

Aleksey Andreevich Lyapunov

Edited by N. Lyapunova and Ya. Fet. – Novosibirsk: Scientific Publ. Center of RAS, 2001.– 524 pp. + 32 pp. of photos (71 photos). – (In Russian).

The book describes the life and activities of the outstanding Russian scientist Aleksey Andreevich Lyapunov. Lyapunov holds a special place in the history of science in this country due to his leading part in the struggle for recognition and development of cybernetics.

The collection of materials and documents presented in this book dates back mainly to the Siberian period of Lyapunov's life, that is, 1961–1973. These records characterize A. A. Lyapunov not only as a scientist, a teacher, and a public figure, but also as a distinguished and honorable person. His life was, and still remains an outstanding example of serving the public interest.

The book is addressed to students, teachers, and general readers interested in the history of computer science.

Preface

A. A. Lyapunov's private library keeps a Russian translation of W. Ross Ashby's book "An Introduction to Cybernetics" published in Moscow in 1959. The fly-title page of the volume bears a handwritten dedication:

*«To "the father of Soviet cybernetics" dear
Alexey Andreevich Lyapunov. 28/IV-1959»*,

signed by the author of the Foreword A. N. Kolmogorov, the editor V. A. Uspensky, and the translator D. G. Lakhuti.

Many years have passed, and recently, in 1996, the IEEE Computer society honored Alexey Lyapunov as a *Computer Pioneer* who "founded Soviet cybernetics and programming".

A. A. Lyapunov was a representative of old Russian nobility which originated numerous distinguished workers of Russian science and culture during 19th and 20th centuries. While still a young talented mathematician who already was a hero of the Great Patriotic War and a Professor of the Department of Mathematics at the Moscow Artillery Academy, Alexey Lyapunov headed, in the early '50s, the struggle for the recognition of cybernetics in our country. In those hard times, when dogmatic Marxist philosophers denounced cybernetics as a "reactionary pseudo-science", Lyapunov organized the first in Russia scientific seminar on cybernetics at the Moscow State University. Then he launched his famous series of collections "*Problemy Kibernetiki*" ("Systems Analysis"). The fearless struggle for the new science was crowned with full victory.

A lot of materials and documents related to this early period of development of Soviet cybernetics as well as to A. A. Lyapunov's activities were

published in 1998 in the book “Essays on the History of Computer Science in Russia”.

In 1961, on invitation by the management of the Siberian Division of the USSR Academy of Sciences, Alexey Andreevich moved to Novosibirsk where he worked for the rest of his life. The Siberian period was one of the most fruitful in Lyapunov’s life. With the total energy so characteristic of him, Alexey Andreevich joined the organizing of cybernetic scientific teams here. He played the decisive role in the creation of the Cybernetic Department at the Institute of Mathematics and has established the Chairs of Mathematical Analysis and Theoretical Cybernetics at the Novosibirsk State University.

A. A. Lyapunov was a distinguished teacher and disseminator of scientific knowledge. His interests covered the teaching at all the stages of education, from the university down to the primary school level. Alexey Andreevich’s pedagogic activity reached its highest point at the Novosibirsk Academic Village. Together with M. A. Lavrentiev, he initiated the establishment at the Novosibirsk University of the first “Physico-Mathematical School” in our country. He also was one of the organizers of Siberian Mathematical Olympiads and Summer Physico-Mathematical Schools.

The present book is a collection of reminiscences by Alexey Andreevich’s colleagues, students, and friends related mainly to the Novosibirsk period. Some unpublished articles, letters, and other materials are also included portraying A. A. Lyapunov not only as a scientist, teacher, and public figure, but also as a remarkable person whose life was and still is a prominent example of service to the Russian science and the Russian people.

In preparation of this book, many unique materials were used including some from A. A. Lyapunov’s private archives. We have received great assistance from a lot of people, especially from relatives, friends, and co-workers of the scientist. We would like to express our deep gratitude to all of them.

Nataliya Lyapunova, Yakov Fet

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