high value-added products on a profitable German market.

In January 2016, BP and Rosneft announced that their JV in Germany would be dissolved, and assets restructured between the partners, with Rosneft increasing its stakes in three of Ruhr Oel's four refineries. Consequently, Rosneft has acquired more than 12% of Germany's refining capacity, becoming the country's third largest oil refiner with a total throughput of 12.5 million tonnes per year. Rosneft has also set up its own business in the country through a new subsidiary, Rosneft Deutschland.

Rosneft aims to expand its presence in the segment of special products, selling jet fuel and marine fuel produced by its German refineries to the country's major airports and sea ports. Historically, one of the factors negatively affecting Rosneft's EBITDA per barrel has been high transportation costs associated with the long distances that the company's products travel to reach the end market. The fact that the German refineries have favourable locations to supply the target consumers will help increase commercial returns for Rosneft and its shareholders.

Furthermore, Rosneft has entered Germany's motor road construction market with Alfabit, a polymer modified bitumen product based on Rosneft's own technology and adapted to the requirements of the local market. The first deliveries to German customers were made by Rosneft Deutschland in late May, using bitumen from PCK Refinery, in which Rosneft now owns 54%.

Rosneft is actively seeking to diversify across the value chain into the premium refined products and petrochemicals segments of the market. This development path is not unusual for an oil company and is not politically dictated by the Kremlin; many global majors and national oil companies have followed a similar trajectory which enabled them to grow and establish themselves internationally.

Rosneft's attempts are not limited to Europe, and, following the imposition of Western sanctions, the company has intensified its activity to gain access to Asian downstream markets. In Asia, like in Europe, Rosneft prefers direct long-term supply contracts with customers to guarantee the deliveries of crude and petroleum products. For instance, the first forays into the Indian market, which came months after the imposition of Western sanctions, saw the signing of a long-term oil supply contract to the Vadinar refinery. It stipulates supplies of a total of 100 million tonnes of crude over a period of 10 years.

The value that Rosneft assigned to the Asian market is obvious from the fact that it has bid and won against Chinese and Saudi investors to purchase stakes in prized refining facilities in Asia. Essar Oil, the acquisition of which was completed in August 2017, is one of these facilities. Rosneft initially sought to purchase a controlling stake in Essar Oil (up to 74%) but the US sanctions led the Indian owners to offer it 49%, with Trafigura and United Capital Partners, both known for their close ties to Rosneft, purchasing another 49%. At \$12.9 billion, the acquisition of Essar Oil is the biggest single foreign acquisition in India and the largest outbound foreign acquisition by Russia.

Essar Oil is a commercially sound acquisition. It operates Vadinar, the second biggest private refinery in India, the world's third largest oil consumer. Commissioned in 2008, Vadinar has undergone several upgrades, which have increased its capacity to the current 20 million tonnes per year, improved its Nelson Complexity Index and enhanced its conversion ratio. The refinery is now able to process higher quantities of heavy and ultra-heavy oil as well as crudes with higher total acid number, enabling it to accept oil from a wider range of sources. Vadinar's margins have remained continuously above industry benchmarks. In its annual 2017 report, Rosneft describes the refinery as "one of the most advanced" in the Asia-Pacific region.

Vadinar currently accounts for about 9% of India's refining capacity but Rosneft plans to more than double its capacity to 45 million tonnes a year. Rosneft is not alone in undertaking large-scale investment in refining; in a February 2018 report, the Indian government anticipated an increase in the country's refining capacity by 77% on the current level over the next 12 years to meet the growing demand. The bulk of demand growth will come from the transport segment of the market in part because a growing number of the huge population are buying their first cars. In line with these forecasts, Rosneft and partners intend to increase the number of Essar Oil's filling stations, bought as part of the transaction, from the current 3,500 to between 5,000 and 6,000. Rosneft also intends to build a petrochemicals plant to meet part of India's expected demand surge for finished petroleum products.

Finally, Essar Oil operates a deep-water port, the location of which will help Rosneft optimise costs when supplying other countries in Asia. Thus, with the acquisition of Essar Oil, Rosneft has received access to a large, previously unserved Indian market and secured a strategic foothold for Asian exports, which will allow it to grow its presence in the wider region. Essar Oil is therefore not a political acquisition although it advances the Kremlin's goals of promoting Russia's energy positions in the Asia-Pacific region, strengthens political bonds with India and provides a platform for Russia to grow its influence in the region.

