In this photo essay, we reflect on our respective encounters with the object now known as Dartmouth College, Rauner Special Collections Library, MS 003183. Deborah Howe describes the process that turned a fragile object into a functional codex. Michelle Warren considers how this process intersects with the practices of medieval studies and digital humanities. Together, we trace the kinds of collaborations that orient material history toward the future.

First Impressions

[Deborah Howe] My first impression of the Brut was one of awe and intrigue. It is one of the oldest items to pass across my bench and I revered it for its historic provenance and enduring nature. The condition of the binding reflected its age as evidenced by various damages throughout, including visible signs of water and insect damage. The parchment pages were heavily soiled and the gutters were filled with dirt and debris. Folds of the exterior folios were weak and had losses, and several of the inside text pages had tears and surface degradation. The sewing threads of the first and last quires barely held the fragile pages together, and with each successive viewing this sewing became weaker and more insubstantial. Without proper support, the binding was becoming its own worst enemy, mechanically self-destructing.

[Michelle Warren] I did not get to see the Brut at its dirtiest. Indeed, scholars who are not curators or conservators are generally not afforded such views. By the time we see a manuscript, it has usually been made relatively presentable (otherwise, we are not allowed to see it). We are
thereby taught to think of books as static: we do not leave any signs of our reading even as we delight in discovering notes and doodles made by our predecessors. An accidental change in the book is an embarrassing problem (“please don’t break while I’m touching!”). I love how the Brut’s arrival shattered these barriers and prompted us to think of the artifact as our contemporary. In need of care, certainly, but not frozen in time.

Looking More Closely

[DH] I would not be the first to modify the codex. Previous repairs were evident: machine made paper and leather glued over the interior of the lower cover and flap to strengthen it; a thin thread used as reinforcement sewing. The nature of the paper and the method of application suggest that these repairs were done by an amateur in the 1950s. The cover’s leather spine was disintegrating to the point that one could see the backs of the quires and the heavy tanned leather supports. The exposed quires revealed another set of sewing holes and evidence of old adhesive, indicating that there was a previous binding, most likely the original one. This second set of sewing holes explained the incongruity of the binding with the text-block, an observation that had perplexed
Fig. 2. Inside cover, previous modern repair: machine-made paper and leather patches to reinforce the cover. Photo by Deborah Howe, courtesy of Dartmouth College Library.

Fig. 3. Sewing, previous modern repair: thin threads stitched around the tanned leather supports to stabilize the loose quires. Photo by Deborah Howe, courtesy of Dartmouth College Library.
me from the beginning: the worn and damaged binding was historical but was not completely contemporary with the text-block.

[MW] Physical evidence of past changes draws attention to the artifact’s ongoing life. With every turn of the page or pixel shift of the screen, we must grapple with temporal syncretism. Authenticity is a moving target. What state do you seek to “restore”? Is the fifteenth century more valid than the sixteenth? The twentieth? We can have legitimate questions about each. The evidence of past practice provides a model for current and future practice, leavened with an archeology of the codex. How can we make visible as many aspects as possible of the object’s life? Centuries from now, the actions taken today will be evidence of our own historical epistemology, about which future curators and readers will hopefully be curious.

[DH] Historically, texts from the period, written on parchment, were usually sewn onto raised supports and laced into pasteboard (heavy boards made by laminating layers of paper), oak, or beech wood boards. Once laced into the boards, the binding was covered with leather or an alum-tawed pig or goat skin. Often decorated brass clasps were fastened to the covers at the foredge to restrain the hydroscopic parchment. The
Brut binding is, by contrast, supple and limp, unusual for a cohesive and complete parchment text. It is in fact a stationery binding, sometimes referred to as a tacketed or account book binding. The outside decoration reflects precisely David Pearson’s description of a stationer’s binding: “A common distinguishing feature of this branch of binding is the addition of broad leather bands on the outside of the book, across the spine, with a criss-cross interlace in the leather bands and clearly visible spine tackets. The bindings may also have wraparound flaps which are held shut using clasps or toggles attached to the bands” (90; further illustration in Medieval Manuscripts 35).

