

Russian minister writes on ‘physical economy’ from Leibniz to LaRouche

The Russian-language book Osnovy fizicheskoi ekonomiki (Foundations of Physical Economy), published in Moscow this year, is co-authored by Dr. Yu.S. Savrasov, Dr. D.S. Kontorov, and Dr. N.V. Mikhailov, who is the First Deputy Defense Minister of the Russian Federation. The volume includes an introduction that reviews “physical economy,” as brought to life in the late 18th century as the “American System of Political Economy” in opposition to “official British political economy,” and in our day by Lyndon LaRouche. First Deputy Defense Minister Mikhailov is identified in the book as the author of that introduction.

Dr. Mikhailov is a leading Russian specialist in anti-missile defense, who is visibly active in current deliberations about Russia’s military posture. In 1996, he became Deputy Secretary of the Security Council, before moving to the Ministry of Defense the next year.

These excerpts from the introduction to Osnovy fizicheskoi ekonomiki have been translated by EIR. Subheads have been added.

Economics is “the law of the house” (Gk. *oikos*—house, *nomos*—law), from the household to the planetary level, the planet being the house for all humanity. . . .

The first known book on economics was the Book of Genesis. There it was said, that man is destined to live in no other way, than by means of daily labor, to be fruitful and multiply, to replenish the Earth and have dominion over all living and non-living beings of nature. It is evident, that mankind is following those dicta down to the present day, although not always with success.

The ‘American System’ of political economy

Economic science (in the modern sense) is significantly more recent. The works of Leonardo da Vinci (1452-1519) show that there were successful efforts to develop economic science already in the 15th century. In 1671, Gottfried Leibniz (1646-1716) published his article “Society and Economy,” devoted to questions of real value and compensation of productive labor. He established the terms “work” and “power,” which subsequently were used in physics. He defined the term “technology.” From 1791 until 1830, Leibnizian economic

science became known worldwide as “the American system of political economy,” which played a marked practical role.

At the beginning of the 17th century, the tendency of cameralism had emerged, which was a variety of mercantilism, manifested as the state’s active intervention into economic life in the interest of merchants. The partisans of this teaching believed that profit was created in the sphere of exchange, and that the wealth of a nation was comprised of money. The teaching of Leibniz was broader and deeper. In essence, Leibniz originated the synthesis of physics and economics. Then, the physiocrats, who modelled their schema on the Chinese economic model, influenced views in economics to a certain degree. Rejecting the notion of wealth as an accumulation of money, they considered nature to be the sole source of wealth. . . .

Official British political economy begins with the book *The Wealth of Nations*, by Adam Smith (1723-90). The British scientific paradigm opposed the American one, and took the upper hand.

Economic science underwent fundamental anti-capitalist development in the works of Karl Marx (1818-83), who synthesized the British, American, and physicalist tendencies and brought to the fore *human labor* as the source of wealth.

Thus it came to pass, that the fundamental ideas of Leibniz, about the concepts of labor and power, were first moved to the back burner, and then quite forgotten, although the principle of least action, which he discovered, was the central element for defining productive technology.

The discoveries of Leibniz and his followers (Huygens, Carnot, et al.), using the differential calculus and other mathematical achievements, were the basis for the development of heat-powered machinery, the creation of the coal and iron industries, and for methods to economize labor in economic practice. They played a certain role in forming the technosphere. This fruitful tendency was continued in the works of F. List (1789-1846), Henry C. Carey (1793-1879), E.P. Smith (1814-82), and, in our time, Lyndon LaRouche, who based his work on the geometrical conception of Bernhard Riemann (1826-66), and the works of Kepler (1571-1630) and Gauss (1777-1855). *Physical economy* did not win due recognition, perhaps because economics is inevitably bound up with the concept of law. Physical economy borrowed the idea of *natural law* from Nicolaus of Cusa (1401-61), who defined it as the *law of equity*. The economics of Adam Smith and his followers—traditional economics—proceeds rather from a notion of juridical, *legislative law*. It became a descriptive science, which identifies and interprets processes in production relations.

It may seem paradoxical, that the impulse to create physical economy came from the thinking of the idealist Plato, while the point of departure for modern traditional economics, which is alien to the physical paradigm, is the concepts of the materialist Aristotle. This paradoxical character, how-

ever, is purely superficial. The profound causes of the difference have another genesis. The pretensions on the part of traditional economics, to be able to establish economic laws that are effective for purposes of prediction, proceeding only from the conditions of existence, turned out to be illusory. In that sense, traditional economics failed to justify being called “the law of the house.” . . .

