

Introduction to “Istochniki: The Sources of Russian Nuclear Weapons Strategy”

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Overview

What are the sources of nuclear deterrence strategy for the Russian Federation national security enterprise? It is not sufficient to argue that we cannot know because it is all a secret held in the impenetrable, red-walled castle of Putin’s mind. Nor that it is spelled out unambiguously in declaratory statements from the ministry of defense. Counting RT-2PM Topols will only lull you to sleep and get you no closer to *why* they deploy what they deploy.

Comprehensive interdisciplinary study will generate a wider variety of explanations or predictions of behavior. We can capture viewpoints through different disciplinary lenses, include the overlapping and non-overlapping domains each discipline privileges in its research, and most importantly consider intersections or interactions between systems. Andrew Marshall’s Net Assessment is one such type of multidisciplinary approach, which for forty years provided long-term analytical studies of competition between the U.S. and Soviet Union’s strategic forces to the U.S. Department of Defense (DOD).¹ There are others of course, as this is the kind of work national intelligence agency teams or researchers together with peers take on regularly.

What kind of similar study can be done by one person, outside the DOD, with little but open-source material to go on? That’s what this project is, as quixotic as that sounds. I am not aiming to produce a single paper or book, but an ongoing directed learning and research

¹ Adamsky, Dmitry (Dima). 2020. “The Art of Net Assessment and Uncovering Foreign Military Innovations: Learning from Andrew W. Marshall’s Legacy.” *Journal of Strategic Studies* 43 (5): 611–44. <https://doi.org/10.1080/01402390.2020.1776121>.

corpus. My question is different than Marshall's substantively and methodologically. I'm not measuring a military balance, nor looking for asymmetries. I am looking to find and map the tributaries of influence that converge into the river of (Soviet to Russian) nuclear strategy thinking flowing from 1949 to today. From their first atomic yield to today's Poseidon nuclear torpedoes, I hope to divine the well-springs of thought, research, and development. Which sources of strategic influence are significant, and which marginal, incidental, diffuse, or discarded? Which ones bring the sediment of legacy or other deterministic currency downstream? Which ones etch the landscape, and which ones yield to the stony constraints of time, economics, physical reality, treaty?

The model of nuclear command and control provides a simple example of how strategies differ. In the U.S. all combat arms, with the exception of nuclear weapons, can be employed by the military without requiring the explicit order of the Commander in Chief. The President has sole direct authority to order the use of nuclear weapons from an ever-present set of deployment options.² The Russian Federation differs in this manner. Alexei Arbatov states that there are three people jointly capable of launching nuclear weapons.³ Why is the US President's "button" different?⁴ What arguments, concepts, aspects of strategic culture, organizational design, or history had decisive effect on this feature of their strategic command and control model?

The U.S. Department of Energy (DOE) has influence on nuclear strategy because of their role as manufacturer, designer, tester, steward. The agency inherited this responsibility from the U.S. Atomic Energy Commission in 1977, who in turn inherited it from the US. Army in 1946.⁵ DOE and DOD are two complementary sources of strategic influence. The DOD's influence

² "I can't speak in open session about the particularities, but I will say that the system is not a button that the President can accidentally lean against on the desk and immediately cause missiles to fly, as some people in the public, I think, fear it would be. It requires the President to work with military aides who are attending him and who have possession of the materials that he needs. And it requires personnel at all levels of echelon command all the way down to the missile silo to carry out an order. The President by himself cannot press a button and cause missiles to fly. He can only give an authenticated order, which others would follow and then cause missiles to fly." - Dr. Peter Feaver "S. HrG. 115-439 AUTHORITY TO ORDER THE USE OF NUCLEAR WEAPONS." 2017. Washington DC: U.S. GOVERNMENT PUBLISHING OFFICE. www.congress.gov/event/115th-congress/senate-event/LC62403/text.

³ Page 44, Arbatov, Alexey. 2017. "Understanding the US-Russia Nuclear Schism." *Survival* (0039-6338) 59(2): 33-66. doi:10.1080/00396338.2017.1302189.