There are two types of tacket bindings, primary and secondary. The Brut binding utilized secondary tackets: “Secondary tackets are used to attach a cover to a text block which is already held together by some other means-usually but by no means always, by sewing in the conventional manner to sewing supports” (Pickwoad 138; graphic illustration in Szirmai 310). This type of binding enabled the owner to add new requires by simply removing the tackets, adding the new material to the leather sewing supports, and retacketing into the cover; the fore-edge flap would compensate for the extra allowance needed as the spine became thicker. With this evidence in hand I concluded that perhaps this binding of the Brut was commissioned by a merchant in the sixteenth century, an idea later corroborated by evidence from readers’ annotations (see Ulrich’s article, “Echoes in the Margins,” in this issue). The metal clasp on the flap remains something of a mystery, since the cover shows no evidence of a corresponding catch plate. The clasp may have been repurposed from the original hard-cover binding, never intended to be functional, or simply left incomplete.

[MW] The similarities between the Brut and the Derling family’s Book of Diverse Necessary Remembrances are striking (Deborah and I each found this analogue in different ways). The Folger Shakespeare Library catalogue describes the covering as “a London 16th-century blank book binding in brown calfskin over pulp boards with fore-edge flap, over-bands, tackets, lacings, buckle, and strap. Tooled in blind. Dimension: 310 x 201 x 47 mm.” The Brut binding is of similar size (290 x 195 mm), described by Dorothy Africa (Preservation, Conservation, and Digital Imaging, Harvard Library) as “a stationer’s binding, the sort most commonly used for ledgers and business records, characterized by external bands, decorative lacing patterns, tackets and an overlap front lap” (cited in Bryan 208). I am intrigued further by similarities between the Brut binding clasp and those found (as Deborah suggests) on hard cover bindings.
Fig. 5. Dartmouth Brut, sixteenth-century cover, courtesy Dartmouth College Library

Fig. 6. Folger Shakespeare Library, V.b.296 (c. 1568–1644) (discussion in “Blank Book”). Used by permission of the Folger Shakespeare Library.

Fig. 7. Dartmouth Brut, sixteenth-century cover, Photo by Deborah Howe, courtesy of Dartmouth College Library.

Fig. 8. Folger Shakespeare Library, V.b.296 (c. 1568–1644). Used by permission of the Folger Shakespeare Library.
Twenty-First Century Book

[DH] In my role as conservator my responsibility was to treat the Brut so that it could be used and studied as a physical object. The curator, Jay Satterfield, stated clearly that he wanted the text scanned to make the contents accessible as part of our digital library collection. A common conservation action in the current atmosphere of “surrogate copies” is to digitize the item and place restricted use on the original. As the Brut was a major purchase for Special Collections and intended for regular teaching instruction, this approach was not an option.

[MW] The very idea of the “medieval” changes when a book comes into circulation in order to be used as well as preserved. The Brut was purchased as a multifaceted teaching resource: vernacular literature, history, media studies. It is used in college courses at least once a month; any curious visitor can handle it. This commitment to access has shaped preservation decisions, rather than preservation concerns limiting access. This approach is quite different from the most common conservation methods, which reconcile the competing pressures of preservation and access by leaving books disassembled (each quire in its own sleeve) or
out of circulation altogether (with microfilms and digital surrogates the primary form of access). With the Brut, the physical restoration complements digitization, which presents its own challenges of long-term preservation (technological changes that we cannot yet anticipate may block future access; files may be corrupted; servers may crash).

[DH] To prepare the Brut for digitizing, I began by pulling the quires, which entails going into the middle of each section and cutting the threads. As I proceeded through the book I would come upon a quire containing a parchment tacket (six in total); these were carefully untwisted and released from the cover. Once the stitching was removed, I minimally cleaned the pages by hand, avoiding the manuscript area, and then mended the backs of the broken folios and tears with a lightweight Japanese tissue. In this unbound condition the pages were stable enough to be digitized.

Each folio was scanned on an Epson Expression 10000 flatbed scanner, with 600 ppi resolution and 48-bit color. Later, the image files were sequenced in proper order and integrated into the Dartmouth Digital Collections.

