

## **Reflections on Russian and American Conversations on Cybernetics and Systems Theory in the 1980s and 1990s**

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In 1985 and 1988 two meetings between Russian and American scientists in the field of cybernetics and systems theory were supported by the American Council of Learned Societies and the Soviet Academy of Sciences. These meetings revealed significant differences in how cybernetics was developing in the U.S. and the USSR. In the Soviet Union there was a much closer connection between science and politics than in Western countries. The Americans were primarily interested in developing cybernetics in the direction of understanding cognition, knowledge, and the philosophy of science. By understanding the nature of knowledge and expanding the philosophy of science Americans hoped to encourage tolerance and create a superior foundation for social science. The “official Russians” tended to view cybernetics as a technical field akin to operations research, artificial intelligence and ergonomics, a field that could help them manage their centrally planned economy. “Unofficial Russians” were also interested in cognition and in ethical systems in the West and the Soviet Union. The differences in concerns and guiding questions made clear that scientific fields can evolve differently in different societies, even though the underlying logical issues can be similar.

From 1990 to the present a series of symposia on the transitions in the post-communist countries were organized during the European Meetings on Cybernetics and Systems Research, which are held every two years in Vienna, Austria. These meetings brought together scholars from East and West to discuss theories to guide the transitions and the effects of social, economic and political reforms. Initially the intent was to refute the view that there were no theories to guide a transition from communism to capitalism. Key conclusions from these symposia have been an understanding of the importance of cultural factors (underlying beliefs and values) in the process of development and an appreciation of the time required for major social changes to occur.

Since 1994 over 150 young professors from the former Soviet Union and Southeast Europe have spent several months at The George Washington University through exchange programs financed by the U.S. Department of State. One outcome of this activity has been to acquaint these scholars with group facilitation methods. These methods are particularly suitable in societies where people have been accustomed to doing what they are told. Participatory problem solving and planning enable people in organizations or communities to come together to define the problems that they see and to devise solutions that they think will work. Several of the visiting scholars have begun using these methods when they returned to their home countries. These methods are quite compatible with second order cybernetics and the philosophical position of constructivism.