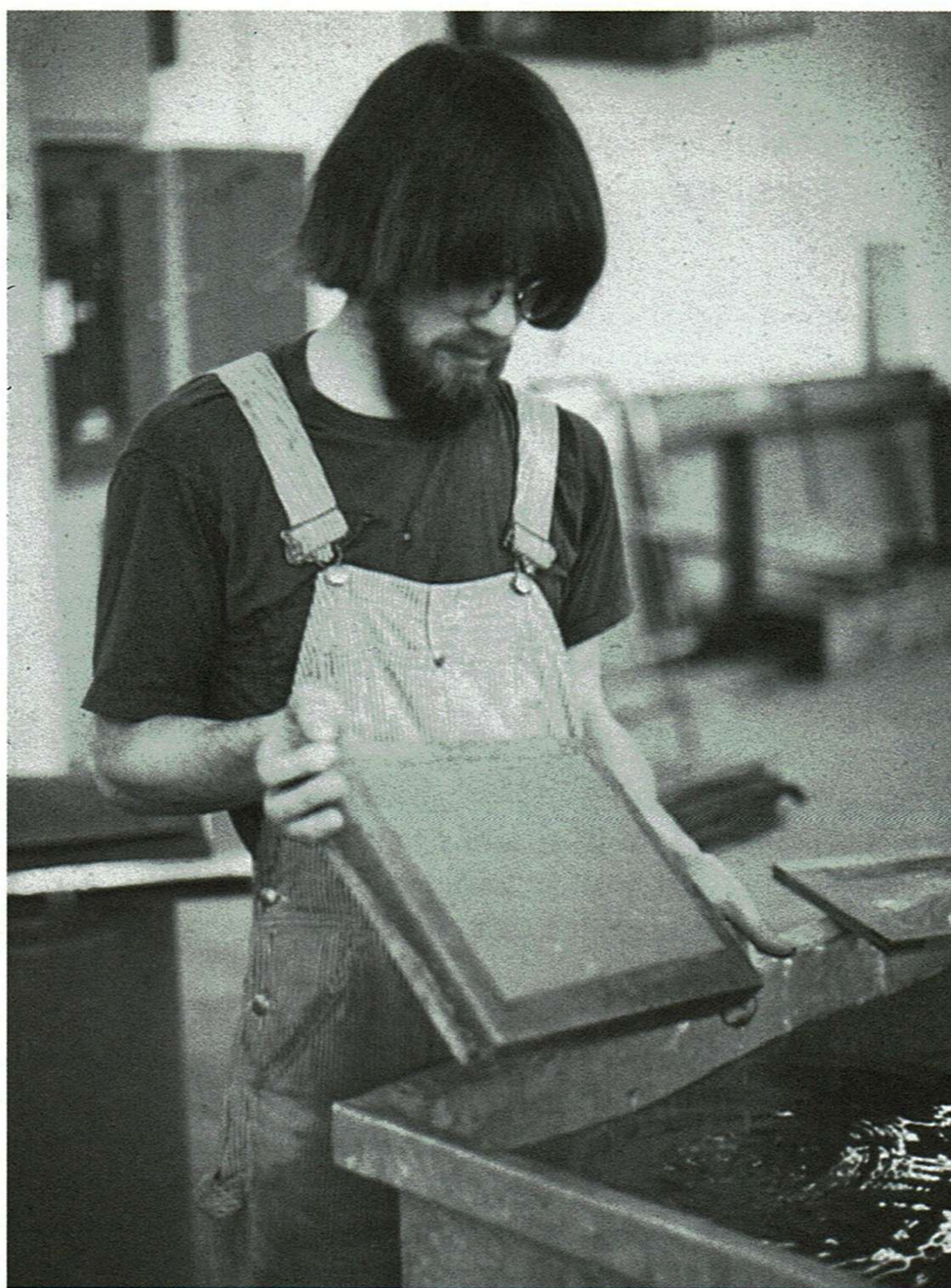


# HAND PAPERMAKING







## Timothy Barrett: Contributions to the Heritage of Papermaking

PAUL DENHOED

ABOVE RIGHT: Barrett making his first sheets of paper at Antioch College around 1972. "Many are amazed that I knew at the age of 22 that I would follow the papermaking path," remarks Barrett. "In truth I had no idea that would happen and the photo exists mainly because I had a wild crush on a certain photographer at the time. The pulp was cotton linters mixed up with a paint mixer on the end of an electric drill in a garbage bucket and colored with Rit fabric dye from the grocery store. We all have to start somewhere, somehow."

All photos courtesy of Timothy Barrett unless otherwise noted.

