VISION IMPOSSIBLE? SOME ASPECTS OF THE CURRENT RUSSIAN DEBATES ABOUT THE MILITARY SCIENCES

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In 21st century military theory and doctrine, it is common to subdivide military capability into conceptual, physical and moral components. At least in theory, it follows that conceptual capability should be regarded as the crucial link between the physical and moral capabilities of a given military actor, as it concerns the ability of the actor to operationalise ideas about how to conduct modern warfare. Conceptual military capability can thus be defined as the sum of an actor's military know-how, scientific capacity and doctrine, which defines the expected ability of an actor to uphold an efficient language of military action, distribution and command.

The aim of this article is to highlight the specific current military debate on interaction between military knowledge and scientific capacity in the case of Russia. For all the recently reawakened interest in Russia's overall military capability, not least in the wake of the 2014 operations in Ukraine, there seems to be a curious emphasis on doctrine among Western observers and analysts. Consider for example one reaction to the most recent Russian military doctrine, which also emerged in 2014:

> Ultimately the doctrine is a restatement of global realities, **as Russia sees them**, but more focused on regional threats to Moscow's interests. It is characterised by defensiveness and insecurity, rather than a desire to chalk up the West as an enemy. At its core, the document leaves any would be Cold War warrior or alarmist disappointed. If anything, it combines Russia's long standing protests to Western behaviour, with **changes to Russian military thinking**, and potentially positive revisions in the country's nuclear posture. As such, if carefully scrutinised by Western policymakers, the 2014 Military Doctrine may serve to deflate existing fears of a return to the Cold War, and tamper

> prevailing worst-case thinking regarding Russia's intentions. (Kofman & McDermott 2015, author's bold)

The emphasis on doctrine begs political questions, particularly related to the current leadership of state in Russia, and there is no lack of commentary on the vagaries of Russian political steering (cf. Barany 2009, McDermott 2011, Hedenskog & Vendil Pallin 2013). But how relevant is the politics-of-scale question about a return to global cold-war structures, and to which countries? Admittedly, in Soviet military parlance doctrine was everything, and rightly analysed as such by Western observers (Glantz 1991). But does military innovation flow only from state policy and political leadership in Russia today? What can we learn from the other two-thirds of its conceptual capability, i.e. by studying how it organises military knowledge and provides it with scientific underpinnings? Focusing on doctrine and summarily disrespecting their innovative capacity in military terms, are we reading the Russians right?

This article taps into an ongoing research project at the Swedish Defence College in Stockholm, *Evolving Russian Military Capability*, to which the author is an affiliated researcher. Methodologically it can be read as research notes from a reading of the public debates between high-ranking Russian military officers and researchers, with examples presented and topical choices made at the discretion of the author of this article (McAuley 2005, Berg & Lune 2014). The period under consideration is 2008-2015, as the first year represents a fresh editorial start for the main public journal of the Russian Ministry of Defence, *Voyennaya Mysl* (henceforth: VM), also translated from Russian and published in the US as *Military Thought*. The journal has been analysed in the original language, and the responsibility for any errors concerning interpretation, translation or conjecture thus lies with the author. Currently, the research project is delving deeper into the relationship between changes in military thought and the general development of science in Russia, using a wide number of sources beyond VM The one-source approach here is chosen for the parallel purposes of research communication and illustration, but the references should be readily

available for checking by the interested reader, only with a slight time lag for non-Russian speakers.

The state-science nexus in contemporary Russia

There is a formal division of labour between the civil and military sciences in Russia. Civil research is guided by the influential Russian Academy of Sciences, under the auspices of which universities can still by and large be seen as mass teaching units. Military research is steered by the Military Scientific Committee, which is directly subordinate to the Chief of Staff of the Armed Forces. Hence, there are also similarities between the civil and military producers of knowledge and research in Russia since both spheres are elitist and detach research from teaching and education (Graham 1993, Russian Academy of Sciences 2014, Ministry of Defence 2014).

