Gary Pattillo

Fast Facts

Recovering tarnished 19th-century images

A team of researchers led by Madalena Kozachuk at Western University in Ontario has found a way to make damaged daguerreotype images viewable again using a synchrotron particle accelerator. The method uses X-rays to scan mercury deposits on damaged daguerreotype plates, which are then used to recreate hidden subsurface images digitally. The new method provides curators with an image recovery method for degraded daguerreotypes, even if the artifact's condition is beyond traditional conservation treatments.

Madalena S. Kozachuk, et al., "Recovery of Degraded-Beyond-Recognition 19th Century Daguerreotypes with Rapid High Dynamic Range Elemental X-Ray Fluorescence Imaging of Mercury L Emission," *Scientific Reports* 8, no. 1 (June 22, 2018): 9565, https://doi.org/10.1038/s41598-018-27714-5 (retrieved September 3, 2018).

Unpaywall

Unpaywall is an open database of 20.4 million (and growing) free scholarly articles harvested from the open access content of more than 50,000 publishers and repositories. Unpaywall is a project of Impactstory, a nonprofit organization that builds tools to help make scholarly research more open, accessible, and reusable.

Unpaywall, http://unpaywall.org (retrieved September 10, 2018).

Misinfodemics

"Researchers are finding more and more that online misinformation fuels the spread of diseases such as tooth decay, Ebola, and measles. Recent research found that Twitter bots were sharing content that contributed to positive sentiments about e-cigarettes. In West Africa, online health misinformation added to the Ebola death toll. In New South Wales, Australia, where the spread of conspiracy theories about water fluoridation run rampant, children suffering from tooth decay are hospitalized for mass extractions at higher rates than in regions where water fluoridation exists."

Nat Gyenes and An Xiao Mina, "How Misinfodemics Spread Disease," *The Atlantic,* August 30, 2018, https://www.theatlantic.com/technology/archive/2018/08/how-misinfodemics-spread-disease/568921 (retrieved September 10, 2018).

International graduate applications and enrollment in U.S. institutions

"For the first time since fall 2003, international graduate application and first-time enrollment rates declined at U.S. universities. For fall 2017, the final application counts from prospective international students declined by 3 percent, while the first-time enrollment of international graduate students declined by 1 percent. The overall decline is primarily in master's and certificate programs, with responding institutions reporting a 4.8 percent decrease in applications and a 2.8 percent decrease in first-time enrollment. In contrast, first-time international doctoral enrollment grew by 1.8 percent."

Hironao Okahana and Enyu Zhou, "International graduate applications and enrollment: Fall 2017," January 2018, Washington, D.C.: Council of Graduate Schools, http://cgsnet.org/ckfinder/userfiles/files/Intl_Survey_Report_Fall2017.pdf (retrieved September 10, 2018).

National Endowment for the Humanities funding

"In fiscal year 2018, the NEH received an appropriation of $152.8 million … well below its 1973–1995 appropriation levels. The period from the late 1960s to 1979 was one of substantial, virtually uninterrupted growth in NEH funding, with appropriations increasing from approximately $36 million to just under $425.4 million in inflation-adjusted value. Funding dropped substantially from this historic high the following year, however, and after several more years of marked reductions, appropriations were down 33 percent by 1983."

American Academy of Arts & Sciences, "National Endowment for the Humanities (NEH) Funding Levels," August 2018, humanitiesIndicators.org/content/indicatorDoc.aspx?i=75 (retrieved September 10, 2018).

Gary Pattillo is reference librarian at the University of North Carolina-Chapel Hill, e-mail: pattillo@email.unc.edu