ABOVE LEFT: One of Barrett's earliest attempts at watermarking. "Mediocre soldering work," recalls Barrett. "The pulp was cotton linters with cut-up blue and green threads mixed in."

Before I ever met Timothy Barrett, I had already learned a great deal from him. In the fall of 1995, not long after devouring his book *Japanese Papermaking: Traditions, Tools, and Techniques*, I met him in the departures area of the San Francisco Airport. We were on our way to Japan to attend the International Paper Symposium '95. I also participated in a brief tour of papermaking sites prior to the conference, which Barrett co-led. I am confident that the lengthy conversations we shared on that trip (and afterward) altered the course of my life, leading me to study with him in Iowa City and subsequently on my own back in Japan. I am intensely grateful for his mentorship and for our continued friendship.

Despite authoring nine articles in *Hand Papermaking* himself, including the premiere issue, Barrett has never been profiled in these pages. What follows is an all-too-brief portrait of the man who, for thirty years or more, has been the Western world's torchbearer for traditional hand papermaking. This article outlines Barrett's career and current research interests, interjected with selections from a series of email exchanges between Barrett and myself over a couple of months in early 2010. Special thanks to Lynn Amlie and Bridget O'Malley who shared their perspectives with me via email correspondence in March 2010, and to Johanna Drucker for allowing portions of Barrett's answers from an unpublished interview with her to be incorporated into this article.

To summarize his career: Timothy Barrett first spent two years at Twin-rocker Handmade Paper, two more studying papermaking in Japan under a Fulbright Fellowship, and two years of part-time study at Western Michigan University's Department of Paper Science and Engineering (WMU). In 1986 Barrett joined the University of Iowa Center for the Book (UICB) as associate research scientist and served as its director from 1996 to 2002. He continues there as adjunct professor and research scientist, teaching courses



that address the history, technique, science, and aesthetics of hand papermaking, and overseeing the UICB Research and Production Paper Facility.

**Paul Denhoed (PD):** *What is your basic teaching philosophy?*

**Timothy Barrett (TB):** *I think in the classroom, university, or apprentice/master environment, the most successful atmosphere is one in which the amount of teaching going on is minimal compared to the overall level of learning. That is to say, someone who is really good at teaching turns out to be uncommonly adept at inspiring those around her/him to want to learn on their own. I listen for a student's interests, suspicions, or things they find curious, and often find myself suggesting ways certain connections might lead to creative output, research, or even a career path they haven't considered. It's very rewarding when, as a result of that conversation, the light bulb above a person's head glows or even lights up. I think it was Leonardo who said "Poor is the pupil who does not surpass his master." I'm fond of that quote. When students of mine go beyond anything I ever did, it's very satisfying to me. That is what is supposed to happen. It means we are all contributing to the field, and hopefully, now and then, inspiring younger folks to build further on what we've done.*

Barrett is indeed inspiring the next generation. Lynn Amlie, a former student of Barrett's and director of the UICB Research and Production Paper Facility from 1997 to 2004 affirms: "His ability to share his own passion for the world of paper and books with exuberance and sincerity, in a way that is truly infectious, has spurred on so many students and colleagues to pursue their dreams in a way that contributes exponentially to the whole field, and far beyond." While gratified with his role as a mentor, Barrett is always quick to acknowledge his own influences.

**PD:** *Who were some of your own mentors, teachers, and others who laid the foundation for your work, and how has their work influenced, inspired, or stimulated you?*

**TB:** *Certainly Dard Hunter's work was pivotal in giving me the confidence to take papermaking seriously, mainly because in his own work he demonstrated how one could make the study and practice of the craft a full-time pursuit. I'm working with Peter Thomas and Sue Gosin on a family tree of the revival of hand papermaking in America, and I'll bet many of my generation will want ourselves connected, at least in part, to Dard Hunter, even though very few of us ever met him.*

After some rudimentary self-taught papermaking in college, I worked with Kathy and Howie Clark at Twinrocker. Kathy, an accomplished fine art master printer, and Howie, a professional engineer, brought some exceptional talents to the revival of the craft in America. They were a major inspiration to me mainly because they were living proof of what one can accomplish if you are persistent, diligent, and believe in the value of what you are doing.

