From the Soviet Scientific System to Russian Academic Involvement in the War Against Ukraine

Super Normal Science and the Post Soviet Academic Community

Laboratory of Military Ecotones
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English speaker manuscript / 15-minute individual version

The central argument is that Russian academic involvement in the war against Ukraine should be examined through a historically reproduced institutional dependence on state authority. The proposed concept of super-normal science connects changes of doctrine with continuity of academic form and with negative selection against autonomous problem formulation.

The spoken manuscript contains 1,975 words across slides 1–16. Suggested delivery windows total 15 minutes, approximately 132 words per minute including pauses. Rehearsal determines the actual duration. Slide 17 and its 60-second excerpt are an optional contribution to the collective 20-minute overview of twelve papers, outside this individual timing.

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Presenter timing

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Spoken manuscript

Slide 1 From the Soviet Scientific System to Russian Academic Involvement in the War Against Ukraine

0:00–0:35 / 35 seconds

This contribution examines a scientific community that can preserve its institutions while repeatedly changing its public account of reality. My argument concerns an institutional type formed in the Soviet system and reproduced after its dissolution. I call it super-normal science.

The question is how this type helps explain Russian academic involvement in the war against Ukraine. I approach that involvement through institutional documents and a proposed mechanism of reproduction. This paper also belongs to our wider inquiry into why scientific communities fail to investigate the long-term consequences of war.

Slide 2 Problem: institutional continuity and changing doctrine

0:35–1:40 / 65 seconds

When a state changes radically, we might expect its scientific institutions to reconsider their assumptions. Yet the post-Soviet material suggests a different pattern. Institutions remain, professional hierarchies remain, and academic status can remain. The language in which social reality is described changes much faster.

Fear, career interests, propaganda and opportunism are relevant explanations. They should be investigated. But these explanations leave a further question: how does repeated adaptation become professionally ordinary, and sometimes internally convincing?

The working hypothesis is that the most stable element is a structure of dependence. The community recognizes the current state as an authority over legitimate questions and acceptable conclusions. Changes of sovereignty make this dependence especially visible. The object of inquiry is therefore the organization of knowledge, including the institutional practices that allow incompatible doctrines to succeed one another without a sustained examination of the transition.

Slide 3 Theory: super-normal science

1:40–2:55 / 75 seconds

Super-normal science is my proposed term for an organization of science in which reproducing an institutionally sanctioned worldview systematically prevails over independent investigation of the object. State authority becomes the principal external source of acceptable problems and explanations.

The concept begins with Kuhn's normal science, in which a disciplinary paradigm organizes puzzle solving. Here, an external political authority increasingly defines the framework within which puzzles are formulated. Scientific forms remain visible, while their cognitive function can change.

The analogy with a community of performers helps describe this relationship. The state supplies a score, institutions distribute roles, and researchers translate the expected propositions into professional products. Chekhov's The Darling suggests how successive views might be sincerely internalized. Sincerity remains a possible mechanism, however, and cannot be inferred from a public statement alone. This concept also differs from Funtowicz

and Ravetz's post-normal science, which addresses decisions under uncertainty and contested values.

Slide 4 Theory: formation and survival of the institutional type

2:55–4:00 / 65 seconds

The paper traces the formation of this academic type to the restructuring of Soviet science beginning in the late 1920s. The historical proposition concerns the connection between administrative authority, resource allocation, appointments and the range of legitimate questions.

This is a model of an institutional tendency. Soviet science also produced important discoveries and contained spaces of professional autonomy. A historical explanation must account for that variation, and for relations in which scientists actively negotiated with state agencies.

After 1991, the institutions passed into different states. The theory proposes that important administrative habits and patterns of dependence survived the division. What requires explanation is their reproduction, rather than an uninterrupted identity between every Soviet and contemporary organization. Changes of doctrine provide a way to investigate that continuity, provided we examine dated decisions and actual research practices.

Slide 5 Theory: negative selection and cognitive autonomy

4:00–5:05 / 65 seconds

The proposed reproduction mechanism is negative selection. Researchers who distinguish a state thesis from a scientific conclusion, or insist on examining an inconvenient object, can become an organizational problem. Exclusion may appear as a judgment about methodology, collegiality or professional adequacy.

My earlier study The Department: Social Pressure in a Small Scientific Group supplies participant material for examining these procedures at a local level. It identifies a mechanism that should be compared with other groups and periods.

