

“Noosphere—Ecosphere—Semiosphere: Explorations into Environmental Thoughts”

by Victoria Myznikova

The “Noosphere—Ecosphere—Semiosphere: Explorations into Environmental Thoughts” workshop, organized by Julia Lajus and Julia Herzberg in cooperation with the RCC, took place on 6 October 2022, marking the inaugural conference of the Oberseminar/Colloquium on the History of Russia and East Central Europe in Early Modern Times.

With its focus on the Russian-Ukrainian and Soviet geochemist Vladimir Vernadsky’s (1863–1945) ideas on the Noosphere as a new state of biosphere, “a sphere of reason,” the conference proved a particularly suitable venue for discussions of the ongoing geological period of the history of Earth and its conceptualizations in environmental discourses.

The first panel focused on the meaning and the role of key environmental concepts, such as “Noosphere,” “Biosphere,” “Semiosphere,” and “Pollution,” in the Soviet Union and Imperial Russia.

In the first presentation, Julia Lajus focused on the creation of the “Noosphere” concept and its role in Vernadsky’s intellectual legacy as well as the difference between the concepts of the “Noosphere” and “Anthropocene.” She showed the importance of Vernadsky’s intellectual cooperation with French scientists and Bergsonian philosophers Pierre Teilhard de Chardin (1881–1955) and Edouard Le Roy (1870–1954) for the development of Vernadsky’s ideas about the noosphere. Julia Lajus also underscored how the general scientific optimism and determinism of Vernadsky’s thought found their expression in Vernadsky’s writing on the noosphere. As Lajus showed, the “noosphere,” with its evolutionary characteristics, was in sharp contrast with the later concept of the Anthropocene, which represents a radical rupture with all evolutionary ideas in human and Earth history, including the breakdown of any idea of advance to a higher stage.

Environmental concepts were also the central theme of the talk by Philipp Kohl, who discussed natural temporalities in the works of the Tartu-Moscow Semiotic School. Focusing on Russian-Estonian literary scholar, semiotician, and historian of Russian culture Juri Lotman’s *Universe of the Mind* and *Culture and Explosion*, Philipp Kohl explored the author’s use of the concepts of entropy, irreversibility, biosphere, geological models of catastrophism, and uniformitarianism to describe cultural time.

To conclude the first part of the workshop, Andrei Vinogradov addressed the environmental thought and imaginaries of pollution of late imperial Russia, bringing into the spotlight social conflicts around oil transportation and oil spills in the Volga River in the late nineteenth and early twentieth centuries. As Andrei Vinogradov showed, the introduction of anti-pollution policies functioned as protection of the imperial cultural system. Oil was perceived not only as material but also as cultural “pollution,” i.e., the destruction of old elites and the emergence of new ones, hence threatening the traditional economy. In the end, the stability and orderliness of the empire turned out to be more important for the state than economic progress and commercial profit, which resulted in the introduction of the first Russian anti-pollution law in 1904.

The second panel reflected on more contemporary environmental discourses ranging from the writings surrounding the creation of Soviet science towns to the usage of the “Noosphere” concept by Russian officials and businesses in governmental decrees and public speeches.

In the first presentation of the second panel, Julia Lajus explored the conceptualization of “Ecological Crisis” in the USSR in the 1970s, focusing on the works of Evgenii Konstantinovich Fedorov (1910–1981), a Soviet meteorologist and geophysicist, and Barry Commoner (1917–2012), an American cellular biologist. While in some ways—in their critique of capitalism, militarism, and growing inequality between developed and developing countries, and their opposition to a simplistic demographic explanation of ecological crisis—their ideas were quite similar, Fedorov and Commoner disagreed on plenty of other issues, such as the perception of risks, the role of technology, and the attitude towards environmental problems in the socialist camp. Soviet scientists, including Fedorov, were convinced that growth was essential for further development. “No growth” approaches were marginalized. As Julia Lajus showed, for Fedorov, the problem of growth could be addressed by increasing the productivity of the biosphere on the basis of conscious calculations and the complex modification of nature by different technologies—very much in the spirit of Vernadsky, whom Fedorov admired.

