Blue Prints: The Early Influence of Modern Chemistry upon Woodblock Printmaking

The most famous works of Japanese woodblock printmaking owe their existence to an accident in a German chemist's laboratory. In 1706, two scientists in Berlin were preparing a batch of red pigment derived from cochineal insects, iron sulfate, and potash salts when their concoction mysteriously turned a deep blue. After careful investigation, they concluded that a fourth element—animal blood—had contaminated their mixture and had inadvertently produced ferric ferrocyanide. In this way, the world's first synthetic pigment (later known as Berlin Blue / Prussian Blue) was produced.

Ferric ferrocyanide was first used in the production of European artworks in 1709. By the 1820s, it had been exported to Japan, where woodblock print designers found it to be far more durable than traditional, organic pigments such as indigo and dayflower, which faded quickly when exposed to ultraviolet light. Discovery of this dye inspired printmakers to produce works entirely or predominately in blue—an art movement known as *aizuri-e* (literally, "blue-printed pictures") whose most iconic example is *The Great Wave off Kanagawa* (c.1830–1832) by Katsushika Hokusai (1760–1849). This gallery rotation considers other examples of *aizuri-e* by designers such as Keisai Eisen (1790–1848), Utagawa Kunisada (1786–1865), and Hokusai.

Made possible by the Robert F. Lange Foundation.