

Eglė Rindzevičiūtė, *The Power of Systems. How Policy Sciences Opened up the Cold War World*, Ithaca: Cornell University Press. 2016. 306 p. ISBN 978-1-5017-0318-8

This extremely interesting book deals with little-known chapters in Cold War and Soviet history. The story centers on the International Institute for Applied Systems Analysis (IIASA), an international think-tank established in the age of detente to foster East-West scientific collaboration. While the institutional history of the IISA constitutes the core of the book, the study deals with much broader questions. The author explains that her research may be read in two ways: firstly, as a story of East-West relations in the development of global, system-cybernetic governance; and secondly, as an insight into the transformation and globalisation of late Soviet governance. It consists of an elegantly written introduction, seven chapters, and an epilogue.

Chapter One traces the origins of the Soviet interest in systems analysis. The key decade is the 1960s, when Soviet technocracy embraced the theory of scientific-technical revolution, and the removal of Khrushchev opened the way for new political and administrative elites. The theory of scientific-technical revolution made the Soviet Union increasingly interested in the governance of both hard and soft Western technology. While the transfer of hard technology (computers) failed, the prime minister Kosygin, and his son-in-law Dzhermen Gvish (who became vice-chairman of the State Committee for Science and Technology), actively promoted the transfer of Western policy sciences such as OR, systems approach, and cybernetics.

Chapter Two follows the establishment of the IIASA: the birth of the idea in the administration of Lyndon Johnson, the negotiations disrupted by the Prague Spring, the intensification and institutionalisation of East-West techno-scientific cooperation, the Soviet hopes that an East-West institute would give them access to US computer technology, and the institutional and organisational efforts to politically neutralise the IIASA project. In this chapter, Rindzevičiūtė argues that in the context of the Cold War, the IIASA emerged not just as an instrument to reduce tensions between the superpowers, but also as a crucial space for forging Cold War scientific networks, and for shaping the nascent policy sciences.

In Chapter Three, Rindzevičiūtė asks crucial questions, such as: how could two ideologically opposed regimes cooperate on such an ideologically sensitive topic as systems analysis, which was supposed to forge and control not only technical structures and processes, but also societies and ways of thinking? Did system-cybernetic policy sciences constitute an illiberal governmentality? Or were the Soviets participating in the work of the institute, while never seriously considering embracing the system-

cybernetic technology of governance considered as too liberal or too democratic? Rindzevičiūtė narrates the origins of the approach of systems analysis, and traces the shifts in Soviet institutional and intellectual frameworks, policies and social practices that enabled the Soviets to embrace American policy science.

Chapter Four follows the construction of the IIASA non-political systems community, its sense-making and informal everyday practices, and its mobilisation in defending the institute during the second Cold War.

Chapter Five traces the origins of the Soviet and Western interest in global modelling, and describes the work of several cases of East-West modelling for a new, long-term and global future. This chapter looks at global modelling at the IIASA, global modelling at the UN, and Soviet modelling at the Moscow Computer Center and Institute for Systems Research. As Rindzevičiūtė explains, while many Soviet scientists clearly respected the limits of criticism that the Soviet system allowed, some actually tried to make a serious contribution to Soviet policy planning through their research.

Chapters Six and Seven deal with two specific East-West modelling projects: the nuclear winter model, and the regional air pollution information and simulation model. Rindzevičiūtė demonstrates how Soviet modellers used their research to argue for a new approach to governance that would focus on the place of societies in the complex biosphere system.

The book puts forward an interesting argument, claiming that the introduction of systems analysis in Soviet policy planning had a liberalising effect. Initially perceived by Soviet officials as the ‘science of control’, systems analysis actually introduced an element of uncertainty: after all, there was an assumption that complex systems can never be fully represented or understood. Thus, as the author explains, ‘the notion of cybernetic control allows for the areas of opacity and self-regulation’. Rindzevičiūtė argues that East-West cooperation played an important role in shaping global governance, ‘including aspects that we traditionally associate with neoliberal states such as for example scientific, knowledge-based governance at a distance, capitalising on scientific expertise and the idea of self-regulation’. However, the book would have benefited from clearer examples on how exactly policy-makers received and used research based on systems analysis. Rindzevičiūtė explains that Soviet scientists ‘actively participated in the development of global governance, which they saw as an antidote to short-term government concerned with quick fixes’. It is, however, not clear if and how this antidote was ever used by policy-makers. In the same line, the book argues that ‘through particular networks, organisational culture, and research projects, the systems approach redefined the Cold War world.’ In the context of the IIASA, this argument is very convincing: the IIASA itself both embodied and promoted an alternative to Cold War antagonism: the question is how influential systems approach-based views were *outside* networks of scholars and researchers. For example, Matthew Evangelista, in his book *Unarmed Forces. The Transnational Movement*

to *End the Cold War*,¹ minutely demonstrates how transnational networks of scientists managed to get access to Mikhail Gorbachev, and influenced his attitude on nuclear weapons. Meanwhile, *The Power of Systems* gives much less evidence on the connections between scholars and policy-makers.

This, however, does not diminish the value of this very original study, but merely poses questions for further research. Rindzevičiūtė's book makes an important contribution to the debate about the influence that Western ideas had on Soviet intellectual circles launched by Robert English in his book *Russia and the Idea of the West: Gorbachev, Intellectuals, and the End of the Cold War*² more than 15 years ago. The study offers a deep analysis of the process that made the circulation of ideas possible in a world that was supposedly divided by two antagonistic blocs. In this sense, the book follows the latest trends in Cold War historiography that look at bridges and connection points between the socialist and capitalist worlds, as well as groups, networks and activists that challenged the Cold War bipolar logic. Rindzevičiūtė skilfully sheds a light on what she calls nodes of transnational scientific networks: groups of East-West scholars who redefined the idea of the Cold War, both in their everyday practices and in their research. In terms of Soviet history, *The Power of Systems* gives us a powerful insight into the crisis of Soviet modernity. While another excellent study by a Lithuanian author, *The Making and Breaking of Soviet Lithuania*,³ analyses the popular and nationalist challenges to Soviet modernity, Rindzevičiūtė discusses criticisms from scientific elites. The chapters on global modelling demonstrate how the introduction of Western policy sciences (systems analysis) and international cooperation led Soviet scientists to question the durability of the Soviet model.

The Power of Systems uses the analytical tools shaped by Roland Barthes, Michel Foucault and Bruno Latour. At the same time, it is based on extensive research in the archives of the Russian Academy of Sciences, the Russian State Archive of the Economy, and the IIASA archives, and semi-structured interviews with ex-Soviet and Western scientists, research politicians and administrators. It thus offers a very wide range of previously unused sources that support the skilfully elaborated narrative. All in all, one of the book's greatest strengths is its interdisciplinarity: it will be a fascinating read for historians of the Cold War, the Soviet Union and the history of science, as well as for sociologists and political scientists.

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¹ M. Evangelista, *Unarmed Forces: The Transnational Movement to End the Cold War* (New York, 2002).

² R. D. English, *Russia and the Idea of the West: Gorbachev, Intellectuals, and the End of the Cold War* (New York, 2000).

³ V. Davoliūtė, *The Making and Breaking of Soviet Lithuania: Memory and Modernity in the Wake of War* (Routledge, 2014).