⁴ Gambino, Lauren. 2018. "Donald Trump Boasts That His Nuclear Button Is Bigger than Kim Jong-Un's." *The Guardian*. <https://www.theguardian.com/us-news/2018/jan/03/donald-trump-boasts-nuclear-button-bigger-kim-jong-un> (March 2, 2024).

⁵ <https://www.energy.gov/lm/brief-history-department-energy>

might seem more pertinent to war-making strategy but ask any parent about the influence an embargoed toy has on a child for a metaphorical example of dynamics of interaction between sources of influence on national security policy.⁶ Obviously, there are other organizations like Congress, the NNSA, and universities, who influence to varying measure US nuclear strategy.

So far, nearly all of the U.S. military's warfighting has been abroad, and especially after we acquired a nuclear deterrent. The structure of the U.S. triad through the Cold War is mapped to the expeditionary design of the conventional forces.⁷ Russia by contrast has 11 time-zones worth of land. She is bordered by Europe, the Middle and Far East, and has relatively little blue water access. Most of their war history has been on land and their current nuclear force structure respects this geography and history of conflict. The Russian Federation is large enough physically, historically, scientifically and geopolitically that their entire nuclear enterprise should show signs of a rich and diffuse network of influences. Organizational dynamics, economics, strategic culture, history of the military industrial complex, Russia's unique geographical constraints, religion, published (declared) strategic doctrine, linguistics and many more fields offer clues as to the lines of logic for decision making.

I expect to draw on scholars like Andrew Marshall, Dima Adamsky, Olga Oliker, Alexei Arbatov, Pavel Podvig, Clint Reach, Kristen ven Bruusgard, and Samuel Charap at the outset to help me expand and then requalify the scope of factors and scholarship that I study closely. Their materials will introduce me to the Russian-language sources that I intend to read and include as well.

My goal is to, at first, enumerate those influences, then weigh them as factors and eventually to make claims about possible directions of nuclear strategic development based on an open source information processed through a model coded and weighted for influence. Practically speaking I expect the earliest products to be growth of the existing bibliography into an annotated bibliography or perhaps an ad hoc research guide. Also, I will write small essays on the website as my research matures.

⁶ Bomb Power by Gary Willis explores the how the development of nuclear weapons changed the warmaking power of the U.S. Presidency. Willis, Garry. 2010. *Bomb Power: The Modern Presidency and the National Security State*. New York: Penguin Press.

⁷ Deputy Assistant Secretary of Defense for Nuclear Matters. 2020. *The Nuclear Matters Handbook 2020 [Revised]*. US Department of Defense.

<https://www.acq.osd.mil/ncbdp/nm/NMHB2020rev/index.html>.

Sources of Methodology

The Office of Net Assessment (ONA) is synonymous with Andrew Marshall the person, the research method, the product; all of which made unique contributions to the last half-century of defense analysis and national security strategy. Writing from Paul Bracken, Eliot Cohen, Thomas G. Mahnken and even Marshall himself, describe net assessment somewhat liberally if not faithfully. Each author offers an explanation somewhere along a range at one end comprehensive and at the other comprehensible. Eventually it dawns on the reader that one is never going to get an answer that reads like a homework problem: with steps or templates. It appears that the method for each net assessment shifted to suit the requirements of the request. Cohen's essay outlining five questions all net assessments had in common comes closest to offering a rubric. Dima Adamsky, in his 2020 piece,⁸ humorously parks the attempt, writing that others have referred to net assessment simply as 'what Andy Marshall does.'⁹

Andrew Marshall was originally tasked with articulating military balance between Soviet and U.S. forces. What did the Soviets have that we did not? He broadened the scope of his research beyond simply counting for balance, into other asymmetries, and found broadening useful. He broadened the lens again to look outside of weapons and troops into economics, or other closely-related drivers like military industrial complexes, and found broadening useful still. Looking wider still, ONA's work produced insights that the Department of Defense would find critical to directing defense strategy, force structure, posture and procurement into the 21st century. Writing for Mahnken's 2020 collection of essays on Net Assessment, Marshall's own words point to the purpose and scope,