The deterioration of relations with the West post-2014 gave urgency to Rosneft's plans to enter the Asian market. This led to the signing of the long-term supply contracts with India followed by the acquisition of Essar Oil. A key significance of the deal is that it marks the first acquisition by Rosneft of *operational* downstream facilities in the Asia-Pacific region. Yet the company has also announced deals with China and Indonesia to build refineries in Tianjin and Tuban, respectively. Investment in Tuban refinery and petrochemical plant alone is estimated at \$15 billion but these facilities are being built from scratch and will take several years to complete.

As with the Indian market, the entry into Indonesia makes commercial sense while also reinforcing Russia's political objectives. In Indonesia, domestic oil consumption is twice as great as its domestic production, and the country has been an importer of Russian oil and oil products manufactured in South Korea and Singapore. With the construction of the planned refining capacities, Rosneft will be able to transport crude directly to its refinery in Tuban for processing. It will then sell the products on the local market and export to other Asian

states. Receiving Russian oil directly will, in Sechin's words, increase the synergies and economic efficiency of oil refining in Indonesia.

In addition to securing outlets for its own oil, Rosneft has put itself in a favourable position where it can expand its oil trading operations and seek more prepaid supply deals to feed its growing network of international refineries. Indeed, it is currently planning to open a trading arm in Singapore.

Rosneft's actions in the downstream segment of the market have been commercial. They have required and will continue to require large investments, but these should be expected to pay off and support the company's growth strategy in the mid and long term. In one important way, Rosneft's strategy now resembles that of Saudi Aramco: it invests in refineries to create baseload demand for its crude output. By locking down control of downstream assets, Rosneft is ensuring a secure outlet for its oil, especially in times of glut and low oil prices.

Furthermore, Rosneft has been steadily moving up the value chain in the global oil industry and has been successful at establishing itself in the world's fastest growing markets where it previously had no presence. Ironically, the Western sanctions have enhanced the convergence of interests between Rosneft and the Russian state and pushed the company to make costly investments which have, in turn, served the Kremlin's long-proclaimed goal of pivoting to Asia. The convergence of Russia's political and economic interests has led to actions which have enhanced Russia's resilience to sanctions.

Measuring Russian Economic Power

Richard Connolly

Recent economic performance

Russia's slow recovery from the recession of 2015-16 continued in the first half of this year. Much news coverage of Russia's economic fortunes has focused on the negative influences facing the economy, including intensifying U.S. sanctions, and the depreciation of the ruble that accelerated over the summer amidst wider turbulence in emerging markets.

Nonetheless, economic growth has accelerated as the year has progressed. The price of oil, Russia's primary source of export revenue and tax receipts, is the most obvious driver of this improvement in fortunes. Hovering within a range of around \$70-80 per barrel (Brent), this increase has caused projections for federal tax receipts to be revised upwards, with corresponding improvements in projections for federal government borrowing in the foreseeable future. This was accompanied by a gradual reduction in interest rates, notwithstanding the recent 0.25% increase announced on September 14th.

The relatively high price of oil, alongside a modest increase in the volume of oil production, as well as by growing extraction and export of gas, has driven the rising value of exports (\$211 billion in the first five months of the year cf. \$353 in the entire of 2017). In turn, rising export receipts have boosted domestic consumption. Industrial production is also growing at the fastest rate since 2012 (3.1% y-o-y in the first half of the year), with manufacturing expanding at over 4% during the same period.

The most recent data for the first half of 2018 suggest, therefore, that economic performance is improving across the majority of key economic indicators. GDP growth in the second quarter grew at a year-on-year rate of 1.8%, up from 1.3% in the first quarter. According to the latest forecast from the Ministry of Economic Development, this puts Russia on track for an annual growth rate of 1.7% (cf. 1.5% in 2017), a rate of growth similar to that forecast from the Central Bank of Russia and the IMF.

This rate of expansion is consistent with the broad consensus view that Russia's maximum rate of annual economic growth, given existing structural constraints, such as the availability of labour and the prevailing institutional framework, is around 1.5-2%. In short, the Russian economy is growing roughly in line with expectations, despite the challenging external environment.

Change amidst stagnation

Although the overall rate of growth is far from spectacular, this conceals a marked improvement in a number of areas of the economy. Two observations stand out.

