

How not to learn about Soviet science

by Warren J. Hamerman

Science, Philosophy, and Human Behavior in the Soviet Union

by Loren R. Graham

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Massachusetts Institute of Technology Prof. Loren Graham allows himself to be billed as the West's number-one expert in unlocking the door of the closed world of Soviet science; yet his works, whether through incompetence or deliberate design I do not know, are part of an elaborate Russian cover-up of their true scientific capabilities. In the 565 pages of his latest book—an updated version of his 1972 “classic” *Science and Philosophy in the Soviet Union*, for example, Graham manages the remarkable feat of making *not one single mention* of the two most important Russian scientific assets of the 20th century—Vernadsky and Gurvich.

As is consistent with other “camouflaged” accounts of Soviet science—for example those of Russian long-range scientific penetration agent Zhores Medvedev—Graham instead fills up hundreds of pages with anecdotes about the Lysenko “affair” and the dogs of Pavlov. Imagine a book on American scientific capability which spent most of its time exhaustively describing the work of Kinsey, Henry James, Margaret Mead, and Masters and Johnson, and you have a good idea of Graham’s scholarship.

The fact that Graham overlooks Vernadsky and Gurvich is most revealing. Vladimir I. Vernadsky (1863-1945), was the father of the school of “biogeochemistry,” the founder of Russia’s atomic energy program, and the organizer of the scientific-technological basis of the Russian war machine for both world wars of this century. The Russian biophysicist Alexander Gurvich (1874-1954) discovered “mitogenic radiation,” was a pioneer in the study of the biological “field,” and the father of all Soviet work in examining the effects of electromagnetic radiation on biological substances.

The incredible omissions of Vernadsky and Gurvich are not Graham’s only lapses. He completely avoids any discussion of the vaunted Soviet program in fusion energy and plasma physics. He also overlooks the entire Russian space

program, laser and beam science, as well as virtually every other area of their actual scientific achievement.

In short, Graham’s book is designed to prove that Soviet science poses no threat to the West and has had no major accomplishments. To be sure, Graham poses for himself the task of reviewing the relationship between the “philosophy” of dialectical materialism and Soviet science. Admittedly, a dreary end result is guaranteed, given the nature of a study which is intended to prove that while there may have been certain “excesses” in implementation from the Soviet regime.

Graham concludes that dialectical materialism itself is about to give birth to a new “sophisticated materialism” which would warn the scientist “not to fall prey to mysticism in the face of the sometimes overwhelming mystery and awe of the unknown. . . . It might encourage him to erect temporary explanatory schemes larger than any one science, but ones that do not pretend to possess final answers.”

Graham reaches this conclusion by alternating between ponderous flights into the nether world of heavy Marxian philosophy, and superficial whirlwind tours through a myriad of scientific fields—biology, cybernetics, chemistry, quantum mechanics, relativity physics, cosmology, physiology, genetics, etc.—with the utter lack of depth and insight that is often cultivated in the salons of those Western Sovietologists who find Gorbachov a refreshing and urbane leader.



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