"The goal was to provide as good a picture as possible of the key competitions and contrasting strategies of both sides as they had evolved over the previous 20 to 30 years. These assessments sought to identify the ways in which Soviet conduct differed from ours as a result of geography, culture, history, organizational structure, or other factors." - Andrew Marshall, Net Assessor.¹⁰

⁸ Cohen, Eliot A. 1989. *Net Assessment: An American Approach*. Jaffee Center for Strategic Studies (JCSS). <https://www.andrewmarshallfoundation.org/library/net-assessment-an-american-approach/> (January 27, 2024).

⁹ (Adamsky, 2020)

¹⁰ Mahnken, Thomas G. and Andy W. Marshall. 2020. *Net Assessment and Military Strategy: Retrospective and Prospective Essays*. Amherst, New York: CAMBRIA Press.

Graham Allison's most well-known contributions to strategic thinking are the alternative models he used to analyze the decision-making that happened at the highest levels of US strategic thinking during the Cuban missile crisis.¹¹ He developed these ideas while writing with Andy Marshall and reporting on his late sixties seminars.¹² He questioned the idea of the state, or even the executive as a unitary actor. The Commander-in-chief and the advisors involved were not computers, programs or large language models that would simply play through a set of variations on outcomes to satisfy a declared set of criteria, put in place by a human software developer. Allison showed that personalities matter, authority matters, prescribed roles and responsibilities, and bureaucratic structure matter differently. For the analyst, this is a well-established case for thinking *widely* and *comparatively*; that there may be alternative explanations. Broad, critically rigorous but creative thinking helps fight the gilding effect of the conciliatory ego; a noisy remainder of a mind tired from struggling with complex, paradoxical or stressful problems. Still, the service of truth may draw us out of our rest and back into the analytical bramble-bush where hidden fruit hangs yet still.

As stated earlier, my goal for this research is to use a scope like Marshall's to examine the relative weights of these different domains of influence on strategy. Where a net assessment might find that Soviet military style focused on smothering a target with masses of forces rather than leveraging technically sophisticated precision fire because factories had production quotas under national Soviet economic policy,¹³ I am looking for whether or not the military-industrial sector appears to have a driving, complimentary, or subordinate role in over-all military strategy. How powerful was the influence of executive preferences in comparison to other factors like wargaming or scenario modeling, geographical determinants, cultural prohibitions, domestic political concerns?

When I started this project, the first material that I put my "sources of strategic influence" lens to was Pavel Podvig's *Russian Strategic Nuclear Forces*.¹⁴ This massive collection of material on the evolution and composition of Soviet Union's Strategic Rocket Forces (RVSN), appears to have only sparse discussion of how the enterprise evolved as it did. There is little

¹¹ Allison, Graham T. 1969. "Conceptual Models and the Cuban Missile Crisis." *The American Political Science Review* 63(3): 689–718. doi:[10.2307/1954423](https://doi.org/10.2307/1954423).

¹² See endnote 18 in Augier, Mie. 2013. "Thinking about War and Peace: Andrew Marshall and the Early Development of the Intellectual Foundations for Net Assessment." *Comparative strategy* 32(1): 1–17. doi:[10.1080/01495933.2013.758509](https://doi.org/10.1080/01495933.2013.758509).

¹³ p. 64 Kotkin, Stephen. 2008. *Armageddon Averted: The Soviet Collapse, 1970–2000*. Updated edition. Oxford New York Auckland Cape Town: Oxford University Press.

¹⁴ Podvig, Pavel, and Oleg Bucharin, eds. 2004. *Russian Strategic Nuclear Forces*. First MIT paperback edition; English-Language edition. Cambridge, Mass. London: MIT.

in the way of the evolution of doctrine, strategic goals, deterrence or compellence theory, sderzhivanie, or otherwise. As a catalogue and history of weapons development, it contains evidence of choices that I am currently unprepared to evaluate. An artist and an engineer can stand side-by-side at the foot of the Mona Lisa and see two wildly different paintings.