A significant difference between the civil and military sectors is that the state holds direct sway over scientific work on the military side through the Ministry of Defence and the Chief of Staff. This state of affairs is rarely or never debated in public or in the Russian media. Regarding civil research, however, state control is indirect and mostly exercised via budgetary measures. The Russian Academy of Sciences is relatively autonomous vis-à-vis state power. Another difference is that the corruption and conservatism of the academy and the consequences for the Russian system of higher education and research belong to a recurrent theme in the Russian public debate. So much so that international observers are struck by the force and intensity of arguments (cf. Kurilla 2014).

Loren Graham is the western scholar who has perhaps most persistently tried to follow the development of science in Russia. His studies range from the politically monolithic period before the fall of the Soviet Union (Graham 1993) via the confused and identity-seeking 1990s (Graham & Dezhina 2008) to the gradual consolidation of presidentialism and oligarchy in the 2000s (Graham 2013). Leaving the social sciences and humanities to the side, Graham finds that the prerequisites for

innovation and fresh thinking more often than not are lacking through the history of Russian science:

> Russian and Soviet science and technology stretches like an arch through four stages: a tsarist system that, while somewhat different from Western models, was clearly becoming more similar to the organisations of other industrialised nations; an early Soviet system in which administrators proudly sought to create a distinct system superior to those of other nations while selectively drawing on the latest foreign models; a late Stalinist and Brezhnevite period in which the disadvantages of the unique Soviet research system, despite its accomplishments in a few high-priority tasks, became increasingly evident; and a new reform era after 1986 in which administrators concentrated on trying to create a system similar to those in the capitalist nations their predecessors scorned. (Graham 1993, p. 196)

His extensive history of science research shows that political change has been the more or less constant driver of both positive and negative developments. Whereas the accumulation of knowledge in the fields of for example literature, history and art have been constantly subjected to authoritarian interference, particularly under the aegis of tsars and communists, the technical and natural sciences have been able to foster a certain relative autonomy by the power of mathematics and objectifying principles of study. This has also allowed researchers in the fields of science and technology a constant element of interaction with their western counterparts. For Graham, however, innovation is defined by the ability among scientists to operationalise research results into ideas and products that can be put on the market and, thus, contribute to the economic growth and welfare of a nation. Graham fails to find this type of innovativeness in Russia generally, but he also points to some areas that are difficult to interpret. In nuclear technology, space technology and computerization political control and steering have yielded positive results (Graham 1993, p. 201ff). Whereas the Soviet Union laid the foundation for Russian prominence in the fields of nuclear and space, however, it completely missed the beat regarding the early stages of computerisation.

In his latest book (2013), adding the contemporary Russian system of science to his observations, Graham takes recourse to the expression 'fits-and-starts' in his effort to describe the development of Russian science over time. He maintains that Russian universities, institutes and other scientific establishments continue to produce human talent. He also describes how the propensity for large-scale national projects aimed at organising and financing top notch research and science spills over into present-day Russia (p. 145-160). As a whole, he concludes, the Russian system of higher education and research continues to produce geniuses in a vacuum because of the blatant lack of political, social, legal and economic support for marketable innovation (p. 99-142). Again, he seems mystified by those scientific areas in which Russian science is able to compensate for what by western standards looks like its constant structural shortcomings. Still, Graham concludes, the Russian system is at the forefront of nuclear and space technology and by extension how knowledge in these fields contributes to the development of modern weapons. Also, with regard to the cumbersome experience from early computerisation, Russia seems to have been able to skip a phase in the evolution of computer hardware, compensating heavily by foreign import and rapid and expansive evolution in the development, design and application of software (p. 91-97). Thus, Russian science is competitive in at least three areas of significant military interest.