First, though the overall pace of investment growth has slowed in 2018, patterns of investment at the sectoral level indicate that a significant reallocation of resources is underway. Notably, after seeing its share of total investment rise from around 19% 2014 to over 28% in the first half of 2017, investment in oil, gas and other extractive industries considerably slowed. This slowdown was caused by the completion of the final stages of the Yamal LNG project and is a welcome sign for those hoping that Russia will experience economic diversification in the future.

A rebalancing within total investment has also resulted in the share of investment in manufacturing activities reaching its highest level for over a decade (i.e. over 18% of total investment). The fastest growing sub-sectors were chemicals, transport equipment, food processing, and machinery.

Second, similarly uneven patterns are evident in manufacturing output. Again, the light industry, food processing, chemicals and machine-building sectors all grew at a faster rate than overall manufacturing.

These developments illustrate the dangers of relying purely on broad indicators of development. Despite the near stagnant headline growth rate, considerable change seems to be underway, with finer-grained data hinting at a significant reallocation of capital and output across the Russian economy.

So the Russian economy continues on its path of recovery from the recession of 2015-16, but the nature of that recovery is uneven and fragile. According to the latest Minekon forecast, growth is likely to slow in 2019 as new tax rises take place, and then accelerate into the early 2020s as the new government's economic agenda reignites investment and with it growth. That is the official plan. This plan is contingent, however, on global economic pressures allowing Russia to do this in peace: the spectre of increasingly draconian U.S sanctions amidst a wider emerging market slowdown all suggest this assumption may prove to be optimistic.

Growth in line with the Minekon projections represents the minimum required to achieve the objectives set out by president Putin in his socio-economic agenda for his current term in office. This agenda states that the annual rate of growth of the Russian economy should reach or exceed the global rate of GDP growth by 2024. To do so will ensure that Russia's share of global output should begin to grow again, or at least not shrink any further.

But how important will achieving this objective be? If Russia fails to achieve these ambitions, will the Russian economy diminish in importance to the global economy? If so, will Russia's political weight shrink with it? To answer this question requires an understanding of where Russia is now: is it one of the world's major economies? Or is it merely of peripheral importance to the global economy?

How big is the Russian economy?

Surprisingly, it is possible to find considerable disagreement over what is seemingly a simple matter of fact. This confusion is caused by which method one chooses to convert the GDP of any country in terms of its national currency (in this case the ruble) into a common currency (in practice, usually the U.S. dollar).

It is perfectly acceptable, for instance, to state that, at \$1.6 trillion in 2017, the Russian economy is not even in the world's ten largest economies, instead being roughly comparable in size to Australia. This is true if GDP is measured at prevailing market exchange rates, i.e. using the current ruble/U.S. dollar exchange rate. But it is equally acceptable to state that, at \$4 trillion, the Russian economy is the sixth largest in the world, only slightly smaller than Germany's (\$4.1 trillion). This statement is true if Russian GDP is converted into dollars at purchasing power parity (PPP) exchange rate.

Much, then, depends on the choice of measure. While the market exchange rate conversion is intuitively easy for most non-economists to understand, the PPP method of conversion is not so easily grasped.

To understand PPP, *The Economist* magazine's widely known "Big Mac" index is often used to illustrate how living costs vary across the world, even for purchasing near-identical products. If a Big Mac is sold for 120 RUB in Moscow and \$5 in Washington, D.C, this would suggest a PPP exchange rate 24 RUB to the dollar. After all, identical products are being sold in both Moscow and Washington.

But the market exchange rate often differs considerably from the rate suggested by a PPP calculation. Today, the RUB/\$ exchange rate is closer to 70 RUB to the dollar. The reason for this variation is usually to do with the differences in costs of inputs required to make the Big Mac: in Russia, input costs (e.g. labour, ingredients for burgers, and so on) are lower compared with those in the US, which means that, on average, the ruble can buy more goods and services in Russia than might be expected if using the prevailing market exchange rate.

Of course, any meaningful comparison of prices across countries should be based on a wider range of goods and services than a simple hamburger. This represents a mammoth statistical task. Measuring the relative price of, say, a Su-57 and an F-35 would require knowledge of a multitude of input prices, including labour and components, many of which may have been imported and therefore embody higher relative costs from other countries. Nevertheless, the UN and IMF have made efforts to do just this, and as a result, PPP 'weights' are available that allow analysts to make estimates of the size of an economy that adjusts for differences in living costs.