The resulting loss concerns collective cognitive capacity. Highly qualified individuals may work inside an organization that has difficulty preserving inconvenient facts, remembering its own errors or formulating questions outside the authorized framework. If repeated selection favours conformity, the institution becomes less capable of discovering that its governing picture of reality is wrong. One local account identifies this possibility but cannot establish its prevalence across an entire scientific system.

Slide 6 Method: comparative institutional analysis

5:05–6:05 / 60 seconds

The method combines institutional documents, published texts and explicitly bounded participant observation. Its unit of analysis is a documented practice: an appointment, an organizational restructuring, a public declaration or an expert product.

The documentary matrix distinguishes established facts, secondary reports, participant testimony and hypotheses. I also distinguish several forms of involvement: institutional integration, public legitimation, practical support and direct operational participation. Each requires its own evidence.

This distinction matters for causal explanation. A biography can demonstrate transitions. A governing network can demonstrate institutional connections. A declaration can demonstrate

public support. Establishing military planning requires a further link between a commission, a research product and its use. Alternative explanations include coercion, material dependence and personal conviction. Their relative contribution requires comparative cases, including cases of refusal and sustained autonomy.

Slide 7 Results: Nikolai Bagrov and continuity of status

6:05–7:20 / 75 seconds

Nikolai Bagrov is a particularly visible case because the institutional transitions occurred at the top of an academic and administrative hierarchy. His biography records senior positions in the late Soviet system, followed by high standing in independent Ukraine. He was rector of Tavrida National University, received the title Hero of Ukraine in 2007, and became a full member of Ukraine's National Academy of Sciences in 2010.

The official university museum records that he became president of Crimean Federal University from 1 January 2015, after Russia's occupation of Crimea. This establishes a transition into the new institutional structure. It avoids assigning an unsupported precise date to his personal political conversion in spring 2014.

The analytical point is continuity of status across incompatible state frameworks. The biography illustrates the proposed mechanism. Demonstrating its prevalence needs a wider sample, while establishing inner motives needs different evidence. Bagrov's trajectory alone proves neither universal conformity nor sincere belief in every successive doctrine.

Slide 8 Results: Tavrida National University after occupation

7:20–8:20 / 60 seconds

The university case extends the question beyond one biography. Following the occupation, the institution's trajectory divided between the structure established in Crimea and Tavrida National University's activity in Kyiv.

I later worked at the Kyiv university and headed its Department of Geography. That experience gives me participant knowledge and helps identify research questions. My observation that a small portion of the earlier collective continued at the relocated institution should be treated as testimony until personnel records establish a dated comparison.

Remaining in Crimea cannot by itself establish ideological support for Russia. Employment, family circumstances, coercion and professional commitments may influence decisions. The relocated university is also an important case of institutional discontinuity and refusal. A theory of adaptation must explain such differences instead of treating every member of the community as identical.

Slide 9 Results: the Russian Geographical Society

8:20–9:35 / 75 seconds

The Russian Geographical Society provides a case at the level of organizational governance. Its official website dates Sergei Shoigu's election as president to November 2009 and the creation of its Board of Trustees to the same year. In 2009 Shoigu was Minister of Emergency Situations. Calling him Minister of Defence at that date would be an error.

The current board, chaired by Vladimir Putin, includes senior state officials, major corporate leaders and the rector of Moscow State University. This roster demonstrates a present institutional connection between political power, corporate resources and academic geography. The current composition must not be projected backwards onto 2009.

My interpretation is that the reorganization provides a visible form of remobilization of geographical expertise under direct state patronage. Governance alone does not establish that the Society planned a particular invasion. That stronger conclusion needs dated evidence about specific projects, commissions, outputs and their use. The structure is an institutional bridge whose activities must then be investigated.

Slide 10 Results: public legitimation of war in March 2022

9:35–10:40 / 65 seconds

The Russian Union of Rectors' appeal of 4 March 2022 supplies a direct example of public institutional legitimation. It repeats the state's account of the invasion, calls for support for the army and the president, and connects university responsibilities with patriotic education.

Here the evidence is stronger than a general connection between science and political power. The document itself expresses institutional support for the state's wartime position. Its language also connects that position with the ordinary educational mission of universities.

