Review: Craft in the Laboratory: The Science of Making Things


Reviewed January 2022

Barbara Opar, Librarian for Architecture and French Language and Literature, Syracuse University Libraries, baopar@syr.edu
https://doi.org/10.17613/b4j6-3e53

The intersection between art and science has a long history, and scholars frequently discuss the impact of science and mathematics in the work of artists. The application of scientific knowledge, or how artists use scientific and mathematical concepts to produce art, however, has not received much attention, even when, as Hideo Mabuchi indicates, “studio equipment and craft processes feel so much like laboratory equipment and experimentation.” The curators of this catalog have selected works in different mediums from the Mint Museum’s permanent collection to explore their physical composition and to detail the process of making them.

Rebecca Elliot’s essay, which comprises most of the book’s text, is filled with varied and highly interesting examples of the achievements of the artists in this catalog. She stresses the importance of creativity in innovation and discovery, suggesting that “craftspeople and designers need scientific imaginations.” Throughout the catalog, she and other contributors discuss how the chosen artists have thought and worked like scientists and engineers to achieve their artistic goals.

The artists included in this catalog have a deep understanding of scientific processes. Brent Kingston, who studied blacksmithing for ten years, applies his skills in metallurgy to kinetic
sculpture. Similarly, blacksmith Elizabeth Brim invented a technique to inflate hot metal into three dimensional forms. Paul Stankard, who began his career as a scientific glassblower, taught himself lampworking, eventually leaving the scientific community for art. His botanical interpretations include realistic flowers and microcosms of nature which are highly valued by museums and collectors. Takeshi Yasuda works in porcelain, the type of clay which is the thinnest and hardest to handle. Yasuda’s glazes combine tradition and innovation, requiring an understanding of the science of color.

Even artists who work with materials that were once alive, like wood and fiber, engage in the computerized tools of mass production. Donald Fortescue trained as a botanist before becoming an artist. Christie van der Haek’s woven textiles are created by technicians who transform the designs into computer programs, allowing her to create a controlled Jacquard pattern. Mass production plays into the work of the Bouroullec brothers and Tom Price as they explore the properties of polymer. The Bouroullec’s employ virtual modeling software and CAD-produced prototypes, while Price experiments with the actual materials.

Following Elliott’s essay and endnotes is a beautifully presented color catalog with no bibliography or index. The examples shown are visually stunning and well selected, but the book’s artistic binding is quite fragile. Overall, however, the book strengthens the case for how and why craft is at the intersection of art and science. Academic visual arts programs, public libraries, and collectors will find much to appreciate here.