Five aspects of the current military-scientific debate

Looking at the military-theoretical debate in VM after 2008, more than 20 articles discuss the role and function of military science in Russia. In an effort to collate the different arguments and perspectives in 2013, colonel N.M. Vasilyev presents his opinion that the debate on military science has been too much focused on the delimitation of military research (VM 2013:3, p. 39-46). The reason, according to Vasilyev, is that too many influential individuals in the field have emphasised armed struggle and combat as the core of military knowledge. Instead, he says, broader social, technical, and scientific perspectives should be applied to military issues since no meaningful boundaries can be drawn between combat and other forms of struggle in modern warfare. The Russian organisation for war, he continues, is so much more encompassing than

just the Armed Forces, strategy is intermingled with general government policies and, above all, it is far from clear when acts of war begin or end (p. 44).The gist of Vasilyev's argument seems to be that Russian military science could do better not so much by emulating other scientific fields of research as by broadening the view of what actually constitutes modern war (p. 42).

Whether or not Russian military science has a core of knowledge, consisting of the prerequisites for and successful implementation of armed struggle, is major bone of contention from 2008 onwards. High-ranking military officers and academics argue over the issue in a debate which seems to be fuelled by the concurrent intensification of Russian military reform. The relative strengths and shortcomings of the military academic system are also debated in relative openness, some arguing that military science is in a crisis situation, particularly targeting the issue of whether or not a renewal of theories, approaches or methods is necessary to achieve the goals of the military reform policy aimed at 2020 (VM 2008:7,10,11; VM 2009: 5,10,12; VM 2010: 10, VM 2011: 9). Opinions about whether or not Russian military science is in a crisis, or not, however pale by the side of arguments concerning the character, role and function of modern warfare. In the following, the arguments are reduced to five different perspectives illustrative of how the debate has evolved over time.

First off, there is the idea that Russian military science is well organised and competitive in terms of knowledge, but that it suffers from an over-emphasis on the role of history and past experience for modern warfare. Major General I.N. Vorobyev and Colonel V.A. Kiselyev, both with doctorates in military science, are frequent participants in the debate. Their argument is that Russian military science is unique in having an extensive knowledge base in its historical experiences from war, but that it is currently over-emphasising the study of history, collective national experiences and relative successes and failures in wars of the past (VM 2013 p. 39-42). Vorobyev and Kiselyev express their firm belief that military history forms an integral part of overall military knowledge, but also that the intellectual primacy of historical perspectives in Russian military theory and higher education has evolved into an organisational

principle (p. 8). In their view, this has made the Russian system for military analysis vulnerable to oversight and partially blocked its capability to embrace the realities of 6th and 7th generation warfare.

A second position in this debate focuses on the demerits of Soviet military terminology and how it casts a long shadow over current military analysis in Russia. The moral importance and ponderousness of the Soviet military heritage is nowhere in question but, as illustrated by N.M. Ilichev, its conceptual and theoretical aspects are (VM 2013:9). In this light, the Soviet assumption that social and economic developments are linear and stable is particularly problematic, since present-day structures are inherently unstable. In an encompassing article, Vorobyev and Kiselyev also follow this line of thought, saying that the role of military doctrine therefore has changed and that the real challenge for current Russian military science is to observe some critical distance between how political and economic knowledge is transformed into military doctrine on the one hand, and on the other hand military science can make judgements about developments in the world (VM 2013: 8, p. 35-38). The authors go on to enumerate examples of how they see Russian military science as lagging behind the US and NATO because of its reluctance to incorporate technical, scientific and social-scientific innovation with the conceptualisation of modern warfare. Vorobyev and Kiseljev also think that Russian military science could have a greater influence over military doctrine if the current spearheading action of the Russian government and the Armed Forces, i.e. the actual military reform was to be taken more at face value (p. 41-42). New technologies, net-centric and information warfare, electronic operations and joint leadership structures lie at the core of modern warfare, and the argument is that Russian military science lags behind other state institutions in this realisation at its own peril.

A third position in the debate on Russian military science is represented by equally frequent participants V.K. Kopytko and A.V. Kopylov. The thrust of their argument is that no clear boundaries, analytical or otherwise, can be drawn between military and social change (VM 2013:9). To them, however, the issue is methodological. In their eyes, Russian military science should sharpen its analytical tools, particularly its

conceptual tool box, in order to better observe and draw conclusions about different types of conflict including both the armed and non-armed varieties. Furthermore, they argue that the ability to contribute to different kinds of prognosis about social, political and economic change is a success factor. According to Kopytko and Kopylov, this can be achieved only as the result of a sharper methodological discussion and revamping of how military science in Russia is delineated, inspired and focused on particular areas of research (p. 14-15).