Dima Adamsky's latest work [*The Russian Way of Deterrence*](#), is closer to my interests. Adamsky focuses on the intersection of strategic nuclear deterrence and strategic culture. He makes good use of contemporary approaches to military assessment and, in Andy Marshall's tradition, argues that to make sense of the big picture one must seek to understand more of your adversary's context than what they display in military parades.

There are many other authors that will have something to say as I move through my literature review. At least two Michaels (Kofman and Mazarr), Clint Reach, Andrew Monaghan, Alexander Lanoszka, Alexei Arbatov, Zysk, Amy Woolf, Putin himself, [*Samuel Charap*](#), Olga Oliker, Anya Fink, and many more that I haven't even discovered yet. I will be reading work by all of these before I get into attempting untranslated Russian source material. Many, like Adamsky and Clint Reach have pieces rich with these sources. Their bibliographies will feed my bibliography after each is analyzed.

Setting Scopes

In reading a paper or book that makes claims about what Russian or Soviet nuclear strategy or doctrine is, my ever-present skepticism about how well the West truly understands the Russian mindset, language, or intentions, sends me instantly in search of their evidence. Is the evidence a Russian document or another Western authority? Is it a [*flyover of bombers during a parade*](#), or [*an explosion at Novaya Zemlya paired with a NOTAM*](#)?

A search for the true sources of Russian strategy requires that I read everything I can get my hands on that makes such a claim, and then try to code the statement as attributing influence to the domain they suggest as evidence. For example, Pavel Podvig explains that the Soviets tried to make fissile material, until acquiring information from the U.S., after which they changed direction, and their program moved forward.¹⁵ I would code this as pointing to the U.S. as a source of influence on Soviet nuclear strategy. Elsewhere in *Russian Strategic Nuclear Forces* there are other examples of a fast-follower approach to design which is

¹⁵ (p.99, Podvig and Bucharin 2004)

prevalent as long as Stalin is alive.¹⁶ These may be coded as examples of symmetry in development, economics, perhaps manufacturing constraints in the defense industrial base.

I am still uncertain what is the best methodology for credible claims about the portion and weight different sources of influence will have. Net assessment has much to offer, as it intends to be comprehensive, strategic, and defense oriented. The open-mindedness to long-term competition is interesting and would require a broad multi-dimensional approach. Eliot Cohen describes most net assessments as being either geographically or functionally aligned. Functional studies could be “maritime, central nuclear, and power-projection balances.” He also lays out the five major questions most assessments have in common which cover framing the assessment, longitudinal trends, concepts of operation, which includes questions useful to my research like one’s “philosophy of war” and “culture of decision-making.”¹⁷ While these are useful in helping me generate my own scope for coding, net assessment has been invaluable, but perhaps not *the* method. Most assuredly, I will come back to it for lessons throughout.

Dima Adamsky’s research for *The Russian Way of Deterrence* provides a scope in the intersection between established sub-disciplines of strategic culture and deterrence theory. He devotes the third chapter of this book to sources of Russian strategic culture, so that will be explored later on. On pages ten and eleven of chapter one Adamsky provides a little abridged list of domains of activity that comprise the strategic community,

“..the entirety of institutions that officially or unofficially shape and determine various aspects of national security policy in a given state. Usually the military, intelligence apparatus, organs of executive and legislative power, defense-industrial complex, and think-tank industry are central to strategic communities.”(P. 10, Adamsky 2024)

Returning to establishing a working definition for strategic culture he notes that the second of three central questions for the genre asks, “What are the sources of strategic culture?” Again, we find descriptive terms that help to confirm our sense of scope: “macro-environmental and nonmaterial” and “shared narratives.” This gives us license to include geography, history, myth, social, institutional, bureaucratic, and executive memory as domains of influence on national security strategy, as echoed by Marshall.¹⁸

¹⁶ Adamsky, pointing to Marshall’s early work, also discusses this period of development (Adamsky 2020).