Today the IMF calculates an implied PPP exchange rate of 23.40 RUB to the dollar – note that this is nearly identical to the Big Mac example given above. Given the actual market exchange rate is nearly 70 RUB to the dollar, this would suggest that the Russian economy is nearly three times as large as that implied by the market

exchange rate. While the discussion so far may seem arcane for non-economists, there are good practical reasons for knowing which measure is appropriate to use, and thus to better understand Russian economic power and capabilities.

Generally speaking, market exchange rates are the logical choice when financial flows across borders are being measured. For example, the current account or trade balance – both of which measure the funds entering or leaving a country – represent flows of financial resources across countries. It is appropriate to use the market exchange rate to convert these flows into dollars when aggregating across regions or calculating the global current account discrepancy.

But for other variables, it is often more appropriate to use PPP-based measures. For example, while market-based rates are appropriate for measuring the value of internationally-traded goods, non-traded goods and services tend to be cheaper in lower-income countries, especially large, populous countries like Russia: the price of an Uber taxi ride of the same distance is higher in London than in Moscow, for instance. This is because wages tend to be lower in lower-income countries, and services such as Uber, are relatively labour intensive. Any analysis that fails to take these differences into account will underestimate the purchasing power of consumers in lower-income countries.

It is possible to use PPP-based measures to estimate other economic variables beyond the simple size of an economy. One variable that should be measured using PPP is Russian military expenditure. This is often expressed in current dollars in widely-known publications by SIPRI and IISS. Thus, according to SIPRI Russia spent around \$66 billion on the military at market exchange rates in 2017. By comparison, the UK spent \$47 billion in the same year. Yet Russia maintains armed forces of around a million servicemen compared with a figure of fewer than 200,000 in the UK. Russia also procures and maintains far larger volumes of equipment across the whole spectrum of military production, including intercontinental ballistic missiles, nuclear-powered submarines, and state-of-the-art helicopters and fighter aircraft. And it regularly conducts major military exercises and operations.

Maintaining and equipping such large and capable forces only makes sense when we remember that most of the costs borne by the Russian state are denominated in rubles and not dollars. Using PPP-based measures to calculate Russian military expenditure would yield a figure of closer to \$200 billion, a sum that makes much more sense given the wide range of military goods and services bought by the Russian state each year. And this is because, quite simply, a ruble buys relatively more military output in Russia than a dollar does in the U.S. This simple observation should be borne in mind when seeking to understand how Russia's sluggish and seemingly stagnant economy can support such a large and capable military.

The Strategic Priorities in Russian Military Thinking

Andrew Monaghan

The Euro-Atlantic security community's thinking about Russia remains greatly influenced by interpretations of an article signed by Valery Gerasimov published in 2013 entitled "The Value of Science in Foresight". This has led to a pronounced emphasis in the Euro-Atlantic debate on asymmetry in Russian military thinking, particularly in terms of the greater roles of non-military means such as malign influence and political warfare, constant (dis)information and propaganda war and cyber attack.

Such understandings of Russian military thinking and activity have been criticised not only by Western subject matter specialists, but by the Russians themselves. Gerasimov himself, for instance, has stated that while 'so-called hybrid methods' are an important feature of international competition, it is 'premature' to classify "hybrid warfare" as a type of military conflict as US military theorists are doing. And other Russians note that such terms do not match Russia's military terminology – an important point, since Russian military theory has its own precise vocabulary.

The so-called "Gerasimov doctrine" is, therefore, a myth. Yet much can be learnt about the evolution of Russian military thinking from a careful reading not only of Gerasimov's 2013 article, which reflects on the questions "what is modern war?" and "for what should the armed forces prepare?", but also of his other pronouncements. His speeches are often published in articles in *Vestnik Akademii Voennykh Nauk* and, albeit sometimes in abbreviated form, *Voenna-Promyshlenny Kurier*. Taken together they offer important insight into Russian military thinking, illuminating both a series of long-running debates in Russian military theory as the defence and security establishment attempts to come to grips with the changing character of war, and also the defence community's priorities and how these are being transformed into practical policy. Three points stand out: the influence of the past, the ongoing importance of armed force even in hybrid competition, and the increasing dynamism of military action.