It is interesting to note that Kopytko and Kopylov take their methodological argument very far. They only glance over the doctrinal aspect of military science, while fully focusing their attention on the world of science. Indeed, far from just talking about methodological choices within the field of military science, they actually conceptualise how the ultimate break with Soviet terminology (in which military doctrine steers military science, cf. Glantz 1991) can be achieved by a conceptual shift in which philosophy of science guides military science. Considering the significant influence on the modernisation of military theory in Russia, particularly of V.K. Kopytko, the argument merits special mention here:

> Hence, military science cannot wholeheartedly study various forms of preparation for and implementation of armed struggle without deeper knowledge about the socio-economic and military-political aspects of war, nor without knowledge about those laws prescribed by materialist dialectics. (VM 2013:9, p.17)

A fourth, perhaps more polemical position in the ongoing debate is represented by Lt.Col. S.V. Fomov. To his eyes, it is easy to accept the notion that Russian military science can be more inspired by science in general and by certain innovations in particular. However, he argues, this does not lead to any significant changes in the objects of study or, indeed, terminology of Russian military science. The reason, he finds, is that the identity of Russian military science is defined precisely by its staunch protection of certain methodological and philosophical core assumptions, to which he explicitly counts 20th century rationalism, such as universalism, collectivism, utilitarianism and organised scepticism (VM

2014:2, p. 76). Doctrinal steering, Fomov argues, is rather uninteresting since Russian military science already shares its place in Russian society and development with the civilian sciences. Times may change, says Fomov, and perhaps some objects of study within the field of military science, but at the end of the day the forte of Russian military science is its constant refusal to succumb to postmodernist theories and perspectives. Fomov's views are supported when, toward the end of 2014, A.V. Kopylov returns with an article on how the American usage of the term *national security* has changed over time. Regardless of his polemical, perhaps politically motivated, keenness to show similarities between the US and Russian governments, his point is that militarily successful Western governments have moved from doctrinal thinking based on ideas about military security to doctrinal thinking based on national security (VM 2014:11, p. 47-56). Kopylov, a Ph.D. in Political science, argues that American and other western thinking is both motivated by and firmly rooted in theoretical and scientific concepts. Directly addressing the Russian national strategy (cf. Vladimirov 2013, pp. 356-359), Kopylov closes his argument by saying that the study of how military theories and practices integrate with other scientific fields in such doctrinal thinking should be a prime object of study for Russian military science (p.56).

The fifth position also emerges towards the end of 2014 and carries over into 2015: 'The discussions about the role of military science, its place in the theoretical system of the state are always topical. But they take on a particular sharpness in the light of the global movement towards post-industrial, information society.' (VM 2014:12, p. 42) Authors Y. N. Golubyev, V.R. Grin and V.N. Kargin argue that the debate on military science in Russia has less to do with methodology, the postmodern varieties of which are well known and utilized by a plethora of analysts in the Russian military-scientific system, and more with the lack of a systematic quality assessment. 'Top managers of the military reform', they say, 'have ignored the birth of these new organizational principles for the intellectual sphere, which are directly related to the steering of quality in military-scientific knowledge.' (p.s58) Following the same line of thought, albeit not putting any blame for scientific problems on political middle managers, S. G. Chekinov and S.A. Bogdanov try to

summarise the key elements of Russian military science under 'the new look' of the Russian Armed Forces. Their schema emphasises interaction between different areas of knowledge and research, also introducing a new terminology for the building blocks of Russian military art (*voyennoye iskusstvo*) (VM 2015:1, p. 35). The new terminology merits some attention from Western scholars in and of itself, but two aspects of the schema are of particular interest here. The first is the overall emphasis on coordination and cooperation between different areas of science and research, civilian and military, where Chekinov and Bogdanov reduce the role of strategic, operational and tactical military theory (historically *the* theories of Russian military art) to just one of several interfacing elements, including civil research in the social, natural and technical sciences. Perhaps even more interesting is their reduction of the role of military doctrine to just another factor contributing to better military science. Their schema would, according to Chekinov and Bogdanov, simply codify a system of knowledge production which is already in place, given their view of what changes have taken place in Russian state and society:

> Thus, in the evolutionary development of military art at the beginning of the 21st century the core role will be played by all of its component and interacting theories and disciplines, of other methods of struggle, above all non-military measures and indirect effects and their elements—military cleverness and instantaneity. A special place in this process is reserved for military science, which decides the basic trajectories, causalities in the development of military art. It specifies causal dependencies in military affairs, gives practical recommendations with regard to military practice in our VS (armed forces) and the other military structures of the country. (p. 43)

Concluding remarks

As this rendering of perspectives on military science in Russia is based on a single source, e.g. the journal *Voyennaya Mysl*, it does not allow any definite conclusions or hypotheses about the country's conceptual capability. It does, however, describe the perimeter of public intellectual

efforts among top military thinkers in Russia today. Some of the names referred to here can sometimes be seen also in other public media, but more often than not the discussion on military doctrine, knowledge and science is limited to fewer sources. Leaving doctrine aside and focusing instead on the know-how and scientific aspects of Russia's current conceptual capability, certain points stand out in the discussion.

From a bird's-eye view, it appears that Russian military thinkers firmly believe in rational scientific modelling and analysis. Postmodernity is firmly relegated to elements of behaviour in society, which is in line with what the civil Russian literature on philosophy of science has to say (cf. Lebedeva 2007, Lebedev 2013). This leads the discussion onto two different paths, where one addresses the problem of how military knowledge and science should be organised, and the other whether or not social phenomena that might be construed as postmodern should lead to a change in, or redefinition of, the military-scientific objects of study. Indeed, as evident particularly from one of the articles quoted here (VM 2014:12) all aspects of human mind and matter can be neatly modelled into analytical 'spaces' (*prostranstvo*) in which scientists can determine and analyse relevant phenomena and causalities. Importantly, the information sphere is considered one such analytical space.

On closer scrutiny, the debate mirrors a particular view of what constitutes scientific innovation. The adherence of the debaters to the uniqueness of Russian national interests is, albeit not outspokenly so, staggeringly close. The Russian national strategy, as formulated by for example A.I. Vladimirov (2013, p.356-359) talks among other things about Russian uniqueness and autarchy in terms of scientific and technological capability, which in turn forms the basis of military independence. The civil-military intellectual link can also be illustrated with how a current Russian university textbook talks about how 'Russia is capable and bound to play an important role in the emergence and formation of a global, pluralist theory of international relations.' (Tsygankov 2013, p. 10). But what does innovation mean in military terms?

On reflection, perhaps it could be argued that Russia retains at least an option to innovate militarily? Returning briefly to the full concept of modern military capability, is the current Western discussion perhaps too focused upon the physical (mostly technological) and moral aspects of modern warfare? (cf. Fabre 2012, Jantunen & Kotilainen 2014) Has the decoupling of knowledge and experience (Ferraris 2012) gone too far? At this juncture, it seems as if the Russian discussion on military science gives us at least the incentive to further research the potential privatization of Russian security forces and the development of private security companies. Drawing on the debate about military knowledge and science in Russia, it could be seen as a game changer for at least two fields of global military interest. Among Russian military experts, the discussion about how Russian military interests might be forwarded by the use of private military companies is already under way (VM 2015:1, pp. 60ff). What is not being discussed, in Russia or elsewhere, is how military privatization might be a game changer also in scientific innovation.

At the base, at least where it stands in 2015, the Russian debate on military science throws out an interesting analytical challenge. Although it is difficult to know whether or not military thinkers like Chekinov and Bogdanov are simply trying to mask incompetence with conceptual eloquence, there is food for thought in their effort. If their relative denouncement of military doctrine in Russia as the ultimate guide to our understanding of current and future military action has any substance, then particularly neighbouring countries will ignore the innovative potential of Russian conceptual capability at their peril.

