

The Noösphere, Optimism, and Learning in Challenging Times

Laura A. Henry

Thank you, President Rose.

Dear Colleagues, First year Students, and Members of the Campus Community,

I am so pleased to speak to you at the start of the academic year – this energizing moment when we reflect on what we have learned thus far and anticipate what we hope to explore in the months ahead.

In the spirit of self-reflection, I want to tell you about an idea that I have wrestled with on and off for several decades: the noösphere. In the 1920s, the Russian scientist Vladimir Ivanovich Vernadsky, working with two French scholars, identified a new stage in the earth's development: the noösphere, meaning the sphere of human thought. Vernadsky recognized that humans had become a "large scale geological force" on Earth. In the noösphere, Vernadsky asserted, the development of human consciousness and "collective reason" would play a fundamental role in the evolutionary dynamics of the Earth's basic geochemical processes.

Why do I highlight the noösphere here today? It's because the concept of the noösphere – or at least the popular imaginary of the noösphere in contemporary Russia – was a stumbling block for me when I wasn't much older than the first year students here to begin their Bowdoin education. By grappling with the idea of the noösphere – an unfamiliar approach to understanding the world – I had to face certain self-imposed barriers to my ability to learn.

So today I want to take you back in time, to an era long before some of you were born, but not such a distant past for others in the room. The year is 1993. I am a freshly-minted college graduate. The Soviet Union had disintegrated only a year and a half earlier. I was working and traveling in **Russia** to research the dramatic changes in the country's political and economic systems up close.

And I was ready! I had been interdisciplinary before being interdisciplinary was cool. I had majored in political science and history, taken courses in the Russian language and literature and economics as well as environmental studies. I wanted to understand how people adapted to change following the collapse of the communist regime. In particular, I wanted to see how citizens would take advantage of greater freedoms of speech and association to address persistent environmental problems, a legacy of Soviet industrialization.

Naively, I intended to be student of citizens unleashed and in action, no longer constrained by a single political ideology. I met people in schools, community centers, and government agencies – wherever I could. This effort led me to many interesting spaces and inspiring people – from an environmental education club that planted trees in Vladivostok to an ecological apartment building in St. Petersburg where worms busily composted food waste in the basement. I had more to learn from these people than to offer in return, but I volunteered when I could be of

use. For example, despite my extremely limited technological skills, I followed the English-language instructions to connect newly purchased modems to computers that would allow these citizen activists to communicate with counterparts around the world.

It was invigorating. However, my interest in action ran up against the brutal realities of daily life in Russia at this time. In the 1990s, most Russian citizens were focused on survival. I had arrived as hyperinflation and disillusionment began to set in. Life savings disappeared in a matter of weeks, prices of even basic foods rose steeply, and employment became precarious for the first time in modern Russian history. Citizens had gained new political rights, but their social rights – such as free housing and health care – eroded. The political arena was equally unstable as violent struggle erupted between the president and the parliament just months after I arrived.

How could one be optimistic about the future in the midst of this turmoil? How could the environmentalists I met sustain their commitment during what was in some ways a liberating but also deeply disorienting and even traumatic period? Even now I marvel that so many people generously gave of their time to talk to an eager young American. Over hot tea in frequently over-heated rooms, in response to my questions about their future plans and policy options, a number of these environmentalists responded in a more philosophical vein. I wanted to talk action, and they wanted to talk ideas. Of all of the philosophical “digressions” in these conversations, the most common had to do with the noösphere.

Many of the Russians who I met sought a deeper understanding of their situation – and a source of optimism – in the writings of Vladimir Vernadsky. Vernadsky lived from 1863 – just a few years after the emancipation of Russia’s serfs – to 1945 – just months before the Soviets and allies defeated the Nazis in WWII. Despite my dutiful interdisciplinarity, I had never heard of Vernadsky.

Vernadsky was one of the founders of the field of biogeochemistry, but his work transcended the traditional boundaries of the natural sciences. Vernadsky identified the noösphere as the Earth’s third stage of development, after the geosphere and the biosphere. He recognized that humankind was “becoming a mighty and ever-growing geological force.”