No fundamental achievements

Despite the dispensing of Nobel prizes for economics, this discipline has yielded virtually no fundamental achievements, which have predictive validity.

In the mid-20th century, a new tendency arose—mathematical economics, which is linked with the names of J. von Neumann, O. Morgenstern, L.V. Kantorovich, H. Nikaïdo, V.V. Leontyev [W. Leontieff], D. Meadows, M. Mesarovich, et al. The research and prognoses of the Club of Rome became particularly well known, but were not borne out. A powerful and highly ramified mathematical apparatus was developed, but due to the absence of promising economic ideas, the pragmatic validity of this tendency proved inadequate. The world developed so rapidly, that economics was unable not only to forecast coming changes, but even to explain those that had already taken place. In this phase, too, economics failed to justify its name, and, despite the prestige of the profession of economist and the need for such a science, it did not attain genuine scientific status as a basic science.

It is impermissible to deny the great contribution to the development of economic thought by such nearly contemporary scholars as Samuelson, Nikaïdo, Marishima, Dornbusch, J. Fischer, and J.M. Keynes. . . . The Soviet school added little to the gnoseology of economic processes, but it achieved significant successes in the development of mathematical models (V.L. Makarov, D.S. Lvov, et al.). Contemporary Russian economists are pure pragmatists, and not very good ones. Using the experience of the West, some of them carried out a monetarist policy, paying no attention to the specifics of the real situation in Russia. Another group appealed to “the achievements of socialism” and called for restoring it, with some corrections. Not one economist in the world, however, has yet been able either to predict, or to explain the economic phenomenon of Russia in our time.

The science of physical economy

Physical economy makes it possible to use physical analogies as a predictive instrument for economic research. Although the ideas of physical economy go back to Plato, Leibniz, and Cusa, physical economy is becoming a scientific tendency, recognized by the public, only in our time—because of the inability of traditional economics to solve problems of forecasting, and to the pressure of practical requirements. The representatives of this tendency—L. LaRouche, P. Kuznetsov, et al., have concentrated their attention on prac-

tical, as well as conceptual problems.

(Dr. Mikhailov provides a bibliographical reference to the Russian edition of LaRouche’s book *So, You Wish to Learn All About Economics?*, published in Moscow in 1993.)

Russians seek ‘asymmetric’ advantages in military technology

by Rachel Douglas

Dr. Nikolai V. Mikhailov is a key figure in Russian military science, and anti-missile defense in particular, who is taking a prominent role in current public debates in Russia about the proper military posture, now that NATO “out-of-area deployments” have commenced with the bombing of Yugoslavia. Co-author of the new book, *Foundations of Physical Economy*, Mikhailov has been First Deputy Defense Minister of the Russian Federation since September 1997, with the additional rank of “state secretary.” Before that, he was deputy secretary of the Security Council of the Russian Federation, beginning in July 1996.

N.V. Mikhailov, 62, has worked chiefly on the industrial and technical side of Russian defense. In 1997, he received a State Prize of the Russian Federation “for projects on the creation and development of warning systems against missile attack, space control systems, and anti-missile defenses.” Mikhailov holds degrees as “doctor of economic sciences” and “grand doctor of philosophy.”

From 1986 until 1996, Mikhailov headed a Soviet research organization, becoming a Russian joint-stock company after 1991, called “Vympel” (“Pennant”), which did classified work on radioelectronics and anti-missile defense. In 1993, “Vympel” was identified as one of the initiating organizations for the Russian “Trust” proposal for joint Russian-American anti-missile R&D, presented at the Vancouver summit. As *EIR* was one of the few publications to report at the time, President Boris Yeltsin carried to that very first summit meeting with President Bill Clinton a proposal for cooperative U.S.-Russian development of anti-missile “plasma weapons,” a proposal that, in its key characteristics, reflected the original LaRouche policy-design of a shift to effective defense against nuclear attack, based on scientific breakthroughs. The proposal was announced in an April 2, 1993 front-page *Izvestia* article, headlined “On the Eve of Vancouver—Russia Proposes to the U.S. a Joint Plasma