The appeal does not reveal the private convictions of everyone employed in those institutions. Nor does it document each organization's material contribution to military operations. It does show how an academic leadership body can translate the state framework into a statement of professional duty. This is a concrete practice against which the concept of super-normal science can be tested.

Slide 11 Results: geographical concepts and the evidential boundary

10:40–11:35 / 55 seconds

The supplied geographical studies identify another possible route of involvement: the production of concepts and spatial models through which neighbouring territories become available for political reinterpretation.

The author's analysis of a relativistic conception of borders is relevant here. Compatibility with territorial expansion is an interpretation that should be checked against the original texts. It cannot establish operational preparation by itself.

The 2013 study of cross-border cooperation among regions of Russia, Belarus and Ukraine remains an identified source whose full text is unavailable in the present corpus. It therefore supplies a research task rather than a demonstrated occupation plan. The next documentary step is to establish authorship, funding, the content of its maps and any transfer or use of the results. This boundary keeps the explanatory argument open to empirical testing.

Slide 12 Comparison: shared inheritance and different state projects

11:35–12:40 / 65 seconds

The theory treats Russian and Ukrainian academic communities as inheritors of important features of the same Soviet system. It asks how a related institutional type can produce different political conduct under different state projects.

The paper proposes that Russia's aggressive project demands academic legitimation, while Ukraine has historically imposed a weaker and less coherent ideological score. The Russian case includes documentary evidence of wartime support. The comparative explanation still requires a matched Ukrainian corpus and measures of actual institutional autonomy.

Shared inheritance does not establish political or moral equivalence between an invading state and the state resisting invasion. It also does not make all institutions in either country alike. The useful test compares dependence, incentives, refusal and autonomous inquiry. The

question is how much variation follows from state demands, and how much follows from institutions' capacity to reject or revise those demands.

Slide 13 Implications: investigating the consequences of war

12:40–13:35 / 55 seconds

This paper's connection with soil and freshwater research concerns the conditions under which consequences become objects of inquiry. If an institution begins with a sanctioned picture of state policy, it may have difficulty asking questions that expose long-term harm produced by that policy.

The proposed negative-selection mechanism helps explain how that difficulty might persist. Institutions may retain excellent technical capabilities while narrowing the questions those capabilities are allowed to address.

The wider series investigates scientific recognition of military contamination and the right to test theories empirically. This contribution supplies an institutional hypothesis for that programme. It does not measure contamination or demonstrate that every research omission has the same political cause. Its implication is that research infrastructure must preserve the capacity to investigate consequences that the current state framework makes inconvenient.

Slide 14 Key takeaways

13:35–14:25 / 50 seconds

Four conclusions follow. First, super-normal science names a proposed institutional mechanism: scientific forms survive while the state increasingly defines legitimate reality. Second, negative selection may reproduce that dependence beyond the lifetime of one doctrine or regime.

Third, the present evidence establishes different things at different levels. Bagrov's biography establishes a transition of institutional status. The Geographical Society's governance establishes connections to state and corporate power. The rectors' appeal establishes public support for the wartime state position.

Fourth, the general explanation remains testable. It requires a wider case series, a comparative Ukrainian corpus, and evidence of refusal as well as conformity. Academic responsibility includes the maintenance or erosion of the institutional capacity to ask autonomous questions about the consequences of state policy.

Slide 15 Key references

14:25–14:35 / 10 seconds

These are the key references. The speaker manuscript supplies the documentary source record and distinguishes primary evidence from the author's analytical materials.

Slide 16 Academic autonomy and responsibility

14:35–15:00 / 25 seconds

The final question is whether scientific organizations can preserve the right to formulate problems independently of the current state. Understanding Russian academic involvement in the war requires examining both documented acts and the system that makes such acts professionally normal. That same examination matters for our ability to investigate the long-term consequences of war.

Excerpt for the collective overview

Slide 17 / approximately 60 seconds / 122 words

This paper introduces super-normal science to explain how academic institutions preserve their form while adopting the worldview of the current state. Its proposed reproduction mechanism is negative selection: researchers who insist on autonomous questions become an organizational problem. The cases operate at different levels. Bagrov's biography shows continuity of high status across state frameworks. The Russian Geographical Society shows institutional connections between geography and state power. The Union of Rectors' March 2022 appeal directly documents public support for the wartime state position. These sources support a mechanism for further testing, while operational planning and the Russia–Ukraine comparison require additional evidence. Within our series, the contribution explains why the autonomy to investigate inconvenient consequences of war must itself become a research object.