Bibliography

Barany, Zoltan. 2007. Democratic Breakdown and the Decline of the Russian Military. Princeton, NJ: Princeton University Press.

Berg, Bruce & Lune, Howard. 2014. *Qualitative Research Methods for the Social Sciences*. Harlow: Pearson.

Fabre, Cécile. 2012. *Cosmopolitan War*. Oxford: Oxford University Press.

Ferraris, Maurizio. 2014. Manifest för en ny realism. Göteborg: Daidalos.

Glantz, David. 1991. *Soviet Military Operational Art: In Pursuit of Deep Battle*. London: Frank Cass.

Graham, Loren. 1993. *Science in Russia and the Soviet Union. A Short History*. Cambridge: Cambridge University Press.

Graham, Loren & Dezhina, Irina. 2008. *Science in the New Russia. Crisis, Aid, Reform*. Bloomington, IN: Indiana University Press.

Graham, Loren. 2013. *Lonely Ideas. Can Russia Compete?* Cambridge, Mass.: The MIT Press.

Hedenskog, Jakob & Vendil Pallin, Carolina. 2013, eds. *Russian Military Capability in a Ten-Year Perspective*. Stockholm: FOI.

Jantunen, Sara & Kotilainen, Noora. 2014. 'Drones, Missiles and Teddy Bears: The Crisis of 21st Century Soldiership' in Vuorinen, Marja & Kotilainen, Noora & Huhtinen, Aki-Mauri, eds. Binaries in Battle. Representations of Division and Conflict. Newcastle upon Tyne: Cambridge Scholars Publishing.

Kofman & McDermott. 2015.

Kurilla, Ivan. 2014. 'Education' in Tüür, Karmo & Morozov, Viatcheslav, eds. Russian Federation 2014: Short term prognosis. Research report in the series Politica, University Press of Estonia.

Lebedev, Sergey. 2013. *Filosofiya Nauky*. Moskva: Jurajt.

Lebedeva, S.A. 2007, ed. *Filosofiya Nauky*. Moskva: Gaudeamus.

Mattson, Peter & Eklund, Niklas. 2013. 'Russian Operational Art in the Fifth Period: Nordic and Arctic Applications' in *Revista de Ciencias Militares*, Vol. 1, No. 1.

Mc Auley, John. 2005. 'Hermeneutic understanding' in Cassell, Catherine & Symon, Gillian, eds. Essential Guide to Qualitative Methods in Organizational Research. London: SAGE.

McDermott, Roger. 2011. *The Reform of Russia's Conventional Armed Forces. Problems, Challenges & Policy Implications*. The Jamestown Foundation.

Ministerstvo Oborony 2014. 'Ministerstvo Oboronyi Rossiskoy Federatsyi: Voyenno-Nautchny Komitet' at http://stat.ens.mil.ru/science/military_scientific_committee.htm, accessed on 05.12.2014.

Rossijskaya Akademiya Nauk. 2014. 'Naochnyie organizatsyi, nakhodyashyesya pod nautchno-metodycheskym rukovodstvom Preziduma RAN' at http://www.ras.ru/sciencestructure/presidiuminstitutions.aspx, accessed on 05.12.14.

Tsygankov, A.P. 2013. *Mezhdunarodnyie Otnosheniya: Traditsyi Russkoy Politicheskoy Myslyi*. Moskva: Alfa-M.

Vladimirov, A.I. 2013. *Osnovyi Obschey Teoryi Voynyi. Chast II Teoriya Natsyonalnoy Strategyi*. Moskva: Universitet Sinergia.

Voyennaya Mysl 2008:7 & 10 & 11

Voyennaya Mysl 2009: 5 & 10 & 12

Voyennaya Mysl 2010: 10

Voyennaya Mysl 2011: 9

Voyennaya Mysl 2013:3 & 8 & 9

Voyennaya Mysl 2014: 2 & 11 & 12

Voyennaya Mysl 2015: 1