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BERNHLM BOOSS-BAVNEK and JENS HØYRUP Editors, *Mathematics and War*, Birkhäuser Verlag, Basel-Boston-Berlin, 2003, VIII+416 pp., ISBN: 3-7643-1634-9.

The volume contains some of the contributions delivered at the International Meeting on Mathematics and War, held in Karlskrona, Sweden, from 29 to 31 august, 2002, together with some invited papers. The idea was to bring together mathematicians, historians, philosophers and military, to discuss some of the interconnections between warfare and mathematics. As it is well known after the World War II (WW II), there

has been a strong mathematization of warfare and of the concepts of modern war, which in its turn deeply influenced the development of some areas of mathematics.

The papers included in the volume deal with topics ranging from historical, philosophical, ethical aspects of the problem, to more technical aspects like the functioning of weapons, the actual planning of war and information warfare. The perspectives the authors approach the treated theme also differ from one to other – some papers are written from a pacifist point of view (more or less explicitly), while others are not. Some of the papers are dealing with history, but focused on the last sixty years, e.g., WW II and the Kosovo war.

The volume is organized in four parts: I. *Perspectives from mathematics*, II. *Perspectives from the military*, III. *Ethical issues*, IV. *Enlightenment perspectives*.

The first part contains studies on military work in mathematics 1914-1945 (R. Siegmund-Schultz), on the Enigma code breaking work in Poland (E. Rakus-Anderson), on the defence work of A. N. Kolmogorov (A. N. Shiryaev), on the discovery of maximum principle by Lev Pontryagin (R. V. Gamkrelidze), and on the mathematics and war in Japan (S. Fukutomi).

The second part is written by military and deals with topics as information warfare (U. Bernhard and I. Ruhmann), the exposure of civilians under the modern “safe” warfare (E. Schmägling), duels of systems and forces (H. Löfstedt).

The third part is concerned with N. Bohr’s and A. Turing’s involving in military research (I. Aaserud and A. Hodges, respectively), and K. Ogura and the “Great Asia War” (T. Makino).

The last part contains two studies – one on mathematical thinking and international law (I. M. Jarvard), and one on modeling the conflict and cooperation (J. Scheffran).

The aim of the volume is to draw the attention of scientists, military and philosophers on the dramatic consequences that the use of science, particularly of mathematics, for military purposes can have on the development of humanity, and to trace some possible way of preventing this disaster.

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Mathematics and War

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