Deep Blue **https://deepblue.lib.umich.edu/documents**

2016

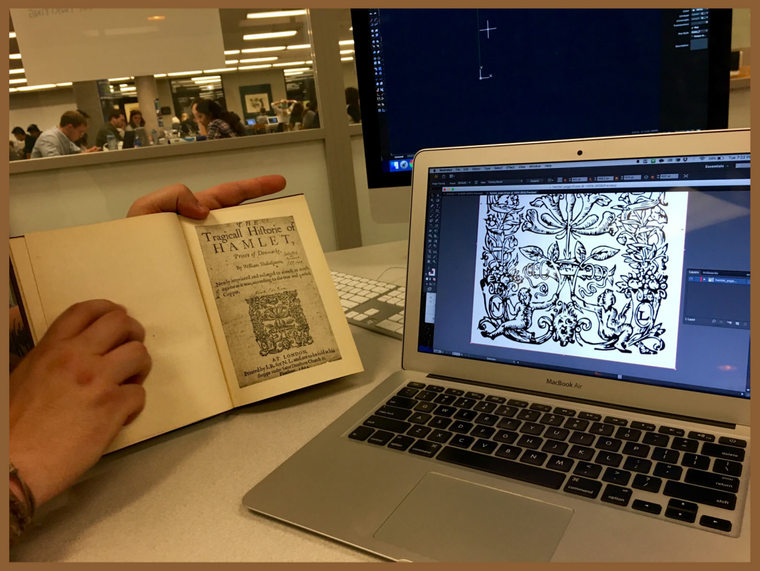
Lead-to-Pixels: Digital Archives, Material Access

Chung, Rebecca

https://hdl.handle.net/2027.42/122842

http://creativecommons.org/licenses/by/4.0/

Downloaded from Deep Blue, University of Michigan's institutional repository



Above, Shapiro Design Lab director Justin Schell demonstrates early 3D rendering of the Nicholas Ling publisher's ornament that appears in Q2. We have found, through trial and error, that only preservation-quality digital masters are suitable for rendering to a 3D printed artifact. We believe we are the first to reactiviate the use of early-modern letterpress ornaments in both metal and various 3D polymer plastics.
Schell and his assistant Jolene Ng are making a hard thing look easy: experimenting with various rendering and modeling programs, and testing materials through the Digital Media Commons. The results will be submitted to the Papers of the Bibliographical Society of America *for eventual publiction, at the invitation of editor David Gants.*

Pictured above is Wolverine Press director Fritz Swanson, holding an early proof sheet of the inner forme of the Q2 edition. The formidable staff of the Wolverine Press has made possible, for the first time since 1611, a printing of a single quarto sheet that follows Q2 word for word, page for page, following the line of descent from the 1604, 1605, and 1611 quartos.
The letterpress edition (in good "Foul Papers" sheets of) was put in circulation during the 2016 conference of the American Shakespeare Society 2016, at the request of a University English professor. The perfected sheet will be distributed in Hatcher Gallery at 1pm on April 7, as part of the Shakespeare on Page and Stage: A Celebration, *on exhibit until April 27. The edition will also be deposited in the Folger Shakespeare Library and the Kislak Special Collections Center, University of Pennsylvania; both institutions provided generous access to their Shakespeare archives as part of primary research on this project.*

LEAD to PIXELS

Digital Archives ⁂ Material Access

The early modern letterpress archive is becoming fragile. At the same time, from the community level to the highest levels of research, digital technologies are transforming how libraries are seen and how they engage their publics. Libraries are now digital repositiories, social media participants, and spaces of learning through making.

