The British Journal for the History of Science (2023), 1–3
doi:10.1017/S0007087423000833

BOOK REVIEW

Eglė Rindzevičiūtė, *The Will to Predict: Orchestrating the Future through Science*

Ithaca, NY: Cornell University Press, 2023. Pp. 306. ISBN 978-1-5017-6977-1. $56.95 (hardcover).

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Eglė Rindzevičiūtė's study focuses on prediction of the future as a form of power situated across two distinct, but intertwined, domains – governmentality and science. From the perspective of governmentality, science – to the extent to which it is deemed capable of forecasting future developments in complex systems (economic, demographic, climatic) – assumes the role of a sophisticated cognitive instrument that can help governments manage uncertainty, devise policy, make decisions and take strategic action. From the perspective of science, though, prediction is not simply an applied task, but an epistemological problem, which requires proper theoretical articulation and methodological development if it is to be made 'scientific'.

Rindzevičiūtė is especially interested in the latter, but, as she argues persuasively, the two perspectives cannot be studied separately. Predictions that matter are inseparable from their governmental functions; the latter thus inevitably shape the epistemological development of the science of prediction itself. And scientific efforts to master prediction cannot be disentangled from the will to govern governing itself scientifically. This makes scientific prediction a topic par excellence of political epistemology. It requires analysing the issues at stake as epistemological in kind while attending to their underlying political nature, or, more precisely, to the fact that prediction is a form of power. Rindzevičiūtė balances these demands by developing a transnational and transhistorical framework for understanding prediction as a scientific problem, while focusing her analysis on a particular historical case – the interest in scientific prediction that developed in the political context of the Soviet Union.

At the heart of Rindzevičiūtė's historicization of this problem is what she posits as the shift from the modern positivist to the late modern cybernetic model. The former assumes that scientific prediction relies first on mastery of the laws of relevant systems, and second on the availability of pertinent data. This model understands prediction as a natural extension of the more general scientific mastery of a given domain of knowledge. It imposes, however, significant limitations on what science can legitimately predict if faced with high systemic complexity and uncertainty, or with insufficient data.

By contrast, the cybernetic model conceptualizes prediction as intrinsic to cognition. Cognition is understood here as a fundamental component of agential interaction with an inherently dynamic and never comprehensively known surrounding world. In the cybernetic model, the question of scientific prediction is no longer about how to use scientific knowledge to make predictions about the future, but about how to develop a science of predictive knowing. Borrowing the concept of 'orchestration' from the father

of cybernetics, Norbert Weiner, Rindzevičiūtė uses the expression 'orchestration of the future' to render metaphorically what such cybernetically understood predictive knowing entails.

Rindzevičiūtė's analysis of efforts to make prediction scientific in the Soviet Union is neither a systematic institutional history nor an argument about Soviet specificity. Rather, her account rests on a set of exemplary Soviet scholars who engaged in original ways with prediction as a problem of and for science, while her choice of examples is governed by her focus on the shift from a positivist to a cybernetic model. While Rindzevičiūtė places these scholars within the context of distinctively Soviet patterns of both governmentality and science, she also consistently shows that the most innovative ideas that emerged in this context were at odds with the mainstream bureaucratic policies and practices of the Soviet regime.

One of Rindzevičiūtė's first examples is the early Soviet economist Nikolai Kondrat′ev (1892–1938), who is remembered for his stringent critique of the way central state planning was organized in the late 1920s and early 1930s. Kondrat′ev is interesting to Rindzevičiūtė because his analysis, especially as developed in his 1926 essay 'On the problem of foresight', lays bare the fundamental limitations of the positivist model of scientific prediction that reigned in the late nineteenth and early twentieth centuries. One might say that it was the unprecedented scale of the Soviet experiment of making all-encompassing centralized planning an administrative reality that exposed the failings of the positivist model of prediction to Kondrat′ev. However, in practice, his critique made little difference; it simply absolved Soviet planners of tying their ambitious plans to any kind of science of economic forecasting.

The bulk of Rindzevičiūtė's study is devoted to the late Soviet, post-Stalin era – a period marked by a renewed emphasis in Soviet policy making on science and technology as decisive to socio-economic development. In this context, the idea of scientific prediction fused with a conception of the future as made, first and foremost, through technoscientific transformation. This also led to problematic intertwining of scientific prediction with speculative projection, as demonstrated in Rindzevičiūtė's engaging discussion of the methodological failings of the ambitious project of 'social prognosis' that was promoted, both in the Soviet Union and internationally, by the late Soviet sociologist and self-styled 'futurologist' Igor Bestuzhev-Lada (1927–2015).

The second half of Rindzevičiūtė's book is devoted to scholars whose ideas exemplified cybernetic remodelling of scientific prediction. These were essentially the pioneers of Soviet systems, organizational and games theories, who, faced with the futility of the over-bureaucratized practices of planning and management typical of Soviet administrative and industrial structures, sought to rethink the very idea and purpose of prediction as a part of governance. Crucial here was their shift away from the question of what can be known about the future as such and onto the problem of how to manage and control that which lies at the heart of any government's inability to know the future with any certainty – human behaviour.

Controlling the unpredictability of human behaviour in complex systems – social, economic, organizational and other – became central for philosopher Georgii Schedrovitskii (1929–94), sometimes described as 'the first Soviet management guru'; game theorist Vladimir Lefebvre (1936–2000), renowned for his influential concept of 'reflexive control'; and mathematician Nikita Moiseev (1917–2000), best known for his contributions to the computer modelling of human-made environmental catastrophes, such as nuclear war. Rindzevičiūtė devotes a chapter to each, elaborating their key ideas, while also usefully contextualizing their intellectual biographies. While each of them cuts a somewhat eccentric figure in the context of late Soviet governmentality, their most original contributions are shown to have important legacies in the present, influencing current thinking on key

https://doi.org/10.1017/S0007087423000833 Published online by Cambridge University Press

areas of governmentality in the Russian Federation, especially, and disturbingly, in conflict-driven geopolitical and military strategy.

The Will to Predict tackles an intriguing and topical issue of considerable interest to historians of science, especially the historical scrutiny of the role that science has in modern and late modern governance. It is a well-informed book, rich in ideas and examples. It is perhaps not as historiographically systematic or as focused as it could have been, but it develops its important topic in theoretically illuminating and conceptually productive ways, while contributing a selective, but thoughtful and original, analysis of the underexplored, yet distinctive and instructive, Soviet case.

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