Evidence and interpretation

The concept and causal mechanism are the author's theoretical propositions. The cases provide different kinds of evidence and do not by themselves establish the prevalence of the type throughout the post-Soviet scientific system. Public rhetoric cannot establish private sincerity. Shared institutional origins do not imply equivalence between Russia's aggression and Ukraine's resistance.

Case or proposition	Present support	Boundary
Bagrov	Official museum biography dates high academic roles and the 2015 appointment.	A visible transition, not a representative sample or proof of inner conviction.
Tavrida National University	Supplied participant account and university institutional record.	No precise staff count or collective ideological motive asserted.
Russian Geographical Society	Official records establish the 2009 organizational change and present governing network.	The current roster is not a historical 2009 roster or proof of operational planning.
Union of Rectors	Official appeal of 4 March 2022 establishes public institutional support.	Does not establish all employees' convictions or each institution's operational contribution.
2013 cross-border study	Identified in the supplied analytical materials.	Full primary text, funding, maps and chain of use remain unverified.
Russia–Ukraine comparison	Common inheritance and different state demands form the proposed explanation.	Requires a matched comparative corpus and cases of refusal and autonomy.

Documentary sources and working bibliography

1. Nikolaenko, D. (2026). From the Formation of the Soviet Scientific System to the Involvement of Russian Academic Organizations in the War Against Ukraine. Pollution and Diseases. Conference abstract. doi: 10.66659/wxywk824. Source

2. Kuhn, T. S. (1962). The Structure of Scientific Revolutions. University of Chicago Press.

3. Chekhov, A. (1899). The Darling. Analogy used in the supplied theoretical core.

4. Funtowicz, S. O., and Ravetz, J. R. (1993). Science for the Post-Normal Age. Futures, 25(7), 739–755. Source

5. Krementsov, N. (1997). Stalinist Science. Princeton University Press. Historical context, not evidence of the proposed continuity into present organizations. Source

6. Nikolaenko, D. V. (2002). The Department: Social Pressure in a Small Scientific Group. In Look Back in Anger: History and the Current Situation in Geographical Science, vol. 3, pp. 199–286. St Petersburg: Amadeus. Russian edition. Bibliographic details follow the supplied manuscript.

7. Crimean Federal University museum. Nikolai Vasilievich Bagrov: From Student to Rector. Official institutional biography, consulted 10 October 2026. Source

8. Russian Geographical Society. President of the Society. Official page, consulted 10 October 2026. Source

9. Russian Geographical Society. Board of Trustees. Official page, consulted 10 October 2026. The membership list describes the current roster. Source

10. Russian Union of Rectors (4 March 2022). Appeal of the Russian Union of Rectors. Official publication, consulted 10 October 2026. Source

11. Tavrida National V. I. Vernadsky University, Kyiv. Official institutional website. Source

12. Nikolaenko, D. V. (2023). Interpretation of State Border in the Russian Relativistic Concept of Political Geography. Lectures 9–10. Author's analytical material identified in the supplied matrix. Source

13. Nikolaenko, D. V. (2025). Participation of Russian Geographers in the Military Activity of Their State: From the Past to the Present. Russian and Ukrainian versions form one analytical study, not independent corroboration.

14. Cross-Border Cooperation among Regions of Russia, Belarus and Ukraine (2013). Identified in the supplied materials as published in Kazakhstan. Full text and bibliographic metadata remain to be verified. Not used as established operational evidence.

Supplied research materials

The revised Conference Talk v2 and Timed Speaker Script v2 provide the earlier oral argument. The Theoretical Core v1 supplies the definition and comparative propositions. Documentary Matrix v2 and the discussion of official RGS materials refine chronology and evidence status. Earlier v1 files provide background but do not override those revisions. The Central Place Theory conference deck supplies the visual form. The published abstract supplies the official publication title and DOI.

Questions for the next empirical stage

A fuller study should compare institutional cases across disciplines and states, identify dated procedures of negative selection, and include documented refusal. Specific claims about war planning require a traceable commission, research product and chain of use. The university comparison requires personnel records and a defined observation period. These are research requirements, not findings asserted by the current talk.