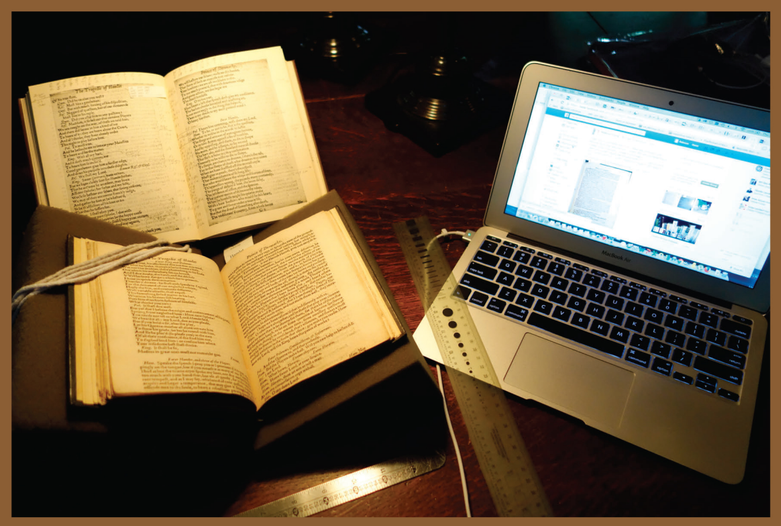
Change creates preservation risks that things will be lost: items, knowlege, skills. Change also creates preservation opportunities like digitization of printed materials and transmission of skills in makerspaces. Why not combine the opportunities of change in response to risk, and re-envision how to serve communities and preserve cultural heritage?

Our experimental items are the First Folio and the Q2 *Hamlet* (Second Quarto, 1604), so we can also participate in the 2016 Shakespeare Quadracentenary celebrations taking place worldwide and here at the University of Michigan. The Huntington Library Q2 has been in cold storage since 2008, when, during digitization, nineteenth-century paper frames used to repair badly-trimmed pages began to disintegrate. There are three surviving Q2s only—the third one belongs to the Elizabethan Club at Yale. All copies are digitized. All are under restrictions for physical access, meaning that most of the digital-access public never hold them, read them, or learn from examining how they are made.

The goal of the LEAD to PIXELS Project is to rethink the relationship between digitization and making, in order to preserve artifacts from the Western handpress period. Digital surrogates alone do not preserve the data fundamental to the bibliographically-based research methods of book history, textual studies, printing history, and scholarly editing: watermarks, depth of impression, characteristics of inking, the appearance of the book before it was folded and bound.

By combining preservation digital master images with both letterpress and 3D printing technology, we are able to migrate the material, tactile, and visual features of a famous early-modern book into research communities and the public. We take the notion of a material surrogate to proof of concept.

This project brings together making, printing, and preservation, through combined resources and talent across the entire MLibrary system and associated programs: the Wolverine Press, the Shapiro Design Lab, Special Collections, the Duderstat Center Digital Media Commons, Buhr Conservation Lab, the Department of English, and the University of Michigan School of Information. Our foundry type for the edition, Caslon 471, was generously donated to the Press by former faculty member Wesley Tanner (Passim Editions). It is the only living typeface connected (through William Caslon's designs) to the pica roman used to set HQ2 and the First Folio. Through the Caslon pressed into archival-quality paper—an effort that relied on many hands—we migrate centuries of printing history and mechanical information technologies for



The Folger Shakespeare Library copy of HQ2, made available for consultation for our project by kind permission of Caroline vvDuroschelle-Melish. I worked by collating the Folger copy against a 1929 facsimile of the Hungtington copy, to confirm for myself that there were no variants and to record page layout measurements page by page. Through its closed Facebook community page, the Wolverine Press sent me questions, images, and measurements as they set lines of type for the quarto sheet edition. I sent back page images and notes in return. The metal ruler gives measurements in picas and is a standard letterpress shop tool. The thin, translucent ruler (owned by David Gants) also measures in picas, and was trimmed to measure the gutters of seventeenth-century books, all the way into the binding.

Dr. Rebecca Chung, (MSI Program, Preservation)
Fritz Swanson, Director, Wolverine Press
Justin Schell, Director, Shapiro Design Lab

This project is sponsored by a 2015-2016 mini-grant awarded through the University Library's Student Engagement Program.
As part of the mini-grant, I was paired with Sigrid Anderson Cordell, Subject Librarian, English Literature.

This project has helped connect the University to the state of Michigan's celebration of Shakespeare in Detroit, where a Folger copy of the First Folio is curently on display at the the Detroit Institute of Arts. Shown here is the letterpress keepsake made for the First Folio 2016 DIA Gala Dinner.
The ornaments were replicated from digital preservation master images of Folger Library copy no. 9, the first known use of preservation master image files to migrate information back to letterpress technology. The winning exhibition proposal for the Detroit First Folio stop in was submitted by a Univeristy alumna, Sandra Yee, now dean of libraries at Wayne State University.