

# The Age of Parchment

In his latest book, Bruce Holsinger, a medieval scholar and bestselling novelist, delves into the biomolecular analysis of premodern manuscripts

There are some exciting developments going on in the realm of book analysis these days, with twenty-first-century science being applied to the study of texts produced in the years before paper in ways that are without precedent. Everywhere you look—and yes, I have been looking carefully at this for a good while now—remarkable things are going on.

A few months ago, I learned of a new book about to be issued by Yale University Press, *On Parchment: Animals, Archives, and the Making of Culture from Herodotus to the Digital Age*, that takes a comprehensive look at the primary medium of textual transmission in the Euro-Mediterranean world from the middle of the fourth century through the end of the fifteenth. Obtaining a set of the advance galleys, I quickly judged the book to be a tour de force of immense readability and meticulous scholarship—a rare combination—and arranged an interview with the author, Bruce Holsinger. A professor of medieval studies and literature at the University of Virginia in Charlottesville, Holsinger's oeuvre includes several scholarly monographs and four novels, one of them a bibliomystery, *A Burnable Book* (2014), which boasts among its central characters a bureaucrat and poet by the name of Geoffrey Chaucer.

Parchment, for the uninitiated, is a recording surface rendered from the flesh of animals, usually sheep, goats, or calves (for which the word vellum is also used), though many other species of creature have been employed over the centuries—all in the service of preserving the written word in the years before the introduction of papermaking changed everything. Holsinger states his premise in the

second sentence of his prologue: “A good part of what we will ever know about the premodern era we know because people wrote things down and saved them on and between the hides of slaughtered beasts.”

While that detail might not come as a stunning revelation to students of book history, the sheer volume of what was produced over that period, not just for literary works, but every manner of document, is staggering. A “conservative estimate” of total parchment specimens from

before 1800 currently extant in England alone—including such mundanities as writs, tax returns, deeds, common claims filings, ship manifests, and the like which are kept, overwhelmingly untouched, in cavernous warehouses—“would easily exceed one hundred million,” Holsinger writes, while “a figure of five hundred million or even a billion is not out of the question.” Worldwide, he suggests there could be as many as three billion specimens—and what survives is just a fraction of what was produced over that 1,100-year period.

Holsinger covers a wide range—“a 360-degree view of parchment,” as he put it in his conversation with me—that along with historical, cultural, literary, technological, and theological considerations, bear on the very essence of the materials themselves. Because these are “membrane” documents rendered from animal skins, they carry DNA, which has created an entirely new area of inquiry that has been christened “biocodicology”—short for the biomolecular analysis of written objects—in which Holsinger has been involved directly as practitioner, not just chronicler.

“It’s part of the study of what’s called text technologies, the various technologies of the written text,” Holsinger



**Nicholas A. Basbanes** is the author of ten critically acclaimed works of cultural history, with a particular emphasis on various aspects of books and book culture, including *On Paper: The Everything of Its Two Thousand Year History*, *A Gentle Madness: Bibliophiles, Bibliomanes, and the Eternal Passion for Books*, and *Patience & Fortitude: A Roving Chronicle of Book People, Book Places, and Book Culture*. A finalist for the National Book Critics Circle Award and the Carnegie Medal, Basbanes' latest book is *Cross of Snow: A Life of Henry Wadsworth Longfellow*.

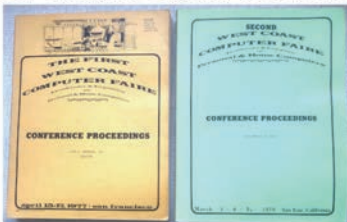
# Gently Mad



**LUX MENTIS  
BOOKSELLERS**

Antiquarian - Fine First Edition  
Heirloom Quality Books

New Catalogues: *Computer History and Dan Kelm*



First Two "West Coast Computer Faire"  
Conference Proceedings [1977 and 1978]

Crossings / Chassé-croisé. MJ Klimenko;  
M. Neri [illus]; ML Fatherree [photos];  
D. Kelm [binder]



110 Marginal Way, #777  
Portland, Maine 04101  
207.329.1469 [ian@luxmentis.com](mailto:ian@luxmentis.com)

told me. "You have to think of a written text as not just a book or a scroll or a document, but as an artifact, because that's what they are." The project he participated in studied 513 medieval books, single leaves, and documents held in dozens of institutional collections in the United States, Great Britain, and Europe. Especially noteworthy was the use of what the researchers came to call "erudis," a clever acronym for the "eraser doo" that is produced when an everyday polymer pencil eraser is used

are not naturally interested in the kinds of historical questions about book transmission that we are, but they are interested in questions like the evolution of the cow over 30,000 years," Holsinger said. "And parchment is an archive that has evidence for that evolution in it, genetic evidence."

Holsinger said that he decided to take in every facet of parchment in a comprehensive history when he realized that just a "tiny fraction" of what survives could be considered literary.



LEFT: Holsinger's latest book, *On Parchment: Animals, Archives, and the Making of Culture from Herodotus to the Digital Age*.

RIGHT: Medieval scholar and bestselling novelist Bruce Holsinger.

to clean parchment leaves.

The perceptive idea that such crumbled detritus might contain DNA was the brainchild of Sarah Fiddymont, a bioarchaeologist at the University of York in England who invited Holsinger to join her research team; the technique they used, known as triboelectric (eraser based) sampling, enabled them to study the samples as a biomolecular record of faunal life and environmental history from a millennium ago. Their formal report, titled "Animal origin of 13th-century uterine vellum revealed using noninvasive peptide fingerprinting," determined that the tissue-thin parchment sheets used to produce thousands of "pocket Bibles" was not derived, as had been widely presumed, exclusively from the skins of fetal calves or sheep, but from a variety of animals.

One of the words scientists are using to describe the evidence they are gathering with this approach is "palimpsest," which book people know as manuscript writings that are hidden beneath the surface of other writings, the Archimedes Palimpsest of recent years being the best known. "Scientists

"In England alone we're talking about kilometers of shelving holding these objects, which got me thinking about what the bulk of the parchment inheritance really is. The idea of this thousand-year palimpsest, this image of where you are looking at things that are invisible, but at the same time are revealing all these different qualities and textures of a document, is fascinating."

Holsinger did not go so far as to proclaim the premodern era the "age of parchment," as I proposed, though he did allow that "in most parts of Western Europe, for a long, long time, animal skin certainly was the predominant medium of writing and transmission of texts. I like the idea that in many ways it was, as you suggest, an age of parchment, certainly for Western Christian culture, and I think for Jewish written culture in particular it certainly was. In that sense, it just might be one of those defining mediums that helps us really understand the heart of that part of premodern civilization. What it definitely does tell us is that manuscripts are a kind of boundless reserve of evidence."