The Influences of the Past

The important historical references that Gerasimov makes are often overlooked – but they provide essential context to the messages that he is sending. These reflect, for instance, the ongoing significance of the experience of World War II in contemporary Russian defence and security thinking, illustrated, in a speech by Gerasimov in 2015 on the experience of strategic leadership in that war and the organisation of a unified management of the country in contemporary conditions. They also indicate the ongoing importance of the rich international and Russian and Soviet theoretical heritage: Gerasimov cites, for instance, not only Carl von Clausewitz, but also Alexander Svechin and Georgii Isserson, who were among those officers purged in the 1930s but made substantial contributions to thinking about strategy and operational theory, including deep operations and deep battle.

In his articles and speeches, Gerasimov also points to lessons that can be drawn from late Soviet and post-Cold War era wars including Afghanistan, the 1991 Gulf War, the war in Kosovo in 1998-99, the Russo-Georgia in 2008, and importantly – and increasingly emphatically – the war in Syria.

These references echo long-running debates in the late Soviet period through the 1990s about the character of future war and the influence of information and technology on the conduct of warfare and the changing ratio of force, command and control and logistics. These also included the emergence debates about "non-traditional" wars, between those who argued that improvements in information and technology could create the context for waging war and achieving political and strategic goals without a shot being fired, and those who argued that regardless of information war, Russia would be unable to escape the dangers and problems of combat and, indeed, whether such "non-traditional" wars had a future or were just a fleeting phenomenon. Such references provide the intellectual roots of the arguments, and familiarity with them is essential to decoding the explicit and implicit messages.

Hybrid Methods and the Importance of Armed Force and Territorial Defence

Gerasimov did indeed, of course, write about the importance non-military means, noting in his 2013 article that the role of non-military means of achieving political and strategic goals has grown, pointing to the broad use of

political, economic, humanitarian, informational and other non-military measures, applied with the protest potential of a population. He returned to this theme in 2016 in his article “On the Experience of Syria”, in which he re-stated the point that in contemporary conflict the emphasis is shifting towards the integrated employment of such non-military measures seeking to undermine the military and economic potential of a state, including through the application of informational and psychological pressure and active support for internal opposition. He has thus suggested that ‘if such methods can be used without the overt employment of military force, then classic combat operations without hybrid operations no longer exist’.

But this raises two important further questions, and important aspects of this have been underplayed or overlooked in the Euro-Atlantic debate. First, despite his acknowledgement of the growing importance of non-military measures in conflict, Gerasimov has repeatedly stressed the continuing importance of armed force as an element of conflict. On one hand, such non-military measures are put into practice with ‘reliance on military force’, he states.

And, on the other, the attempted implementation of such ‘so-called hybrid methods’ in Syria, he suggested, was thwarted by Russia’s entry into the war on the side of President Assad. Russia’s involvement, of course, has been characterised by the significant deployment of violent force, and Gerasimov has emphasised that the Syrian campaign has illustrated Russia’s growing combat capabilities. Thus, as he stated in his article “The World on The Brink of War” in 2017, analysis of the characteristic features, peculiarities and tendencies in development in contemporary warfare indicates that they all share a common quality: the use of military force’.

Second, while Gerasimov has stated that the armed protection of a state is no longer merely limited to military measures, he has also been clear that growing of importance in such non-military measures emphasises the urgent need for effective territorial defence. To defend the population, strategic sites and communications, he argued in 2013, requires the complex involvement of all security and law enforcement forces of a country and the management of these structures. He again returned to this theme in 2016, stating that such challenges required the consolidation of efforts of practically all agencies of power.

The practical consequences of these requirements for territorial defence were the establishment in 2014 of the National Defence Management Centre and the preparation of the Defence Plan 2016-2020 which, combined, allow all the potential resources available to Russia to be systematically employed, and state wide measures adopted. While responses may not be limited to military means, therefore, this includes law enforcement and internal security agencies and forces, such as the newly formed National Guard, Ministry of Emergencies and the FSB’s Border Guard Service, all consolidated – with the Ministry of Defence – under a Defence Plan and Centralised Command.

Blitzkrieg in the Twenty-First Century

Running alongside Gerasimov’s discussion of non-military means in conflict is an extensive discussion of military means of conducting war. Thus, in 2013, he noted that military actions are becoming more dynamic, and the role of mobile, mixed-type groups of forces acting in a single intelligence space because of the new possibilities of command and control have been strengthened. Referencing Operation Desert Storm, he emphasised the US concepts of Global Strike and how concepts of global strike and global missile defence have now been worked out, foreseeing the defeat of enemy objects and forces in a matter of hours from almost any point on the globe.