¹⁷ (Cohen 1989)

¹⁸ (Adamsky 2024)

Another author I'm reading is Kristen ven Bruusgaard. Her 2016 piece for *Survival*, "Russian Strategic Deterrence" appears to almost exclusively stick to the debates published in Russian military journal *Military Thought*.¹⁹ This is of course valuable despite initially appearing a bit narrow. To be fair, we survey all of the cosmos through telescopes. Here, her depth, attention the language associated with deterrence literature, and the authority those crafting the debates she reviews is significant. *Military Thought* is the official journal of the R.F. General Staff.

Even AI has offered scopes! It is sort of AI's thing to make lists, so regularly do bots like ChatGPT and Claude.ai respond in annotated lists, that you can detect undergraduate plagiarism by it. Educators I know have told me that students at that level simply do not organize their thoughts in that way often or to that degree.²⁰ Robots do.

When asked about factors that would inform strategic nuclear posture, Claude.ai gave me this list: Threat Perceptions, Technology Developments, Domestic Politics, Costs, Alliance Relationships, Arms Control Treaties, Nuclear Doctrine, Safety and Security, Technology Viability, Prestige and Status. When asked about "key factors that influence Russia's strategic deterrence requirements" Claude.ai gave me this list: Perceived threat from NATO expansion, maintaining great power status, defense of homeland, sphere of influence, power projection, alliances, prestige, domestic politics, financial constraints, arms control, asymmetry. Each term was accompanied by a single sentence explanation. In all three or four queries took about two minutes but came with zero citations. What is lost in accuracy is partially accounted for in speed. In a sort of quantum way, there was enough that was useful to warrant using the tool again, as long as I was comfortable applying my criticality to the bots response, rather than to perfecting a query. Scrutiny of the results is essential though. Sometimes Claude.ia got the question wrong in a way that was sharply puzzling. When asked about strategic culture, this was proffered, "Legacies of colonialism may motivate post-colonial states towards doctrines that demonstrate prestige, status and autonomy (e.g. France, India)." The legacies of colonialism for France and India are quite different, and their pursuit of nuclear weapons also quite different. I can't imagine France was too worried about invasion by mechanized brigades from the Sahel threatening their autonomy. I digress.

¹⁹ Ven Bruusgaard, Kristin. 2021. "Russian Nuclear Strategy and Conventional Inferiority." *Journal of Strategic Studies* 44(1): 3–35. doi:10.1080/01402390.2020.1818070.

²⁰ Conversation with Tanya Gardner, 2024.

I have set this first draft of my own scope for coding references and statements about the sources of Russian nuclear strategy (and/or) doctrine to this list: mirror-imaging U.S. behavior, history, strategic culture (and its sub-standing scope), language, geography, perceptions of the adversary, domestic political preferences, organizational dynamics, economics, geography, purely psychological (leader or influencer narcissism, depression, mania, delusion, aspiration); environmental concerns (radiological, agricultural/natural), physics, technological innovation (produced, received, emergent); religion; literary or rhetorical, medical; demographic, worldview, legal. Some of these, probably medical and agricultural, will not see much attribution. Perhaps they'll occur infrequently enough that we can conclude that the influence was negligible. However, it would be a failure of imagination to preclude them from the initial scope.

Products

I am working on another supporting document or online resource; a bibliography, to act as a research guide. It will list the material I've read so far. Each entry will link to where you might find the material, and some entries may point to another review. As I move through my literature review, I intended to write up short essays with each. The focus of these essays will be my central question: what are the sources of Russian nuclear strategy and doctrine, their national security concepts.

I'll say this now, I wouldn't have been able to do much of this without a university library account. RAND pieces and things one can buy from Amazon are there as well, but a good deal of this comes from using the University of Kentucky's OpenAthens membership, and I am infinitely grateful to them for this.

I really don't know yet how I'll visualize my "findings." I'm not even sure I'll stick with this methodology. Maybe I will develop some sort of pie chart, spider/radar chart, Sankey or alluvial diagram. This is a problem for when I have data. The first products will simply be additional writing on what different authors have to say about sources of Russian nuclear strategy.

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