

Soviet Ideology and Creativity

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To be of current scientific relevance, it is important to emphasize a matter of principle which is intrinsic to the method of scientific discovery used by Vernadsky in developing the modern conceptions of Biosphere and Noösphere up-to-date. It is a principle curiously lacking in explicit arguments employed in today's physical-science classrooms generally. In a slightly different way, the same ideological problem arises in Russian as well as specifically Soviet ideology. Actually, the notion of creativity is virtually excluded from most modern writing and practice of science and artistic composition.

Nonetheless, this very principle is crucial in dealing with Vernadsky's development of the notions of Biosphere and Noösphere. The ideology-driven efforts to explain and employ the discoveries of Vernadsky without taking a principle of creativity into account, is the usual basis employed in attempts to turn Vernadsky's work into a creed of back-to-Earth mysticism.

This could not have occurred in post-Alexander III Russia except for a kind of patriotism which is shown dramatically in an anti-Bolshevik Vernadsky who devoted himself to service under the Bolsheviks for the sake of Russia. The Stalin administration, for example, clearly understood this fact, and defended Vernadsky's rights against some very menacing sections of Soviet officialdom.

Similarly, among the relevant notables within the former Fusion Energy Foundation (FEF), there were physical scientists, including physical chemist Professor Robert Moon, who practiced creative scientific discovery with notable excellence, and yet, at the peer-review blackboard, submitted to the still currently conventional, barbarisms practiced under the inquisition eyes of the radically re-

ductionist Babylon priesthood of contemporary mathematics dogmas.

Thus, unless the specific factor of a kind of scientific tradition traced from Pythagorean Sphaerics, the Leibnizian principle of *dynamis*, is taken into account, the discussion of creativity usually degenerates into locating the name of creativity within the confines of the symbolic imagery of a reductionist form of mathematical formulation.

As I have emphasized in my "Vernadsky and Dirichlet's Principle" (see *EIR*, June 3, 2005), Vernadsky's creative intention is clear to anyone in that competent strain of modern experimental-science tradition of Nicholas of Cusa, Leonardo da Vinci, Johannes Kepler, Pierre de Fermat, Blaise Pascal, Christiaan Huyghens, Gottfried Leibniz, Carl F. Gauss, and Bernhard Riemann, as also the principle of Classical musical composition derived from the original discoveries of Johann Sebastian Bach.

Explicitly, Vernadsky develops and applies the crucial experimental evidence which demonstrates that living processes reflect the action of a universal physical principle which is not experimentally manifest within the bounds of non-living processes, whereas the achievements of human cognition express a universal physical principle absent from all lower forms of life than mankind.

It is only from that vantage-point that the actual achievements of Vernadsky could be recognized, and the crucial importance for the successful future of all mankind, in their obligatory role within the domain of a science of physical economy today.

In considering the crucial discoveries developed by Vernadsky, the mind must tear away the brutish veil called sense-certainty, to go beyond the powers of the ape, to go directly to the great universal physical principles which only the truly creative individual intellect could actually know. It is the experimental truthfulness of what is seen beyond that veil of brutish sense-certainty, which is the means of access to the knowable, experimental proof of the difference between good and evil.

—Lyndon LaRouche

cepted as a scientific genius of sorts, but one often attacked and viewed generally by the mandarins of dialectical materialism as an "idealist" and a "vitalist."

In something of a master-stroke, Vernadsky created an entirely new field, biogeochemistry, and established an institute around that study in order to have a forum in which his own notion of the formative role of the biosphere in the chemistry of the planet, also frowned upon by the authorities, might be studied without repercussions.

His most farsighted writings criticizing the prevalent no-

tions of Euclidian space and time in physics, as defective for understanding the phenomena that were being investigated in the biological sciences, and calling instead for the application of a Riemannian, rather than a Euclidian, geometry, went totally beyond the ken of the guardians of "Diamat," and were either suppressed or printed in scholarly journals with a very limited circulation.

In the essays presented here, Vernadsky also outlines the two principal premises on which his life's work was based. The first is the principle of Christiaan Huygens, that