Fig. 10. Dartmouth Brut, completed scan on computer screen. Photo by Deborah Howe, courtesy of Dartmouth College Library.
Meanwhile, I was exploring the idea of rebinding the *Brut* back into a stationers binding. Reusing the original cover was out of the question as the leather and overall condition were too far degraded. So I made a facsimile text-block by cutting paper to the exact size of the manuscript and tinting it to resemble parchment. I then made quires and sewed them onto leather supports; I attached the quires to a tooled leather cover with the appropriate stitching of the overbands. Finally, I fashioned toggles (instead of a clasp) for the closure. Upon completion of the facsimile, however, it seemed clear that this binding would probably not be the best option. It seemed as though I was trying to make the *Brut* fit back into something it no longer belonged to and the curator agreed.

[MW] Although the facsimile binding was abandoned for conservation purposes, I remain fascinated by it as 3D scholarship. It reminds us that old books were once new. It reminds us that handcrafted technology is still new (see Wilcox for further examples of this lesson). I am curious about the ways in which the view of the facsimile alongside the surviving historic cover and the current cover will inspire conversations with students. I think that we will all learn something new about both medieval and electronic artifacts through Deborah’s literally “digital” invention.²

[DH] When the scanning was completed, I resewed the quires, using the sewing holes from the stationers binding, onto heavy leather supports, knowing this would be a first step in rebinding. The curator was using the text in the classroom in this fashion, bound without covers. He remarked on how wonderfully it opened and implied he wouldn’t mind if it stayed like that, but I thought it would be a good idea to place it in some sort of cover. Around this time the conference *From Medieval Britain to Dartmouth: Situating the English Brut Tradition* took place (21 May 2011) and I was invited to present a short outline of the conservation work I had done thus far. At the end of my talk, there was a thought-provoking discussion on what should happen with the binding. Some scholars thought to bind it as it would have been originally, in wooden boards, others leaned toward the facsimile stationers binding, but as we talked a consensus slowly developed that something altogether different would be best. The *Brut* had been bound in the fifteenth or sixteenth century for a merchant in such a fashion that made sense to him. Now in the twenty-first century, the book’s use is quite different. It was agreed that some sort of amalgamation would be appropriate for the binding, something that would suit our needs today.
[DH] Left with the task of creating a new binding option, I knew I wanted to maintain the sewing and leather supports that I had already completed, since they were functioning well. I had just taken a workshop taught by Maria Fredricks, head conservator at the Morgan Library, on historical paper bindings, where I rediscovered the beautiful handmade paper of Tim Barrett at The Center for the Book: Paper Research and Production Facility (University of Iowa). I thought that this material would make a perfect pasteboard for the cover boards, protec-
Fig. 12. Completed sewing of the text block on leather supports. Photo by Deborah Howe, courtesy of Dartmouth College Library.

Fig. 13. Alum-tawed chemise cover, with mitered corner turn-ins. Open with back board off to show sewing. The leather supports slide into openings within the laminated pasteboard on the right for regular reading use. Photo by Deborah Howe, courtesy of Dartmouth College Library.
tive but not heavy or stiff—a middle ground between wood boards and flexible leather.

Using multiple layers of the handmade paper, I created the boards with small openings along the spine edge where the leather supports would slip in: the curator would be able show the sewing structure to classes by pulling the cover away from the supports. In order to keep the boards in place and provide a covering, I created a chemise of alum-tawed goatskin, a material in favor in the fifteenth century (Bearman 163). This covering offers a protective casing to the boards—essentially, a medieval dust jacket. The chemise provides a cohesive finish to the book and provides support for the spine (which I chose not to line). The resulting binding has a flavor of what it may have looked like in its original binding (before the surviving stationers binding), is flexible and stable for reading purposes, and can easily be used for teaching and illustrating the physical structure of the book. In the end this amalgamation has met all goals of the Brut’s current use while maintaining the effervescence of its past life.

[MW] Deborah’s solution aligns perfectly with other modern covers. After surveying various digital archives, I found the Ellesmere Chaucer the most striking for comparison, as this book is most often prized for
Fig. 15. Brut, modern alum-tawed chemise. Photo by Deborah Howe, courtesy of Dartmouth College Library.

Fig. 16. Ellesmere Chaucer, modern alum-tawed cover. Huntington MS EL 26 C 9. Reproduced by permission of The Huntington Library, San Marino, California.