By now we are used to the idea that we humans are starting to profoundly affect fundamental aspects of the earth and its climate, chronicled in a growing literature on the Anthropocene. For many of us, this is a source of pessimism, as we think of plastics in the ocean, persistent organic pollutants in the Arctic, and greenhouse gas emissions globally. We are indeed changing the planet, and likely not for the better.

But the Russians I met were talking about something different than the Anthropocene – something both deeper and more deliberate, a way of harnessing the power of human reason more intentionally. These environmentalists valued Vernadsky’s concept of the noösphere not only for its scientific insight, but for its approach to understanding the human capacity to alter the relationship between society and our planetary systems. Many of them explained to me that the changes in Russian society, despite economic dislocation and human suffering, signaled

a new opportunity: the possibility of a shift from material values to spiritual or ethical values. The difficult post-Soviet transformation could portend a remaking of the human relationship with nature.

I admit that, over my cups of hot tea, I waited impatiently for these explications of the power of the noosphere to come to an end. In part, I was confused. Despite my interdisciplinarity, I had little experience with philosophy and I often found myself out of my depth linguistically, reaching the limits of my Russian language skills. I also was eager for the moment when we could discuss “real things.” To me to, the noosphere sounded like dreaming instead of acting. I thought the important stuff was what people did in their daily lives, not what they thought or believed in.

It took an embarrassing amount of time for me to realize that for Russian environmentalists this noosphere was indeed a “real thing,” perhaps *the* “real thing.” I was slow to see that the source of hope in the midst of chaos was not only in changing laws and regulations, but hope was in the noosphere. The noosphere allowed people to continue to imagine a better future in a brutal present. It held out hope that human reason and consciousness can be constructive forces. Faith in the noosphere is what kept these environmentalists engaged with their fellow citizens, talking, planning, and beginning the difficult process of envisioning alternatives for how we live on this planet.

I had much to learn from my Russian interlocutors and from Vernadsky. I will share a few of these lessons.

- The first lesson was to slow down and listen. Your confidence that you already know what matters, what is important in explaining the world, may crowd out your ability to hear what matters to others.
- Second, the uncomfortable feeling of being perplexed, confused, out of your depth – these are not feelings that should be beaten back with certainties and hasty conclusions. Instead they should inspire humility and should be embraced as a painful, but essential part of learning.
- Third, context matters. We are shaped by the political and social circumstances in which we live in ways that we cannot understand – even if we consider ourselves to be critics of mainstream thought or contrarians. For example, I believed that I had rejected post-Cold War triumphalism so prevalent in the United States at that time that said: We won the Cold War! Our system is the best! But in fact these ideas shaped my expectations that with the disintegration of the Soviet regime, American and Russians would become more similar – with similar motivations to act politically and solve problems. The noosphere challenged cultural assumptions that I did not know I had. The optimism of Russian activists came from an entirely different place – not from mimicking Western ideas or strategies, but from a philosophical tradition of their own.

When I reflect on key moments of learning in my own life, these moments of growth and insight often follow periods that I am embarrassed to recall – stages of life when I dwelled too

much on what I already knew and too little on what I still had to discover. I have learned the most when my capacity for listening and empathy were greatest, when curiosity outweighed my desire to come to a conclusion.

In learning about the noösphere, I was given a gift – an alternative mental framework. Once that I might approach skeptically, but that would engage and push and challenge me to think about the relationship between societies and ecological systems. One that has only become more relevant as the years have passed.

In the midst of the misery and despair of WWII, Vernadsky wrote, “Now we live in the period of a new geological evolutionary change in the biosphere. We are entering the noösphere. This new elemental geological process is taking place at a stormy time, in the epoch of a destructive world war. But the important fact is that our democratic ideals be in tune with the elemental geological processes, with the laws of nature, and with the noösphere. Therefore we may face the future with confidence. It is in our hands. We will not let it go.”

Vernadsky’s message is as important today as during World War II: We have the power to shape our fate and the fate of our planet.

I wish you all an excellent academic year.

Sources:

V.I. Vernadsky, “The Biosphere and the Noösphere,” *The American Scientist* 33, 1 (January 1945): 1-12.