He returned to this theme in the article “On the Experience of Syria”, stating that the US has developed and is implementing the concept of prompt global strike, and the quick establishment in any region of inter-service groupings capable of destroying an adversary in joint operations in different operational environments. ‘Exerting remote, non-contact impact on an adversary via the massive employment of high-precision and long-range means of engagement from the air, sea and space is becoming the chief means of achieving goals’, he stated, suggesting that this is a ‘distinctive twenty-first century blitzkrieg’.

In many ways, this harks back to the earlier discussions of the 1980s and 1990s about the impact of long distance, contactless capabilities, about the roles of precision guided munitions and their use at the outset of a war to destroy the adversary’s own precision weapons as well as command and control, air defence and military formations, in effect the defeat of the enemy is conducted ‘throughout the entire depth of his territory’. Information plays an important role in this discussion, too, since he suggests that ‘new information techniques have enabled significant

reductions in the spatial, temporal and information gaps between forces and their control organs'. But this is the 'technical' aspect of information, used in support of combat effectiveness.

Thus, according to Gerasimov, the 'most important set of problems, requiring intense attention, is connected with perfecting the forms and means of applying groups of forces', and 'it is necessary to rethink the content of the strategic activities of the Russian armed forces'. This may be linked not only to Russia's attempt to modernise its armed forces, including the acquisition of long-range, high-precision weapons, but to his speech to the Defence Ministry board in November 2017 in which he noted the establishment of autonomous groupings of forces on strategic directions, and the significant increase in their combat capabilities.

Matching Russian Military Theory and Practice

Hung up on 'so-called hybrid methods' and Russia's non-military measures, the Euro-Atlantic community is missing much of the strategic development of Russian defence and security thinking. Gerasimov is arguing that role of the armed forces in ensuring Russian security is not diminishing but only being reinforced. His speeches and articles offer much to the careful reader, including the historical references and correct terminology that the Russian defence community uses, and thus both the keys to understanding the debate underway in Russia and reflections on the evolving relationship between theory and practice. An understanding of this is essential: while the Russian armed forces are in a period of experimentation and learning, in his speeches and articles, Gerasimov has been telegraphing not only the questions for debate, but also practical policy developments, including the establishment of the NDMC and autonomous combat groupings.

Review of Renz, B. *Russia's Military Revival*. Cambridge: Polity, 2018. Pb. Index, Notes. 978-1-5095-1615-5

Dmitry Gorenburg

It can be reasonably argued that over the last decade, the Russian government has had no higher priority than restoring its military as a potent force that can both strike fear into its adversaries and be capable of being used to achieve state goals in an armed conflict. In *Russia's Military Revival*, Bettina Renz sets out to explain the reasons for this focus on rebuilding its military. In doing so, she moves well beyond the common narratives that focus on improvements on hardware and training or, less commonly, on strategy and doctrine. Although an overview of all of those things is provided, the real focus is on the purpose of the revival, rather than its technical details or the means with which Russia is planning to fight.

In writing the book, Renz seeks to correct three misguided assumptions about the “timing, purpose, and scope” of Russia’s drive to rearm: 1) the idea that the drive to rearm signals a “paradigm shift” in Russian policy, 2) the notion that rearmament is being driven by “an expansionist and aggressive foreign policy”, and 3) the view that “Russian military capabilities now rival those of the West” (p. 11). The book is devoted to disproving these assumptions. In doing so, Renz shows that since Russia became an independent country in 1991, its government has consistently sought to maintain, use, and whenever possible strengthen the military instrument of its power. She also shows that despite significant improvements in capabilities in recent years, the Russian military remains far weaker than those of the West and Russia’s military power is not sufficient to “guarantee victory in all cases” or even to “create substantial new opportunities for the achievement of objectives that were not achievable before” (p. 12).