Fig. 17. Fifteenth-century alum-tawed cover. Folger INC L140. Used by permission of the Folger Shakespeare Library.
its detailed internal decorations. Plain alum-tawed covers are also common medieval covers, illustrated here with a fifteenth-century example. Finally, the limp vellum structure is widely regarded as not only one of the most durable medieval forms but one of the most desirable for modern conservation (Clarkson).\(^4\) The Brut’s new binding is thus perfectly “timed” for a book that embodies a long history: the composite form references a venerable medieval structure (limp vellum), resonates with early modern utilitarian priorities, and reflects modern aesthetic values.

[DH] To augment the Brut’s value as a teaching tool and research archive, I saved all the material that was removed from the binding during the conservation process. The surviving cover is housed in a simple folder covered with the same paper as the new boards under the alum-tawed chemise.

[DH] The final touch was the storage box—a clamshell, or sometimes referred to as a solendar or drop spine box.

[MW] I have a newfound fascination with storage boxes, or “enclosures.” As Deborah and I were working on this essay, I saw a tweet from Erik Kwakkel of a decorated medieval box used to protect loose quires of hymns during processions; I then went looking for medieval boxes and found a fifteenth-century “purse”-style container; I also learned about medieval manuscripts preserved solely as linings for early modern boxes (Leedham-Green); finally, Deborah introduced me to the work of Jeff Peachy.\(^5\) In each of these examples, the box becomes part of the manuscript artifact. The “book in a box” is not only an archival concession but can be a 3D scholarly commentary. Often, there is a poignant slippage between short- and long-term storage that reminds us that archives are never static, even when humans neglect them.

The innovation in this project so far is not the digitization but the physical recoding. “Open data” means not only digital information (championed by William Noel, “The Commons”) but also the ability to literally open the book. When the 3D book is also treated as data (rather than as a vault, in Noel’s comparison, “Revealing”), its dissemination—and value—can also increase. I would even go so far as to suggest that multi-form books like the Brut reconfigure conventional divisions among analog, digitized, and born-digital artifacts. I take inspiration from Alan Liu’s description of a digital poetics that remains tethered to history: “the task of studying new media...is to help us better to understand what it meant to write, read, and imagine in the past;
while, inversely, that of studying old media is to help us appreciate what it now means to encode, browse, simulate, etc.” Liu goes on to contrast “old” and “new” media concepts in ways that can shape a transdigital philology: “preservation” becomes “migration” to new forms; we are no longer working with surrogates but with “simulations.” In this view, the Brut has been migrated, encoded, modeled, and transmitted—in
Fig. 19. The Brut in its box: the bound codex, a folder containing the stationers binding cover, a sleeve preserving sewing fragments and debris, and a sleeve with provenance documents. Photo by Deborah Howe, courtesy of Dartmouth College Library.

Both 3D and 2D, in analog and digital form, in tactile and visual senses. In this state, manuscripts and their avatars impinge on each other’s reality. And the circuits will twist further when, as Bethany Nowviskie has suggested, 3D printing tools become ubiquitous, readily turning digital data into material artifacts.

Notes

1. See MS STC 2248, at the Folger Shakespeare Library.
2. In a wonderful, yet frustrating, twist of archival irony, the facsimile book is currently missing. It had not been assigned a shelf mark nor included in the design of the manuscript box. So for now, we will have to make do with the digital photograph and our imaginations.
3. British Library Database of Bookbindings; Digital Scriptorium; The Folger Shakespeare Library Digital Image Collection; Schoenberg Database of Manuscripts; and “Manuscripts and Rare Books” at the Walters Art Museum.
4. See also the review of Clarkson’s Limp Vellum Binding by Andrew Honey.
5. See Cod. Sang. 360, Stiftsbibliothek, St. Gallen, Stiftsbibliothek; and Manuscript Case, Accession Number: 54. 18, Metropolitan Museum of Art, The Cloisters; and Peachey.
Manuscripts Cited

Dartmouth Brut. MS 003183. Rauner Special Collections Library, Dartmouth College, Hanover. <http://dx.doi.org/10.1349/ddlp.604>

Works Cited