Vernadsky’s concept of “Noosphere” and its interpretations were also explored in the presentation made by Victoria Myznikova. Focusing mostly on Russian environmental discourses and policy documents, she showed the changes that this concept has undergone since the 1990s. As Victoria Myznikova noted, over the course of years, “noosphere” has become a “floating signifier” for those who use this term, due to the incompleteness of the concept and the broad engagement with it. Different actors approached it from their specific perspectives in order to suit a particular viewpoint. In different contexts, Vernadsky emerged as the “co-author of perestroika,” “the pioneer of ESG,” and “the inventor of sustainable development,” while the “noosphere” was used to describe anything from the aforementioned “sustainable development” to “the global market and global workforce.” In the most recent document and speeches, Russian officials and businesspeople referred to it as a vague global utopian perspective of joint human-nature development accompanied by “sovereign” ways of achieving it. The rebranding of the “noosphere” as a particular “Russian” approach to environmental problems marked the general nationalistic shift in Russian politics, breaking with Vernadsky’s universal perspective.

A different kind of environmental concept was the main topic of a presentation by Timofey Rakov, who discussed the history of forest management at Novosibirsk’s Scientific Center of the Russian Academy of Sciences, known as Akademgorodok (i.e., academic town). Timofey Rakov gave an overview of technologies of management of the forest, surrounding the town, following Sverker Sörlin and Nina Wormbs’ theory of *environing technologies*. This idea underscores the difference between two concepts: “nature” and “environment.” The latter means objects that bear the imprint of the interaction between man and the landscape adjoining him. Timofey Rakov focused on the activities of a forest management organization established in the Akademgorodok, the Forest Protection Experimentation Station. The Station designed the complex program of forestry based on two types of technologies—description and shaping. Description meant the observation of the forest condition and proposed measures to sustain the forest based on the collected data. Shaping supposed specific practices—healing diseased trees,

isolating parts of the forest to restore the soil, and organizing the footpaths in the forest. Timofey Rakov argued that these measures also involved inhabitants of Akademgorodok making the trees and citizens connected in a complex system.

Finally, Jonatan Palmblad examined the objections to the “noosphere”-like discourses presented by twentieth-century system ecologists and organicist thinkers. Through an overview of the works of Eugene P. Odum (1913–2002) and Lewis Mumford (1895–1990), he showed that even when the concept of the noosphere was first introduced it already received criticism for its technological hubris. Eugene P. Odum described it as a “dangerous philosophy . . . based on the assumption that mankind is now wise enough to understand the results of all his actions.” As for Mumford, he recognized how the noosphere fitted neatly into the mechanistic worldview conceived in the Scientific Revolution. Jonatan Palmblad then proceeded to describe how the techno-optimism of the noosphere was revived in the twenty-first century in the ecomodernist idea of a “great Anthropocene” and in the congruous philosophies of effective altruism and longtermism. Jonatan Palmblad suggested that because the latter justifies the sacrifice of people in the present for a techno-utopian future, the past criticism of the noosphere has become all the more relevant.

The concluding discussion consisted of suggestions for further analyses of the “noosphere” and related concepts in contemporary discourses. For example, the participants noted how the COVID pandemic made the polemic on the noosphere all the more relevant. The contributors agreed that bringing a global and collective perspective is necessary to address the current polycrisis, in which environmental, political, and economic problems are closely entangled. However, they also noted how a more particular outlook is also needed to avoid naive techno-optimism and to bring forward the perspectives of the people most affected by these crises, especially in the Global South.

Workshop overview

Greetings and Opening Remarks

Welcome Address by Christof Mauch

Opening Remarks by Julia Herzberg and Julia Lajus

Part I

Talk 1: Julia Lajus, “What is the Noosphere?”

Talk 2: Philipp Kohl, “Biosphere and Semiosphere: Natural Temporalities in the Tartu-Moscow Semiotic School”

Talk 3: Andrei Vinogradov, “Environmental Thought and Imaginaries of Pollution in Late Imperial Russia”

Part II

Talk 1: Julia Lajus, “The 1970s Conceptualization of ‘Ecological Crisis’ in the USSR”

Talk 2: Victoria Myznikova, “Different Ways of Thinking Global: The Unlikely Return of ‘Noosphere’ into Environmental Discourses”

Talk 3: Timofey Rakov, “The Urban and the Natural: Environment and Its Understanding in Soviet Science Cities”

Talk 4: Jonatan Palmblad, “No to the Noosphere: Organicist Objections to a Promethean Panacea”

Concluding Discussion