Renz focuses the first chapter of the book on countering the idea that Russia is pursuing an aggressive foreign policy. She argues instead that Russia’s foreign policy has four main drivers: great power status, sovereignty, imperial legacy, and multilateralism. Most critically, Russian foreign policy is driven by an effort to restore its great power status and to have that status recognized by the international community and by the leading powers in the international system. This recognition is necessary for Russia to achieve its second goal, of having a right to sovereignty in its decision-making. Russian understandings of sovereignty differ somewhat from those common in the West. Most importantly, “The Kremlin believes that its sovereignty to conduct internal affairs without outside interference can only be preserved if it can also pursue an independent foreign policy abroad” (p. 34). This linkage of the internal and external components of sovereignty, together with the fear that its adversaries are infringing on its sovereignty through regime change efforts, has resulted in a belief that a strong military is needed to secure Russian sovereignty. The belief that a sphere of influence is a sign of being a great power, together with an understanding of sovereignty as pertaining to great powers but not necessarily to smaller states, encourages Russian political elites to pursue the legacy of the Russian Empire and the Soviet Union by seeking to dominate its former territories in the “near abroad,” though generally without asserting direct territorial control. Finally, the Russian leadership sees the solution to problems in the international sphere in great-power multilateralism, a sort of renewed version of the 19th century Concert of Europe wherein the great powers work together to ensure international peace and security.

It is Russia’s perceived inability to convince other major powers, and especially the United States, of the benefits of this type of international system that has led its leaders to focus increasingly on ensuring their country’s security through unilateral means, including through the revival of its military and security forces, expansion of their use domestically and especially abroad, and the development and refinement of non-military and quasi-military means designed to achieve Russian foreign policy goals. The rest of the book is devoted to describing these developments, beginning with chapters on the reform and strengthening of the Russian military and on militarized components of other Russian government agencies.

No book is perfect, and these two chapters are arguably the weakest part of this one. The chapter on military reform begins promisingly, with a discussion of the origins of the reform effort, and generally seeks to contextualize the strengths and weaknesses of the reform effort. In doing so, unfortunately, Renz tends to overstate the constraints on Russia’s ability to carry out the reform and to strengthen its military. While this is not the place for a full discussion of these issues, I would note that the Russian military has in the last five years largely solved its manpower problem through a combination of decreased deferments for conscripts and

improvements in recruitment of professional soldiers. Recruitment should become even easier in the coming decade due to an increase in the number of draft eligible young men in the population.

Similarly, while economic problems and international sanctions have created difficulties for the production of new weapons over the last five years, Russia has largely weathered the storm without suffering an economic collapse and has found alternative sources, both domestic and foreign, for components that it used to import from European states. Finally, Russian military planners have impressed in how they have worked around the constraints imposed by defence industry gaps and financial limitations. For example, the Russian Navy has dealt with the shipbuilding industry's inability to provide it with new large ships in a timely manner by developing a strategy that focuses on the installation of small numbers of highly effective cruise missiles on a large number of relatively small ships. These ships can then be used to deter attack by threatening the adversary from the relative safety of enclosed seas where the ships can be protected by shore-based defence systems. This is not to negate the author's larger point that Western analysts face the risk of overstating Russian military prowess, simply to highlight that it is very difficult to achieve precision in the balance between overstatement and understatement.

The chapter on Russia's "second army" – the various agencies and ministries other than the Ministry of Defence that have armed formations under their command – suffers from a very different flaw. It falls into the descriptive trap, wherein the author spends numerous pages describing the various agencies and the forces they control, but without explaining their purpose. The reader would have been better served had the chapter cut out much of this description in favour of a more detailed set of explanations of how these agencies promote the themes that connect Russian military revival and Russian foreign policy, as spelled out in the rest of the book.

The last two chapters return to the book's core strengths, discussing situations in which Russia has used its military forces and developments in Russian military thought in the post-Soviet period. In both chapters, as in the book as a whole, the dominant theme is continuity. Renz shows that Russia's recent use of military power abroad comes from largely the same foreign policy sources as its actions in the 1990s. Similarly, she shows that the concept of warfighting that has been labelled hybrid warfare in the West has largely grown out of existing concepts, both in Russia/the Soviet Union and in the West, that have been extended based on new developments in technology and military thinking in recent years. The key point, though, is that these concepts do not provide a fool-proof winning formula for Russian aggression in the near abroad or elsewhere in the world.

Overall, *Russia's Military Revival* makes a convincing argument that Russia is not a 'revanchist' state that, "enabled by better military capabilities, is seeking to forcefully expand the country's influence in the CIS region and to confront the West in a bid for domination" (p. 157). Instead, the key takeaway from this well-written and cogently argued book is that Russian foreign policy goals have been largely consistent since the early 1990s, but that the change in Russia's relative power *vis-à-vis* its main competitors in the international sphere has resulted in the changes in foreign policy behaviour that we have observed over the last decade.

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