Italian artist Bruno Munari stated in 1970, that in the field of “aesthetic research,” what he called “visual operators” have always been attracted to new technological instruments and tools. These machines, first invented to reduce human labor and to increase productivity, have been historically repurposed by artists to explore and experiment in the field of aesthetic creativity. We will move through time looking at a series of machines from the Xerox printer to the dot matrix printer, laser cutter and scanner, CNC mill, 3D printer, and the robotic arm, revealing the significance of each as a tool for aesthetic output. In doing so, we will shift the focus of scholarship on the computer, emphasizing input, to the “peripheral” machines that are equal actors in the making of aesthetic objects.

The chief question we seek to raise is that artistic agency can engage productively with machines and disrupt and reimagine their intended purpose. We will also investigate how these tools may be accessible to a wider audience. This is what Munari was after when he invited the public to use the xerox machine to make art: to think more democratically about making and aesthetics which is of critical importance today.

Our current moment urges us to consider similar questions from racial inequality, access to digital data and other paramount issues. The readings will include a survey of writings on the history of computation and focus on issues of technology, making, new materialism discourses and their critics, labor histories, and ethics. Students will be responsible for a presentation on one of the weekly topics and co-leading the discussion with the instructor. In addition, a 12-page illustrated article as one might find in print such as Log, or online such as eFlux and a 10-minute presentation in class on this work will complete the requirements for the course with the assumption that the student will have a demonstrated curiosity and engagement in this continuously developing area of research.