
Documenting the World: Film, Photography, and the Scientific Record.

Edited by Gregg Mitman and Kelley Wilder. Chicago: University of Chicago Press, 2016. Pp. 288. Hardcover \$35.

Although photography and film are sometimes marginal subjects in the history of technology, the apparent dematerialization produced by digitization has prompted greater interest in materiality and technology from humanities disciplines more invested in their history. At the same time, historians of science have become increasingly attentive to visual representation and how images function as evidence.

Documenting the World's nine contributors work mostly at the intersection of art history and history of science. The book also brings together scholarship on still photography and moving-image film, typically subjects of separate literatures despite their common materiality. With the exception of a chapter on planetary science, contributions focus on the human sciences broadly conceived, from anthropology to medicine to law.

For the most part, *Documenting the World* addresses three questions: How have photographs and films become reliable evidence of natural or cultural phenomena—and, conversely, how have people called their authority into question? How have images produced by colonial and oppressive regimes been repurposed for antithetical ends? How does collecting photographs together in archives reshape their use as evidence?

In their introduction, Gregg Mitman and Kelley Wilder are cryptically generic in introducing the literatures to which their volume is a contribution but more successful in drawing common themes from the volume's essays, such as the ambition to comprehensively photograph the world, the investment of photographs with a reputation for objectivity, and the potential of photographs and films for circulation and repurposing.

Contributions on photography as evidence include Jennifer Tucker on how Victorian courts, and the curious public, used photographs to evaluate the claims of a man who said he was missing aristocrat Roger Tichborne, and Elizabeth Edwards on how early British anthropologists stopped circulating photographs to show colleagues remote people and instead began using them, like field notes, as documentation that they reviewed as part of the process of scholarly writing.

How, asks Peter Geimer, did black-and-white photographs obtain authority while omitting color, a key dimension of reality? One answer comes from philosopher Vilém Flusser, who argued that black-and-white photographs were more direct representations of reality because they involved less complex chemical processes. A very different one comes from the makers of the 2009 French World War II documentary *Apocalypse*, who colorized black-and-white film to give audiences the experience of soldiers

who were actually there—but, rather than using the full range of color those soldiers would have seen, used the constrained, pale range that would have been reproduced by 1940s color film.

A very different form of false color is central to Janet Vertesi's ethnography of planetary scientists who combine digital photographs of Mars, each colorized differently, to see and computationally analyze patterns that aren't otherwise evident. It's not clear, though, exactly why Vertesi's informants see digital images as so revolutionary when most of the same functions were previously possible using technologies such as conventional photography and analog video.

Gregg Mitman and Faye Ginsburg each address the repurposing of oppressive images. In 1926, writes Mitman, Harvard physician Richard Strong led an expedition to Liberia to explore a region in which the United States was investing as a source of rubber. Their photographs documented tropical diseases, while their films surveyed the people as a labor force. Strong filmed and criticized the practice of forced labor but also himself forced men to work. His films are now being screened for descendants of the communities they documented, producing historical memory and kinship beyond the intentions of their creator. Similarly, Ginsburg writes of documentarians and activists who have repurposed photographs and films of people with disabilities, originally shot during the Third Reich as evidence of their inferiority, to instead produce "mediated kinship."

The book's final three essays concern photograph collections. In a case study of the classical archaeology photographs at Humboldt University of Berlin, Stefanie Klamm observes how the intended use of the photographs, as surrogates for archaeological objects themselves, has shaped its organization by artifact rather than photographer or provenance, and has also led to the loss—common in photograph collections—of information about individual images such as their photographer and date.

In a study of the photographs held by St. Andrews University, Kelley Wilder observes that photographic collections have become their own genre in archives, often composed not by the archival principle of shared provenance but instead by shared format, resulting in collections with wildly heterogeneous subjects. This occurs at a massive scale in Estelle Blaschke's contribution, on the photograph licensing firm Corbis, which was founded by Bill Gates in 1989 and has a collection of over 100 million images. Like smaller institutions, writes Blaschke, Corbis has been confronted with challenging questions about the uniqueness, quality, subject, significance, and copyright status of their prints and negatives, which have slowed and reshaped efforts to digitize and monetize their collection.

PETER SACHS COLLOPY

Peter Sachs Collopy is university archivist at Caltech. He is currently writing about the political and psychological uses of video technology.