DP3 Newsletter
digital print preservation portal
IMAGE PERMANENCE INSTITUTE Issue: 15

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RECOMMENDED READING

Digital Printmaking Now – Marilyn Kushner



While the book is not new (it was originally published in 2001) it is new to our list of recommended reading. This catalog from an exhibition at the Brooklyn Museum of Art titled *Digital Printmaking Now* provides an excellent introduction to the issues surrounding the place of the digital print within collecting institutions. One of the prime questions raised again and again is whether these objects are photographs or prints. This leads to the obvious follow up questions of which curator should exhibit them and which conservator should treat them. While the book does not offer answers, and it does not attempt to do so, it clearly illustrates the problem through multiple examples of modern artworks that blur these boundaries.

GOODBYE TO LAUREN HELD



In February of 2013, IPI student employee, Lauren Held, received her Bachelor of Science Degree in Biomedical Photography here at the Rochester Institute of Technology. Lauren was IPI's longest-running student employee and the first freshman ever selected to work at IPI. While at IPI she contributed in many ways including preparing test samples, performing experiments, and collecting data. Her most significant contribution was her paper entitled*The Effects of Acidic, Alkaline, Buffered, and Non-Buffered Enclosures on Cyanotypes* published in Topics in Photographic Preservation Vol. 14 (2011) and presented by Douglas Nishimura at the 2012 AIC Annual Meeting in Albuquerque, NM. She now works at Pictometry International. We would like to thank her for her hard work over the last four years and wish her the best in her new career.

UPCOMING EVENTS

AIC Annual Meeting
Indianapolis, IN.

May 29 – June 1, 2013

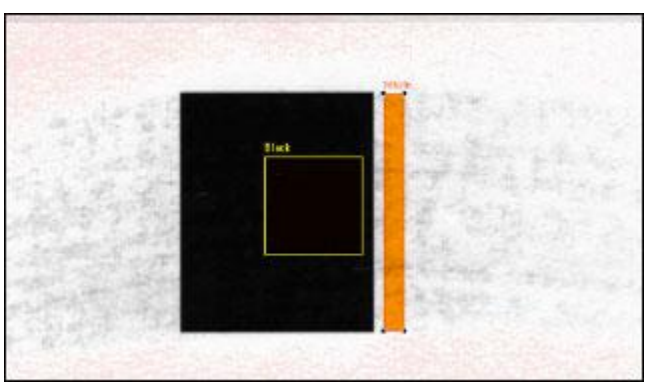
At the American Institute for Conservation of Historic and Artistic Works Annual Meeting in Indianapolis this May 29 to June 1, IPI Director James Reilly will give a talk titled ***Standards Make Us Myopic: We Focus on Specific Values at the Expense of Real Issues*** on Thursday May 30th at 4:00 pm, and IPI Senior Research Scientist Daniel Burge will be present ***Update on Digital Print Preservation Research: What We Have Learned So Far About the Permanence and Preservation of Digitally Printed Books*** on Saturday June 1st at 3:00 pm.

More Information

New DP3 Project Publications

This past January, the Society for Imaging Science and Technology published IPI's paper *The Determination of the Minimum Force to Initiate Abrasion Damage of Digital Press Prints* in their proceedings for the 4th International Symposium on Technologies for Digital Photo Fulfillment

The purpose of the project, funded by the Andrew W. Mellon Foundation, was to determine the minimum levels of force and number of abrasion cycles necessary to produce a just noticeable difference (JND) in objects printed with modern digital presses. The results of this work are intended to help cultural heritage institutions that collect these materials develop the right policies for use and care to prevent damage to their collections.
A variety of digital press technologies and papers were studied and compared to offset lithography. Specimens were abraded using the Sutherland 2000 Rub Tester with both ¼-lb and 2-lb loads. The lighter weight was an attempt to replicate physical handling of materials such as turning pages in books or sorting sheets in stacks of documents. The use of the heavier weight was an attempt to simulate unbound prints being pulled from larger stacks as well as in stacks during transport. The abrading surfaces included unprinted and printed sheets to replicate single-sided prints in stacks or double-sided prints in stacks or books. A series of abrasion cycles (from 5 to 1000) were produced for each of the materials to determine when the JND could be observed.



Abrasion test target showing areas of measurement for density loss and colorant smear

Results from the lighter weight indicated that page turning or sorting of sheets in small stacks should not be a problem no matter which printing technology or paper is used as no noticeable damage was observed even after 1000 abrasion cycles. The heavier weight did show some variation between the different printer technology/paper combinations indicating that a greater concern will be needed for objects that may be inadvertently subjected to higher forces, especially inkjet digital press.

The full article is available on the DP3 Project website.

Click here to download the PDF.

Also in January 2013, the Journal of the American Institute for Conservation published IPI's article *Resistance of Digitally and Traditionally Printed Materials to Bleed, Delamination, Gloss Change, and Planar Distortion during Flood.*

It is imperative that cultural heritage institutions with digitally printed materials in their collections understand the sensitivities of these objects to water exposure during flood. Anecdotal evidence from institutions and the general public suggest that some digital print processes are extremely sensitive to water exposure. Understanding this vulnerability will be critical for institutions modernizing their disaster response plans to include digital prints as inappropriate emergency responses could lead to loss of materials due to their inherent sensitivity to water or due to contamination of adjacent collection materials through bleeding of the image-forming colorants. A variety of digital print types were immersed in water for 24 hours and then evaluated by measuring changes in color and gloss, and visually inspecting for text readability, delamination, and/or planar distortion. As expected, most prints experienced at least slight planar distortion; some, however, suffered extreme forms of damage including colorant bleed or complete delamination or dissolution of the image/text layer. Because the digital prints were often more sensitive than traditional prints to flood damage, new disaster response strategies should be developed for collections that contain these materials.

The article is available through JAIC.



Delaminated dye sublimation print



Dye bleed in inkjet print