Melvin Kranzberg Dissertation Fellowship 2020

Salem Elzway, *University of Michigan*
For "Arms of the State: A History of the Industrial Robot in Postwar America"

The committee is pleased to award the 2020 Melvin Kranzberg Dissertation Fellowship to Salem Elzway for his PhD project "Arms of the State: A History of the Industrial Robot in Postwar America." Salem Elzway is a PhD candidate in the Department of History at the University of Michigan, Ann Arbor. His dissertation project addresses the history of industrial robotics and automation in the US since the 1950s by examining the development of computer-controlled mechanical arms designed to perform and to replace human labor.

The dissertation investigates the wider repercussions of industrial robotics on production, labor, technology, and national security. Elzway locates the consequences of industrial robotics both in the sociotechnical and socioeconomic realities and in the imaginaries created by the new robotic limbs. Following the entanglements of academic institutions and industrial corporations as well as the funding streams of digitalization, computerization, and artificial intelligence research, Elzway aims to expose the heavy involvement of US military agents and defense contractors in the development of industrial robotics. The mechanical arms were, as the title of his dissertation suggests, literally intended to become the "arms of the state" in the twofold meaning of governmental and military prosthesis.

Elzway draws on theory and method from political economy, history of technology, and history of science. His study is informed by a material-semiotic approach to human-machine interaction that takes both the science fiction and the technological embodiment of the industrial robot seriously by exploring its cultural imaginary, innovation policy, and technical assembly on the factory floor. Elzway plans to use the award to complete his empirical research by performing a number of oral interviews and by consulting relevant archival collections, university collections, and libraries in the US.