One of the few "older folks" who did have contact with Dard Hunter and who also inspired me early on was Henry Morris. In the mid-1960s when I was first getting interested in hand papermaking, I of course had Hunter's books to work from. But they were very shy on details about how to actually make paper by hand. Henry's article about how he had built a beater himself and made paper at home gave me confidence this could actually be done on a small scale and I pushed ahead with building my own mould and vat.<sup>1</sup> Later, in the mid to late '70s when I actually visited Henry we talked about papermaking history, the current revival of hand papermaking in America, and the need for more in-depth study of the intricacies of the craft, especially abroad. He



Barrett moving a post of 36 x 48-inch sheets of art-weight paper into the press with fellow apprentice Katherine Kiddie at Twinrocker, circa 1974. In the early 1970s Twinrocker was already offering a wide range of papers for use by conservators, printmakers, calligraphers, printers, and other artists.

was very positive about my research on Japanese papermaking, and encouraged me to write about it, eventually publishing Nagashizuki: The Japanese Craft of Hand Papermaking. He also gave me a copy of Atkinson's translation of LaLande's *The Art of Papermaking in the late '70s* and that helped a great deal with my growing interest in early European papermaking.

But I have to say the people I learned the most from were my Japanese mentors. And what I received from them was not just expertise in Japanese papermaking. One of the surprising things that happens to people who study abroad is a sudden realization you are learning as much or more about yourself and your own culture as about the culture (or in my case, the craft) you thought you went to study. I went to Japan fascinated with certain aesthetic properties of Japanese hand-made papers: the natural warmth, the luster of the fiber in the sheet, the weird combination of crispness and softness in the same piece of paper. While in Japan I discovered these characteristics were closely tied to the traditional materials and techniques used to make the paper. There are other factors to be sure—the training and skills of the craftspeople, the historical moment in which the paper was made, drying and finishing steps, whether a paper was made as a commodity or as a luxury item, etc. But more than anything else, I became convinced that the selection and preparation of the raw materials are key to the final quality and character of any paper. That crucial insight, gained in Japan, led me to wonder if a similar exploration of fifteenth-century European papermaking materials and techniques might also reveal some of the reasons for their unusual and attractive properties: white, supple, strong, often a creamy smooth surface, many marks of the maker in the midst of uniformity, and so on.

Additionally, my discovery of William Barrow's research and my interactions with book and paper conservators were very important. Barrow, because he demonstrated that a physical analysis of the papers themselves can reveal a lot about materials and technique when little or nothing is available in the written record, and the conservators, because like me, they were convinced the earlier papers were inherently different than papers produced in subsequent centuries. Conservators also had an intimate knowledge of fifteenth-century paper due to their treatment experience: washing, dry cleaning, rebinding, etc.





Barrett with Kubota Yasuichi, his son Akira, and other family members in Misumi-cho, Shimane prefecture, Japan, about 1977. Barrett lived and worked with the Kubota family for five weeks during his two-year study in Japan to investigate the Kubota family's approach to making traditional Sekishu-hanshi paper.



Barrett parting the first 24 x 36-inch sheets of "Minter dry tear guard strip" at the Kalamazoo Handmade Papers workspace around 1984.

So in summary, I would say key people in America inspired and encouraged me, and people in Japan gave me a context for envisioning what a deeper, broader career in the craft would entail.

**PD:** And how do you see yourself passing on that mentorship to the following generation?

**TB:** I feel that my job is to inspire people younger than me to do the work, the research, to pursue the creative ideas—that I will never have time to get to. This is important. In fact, I'd go so far as to say it is the one and only secret to defeating death. Dard Hunter, in a very real sense, lives in all of us. Why? Because he had the insight to know that the history and technique of papermaking was territory previously unexplored and undocumented, and the courage to devote his life to the study of it, despite the fact it was not a "normal" career path. More than anything else, Hunter showed us not only what a rich heritage the craft of papermaking represents, but by his own example that we can contribute to that heritage by investing ourselves in practicing and studying the craft. If I can impart some of that to the next generation I'll be happy.

Investing in the practice and study of the craft is something Barrett takes to heart. Upon his return from Japan, determined to set up a shop and begin making paper, he established Kalamazoo Hand Made Paper (KHMP). His desire at KHMP was to put much of what he had learned in Japan and later at WMU into practice. Barrett was particularly eager to see if the use of traditional materials and techniques in Western papermaking was linked closely to the physical and aesthetic qualities of the final sheet, as they are in Japanese papermaking. He says that his early attempts had very mixed results, but these first investigations formed the foundation for a career in which he has engaged in a steady series of research projects, with emphasis generally on traditional papermaking processes. In particular, he has focused on Japanese techniques, and details of early European methods, including fermentation of rag, washing during beating, and the use of gelatin sizing. The research has been

funded by a number of prestigious sources including the National Endowment for the Arts, the Kress Foundation, and the Institute for Museum and Library Services (IMLS).

The goal of Barrett's current IMLS-funded research project is to use cutting-edge non-destructive instrumentation to analyze 1,500 book and manuscript papers made between the fourteenth and the nineteenth centuries. Barrett's research effectively builds on the work of William Barrow, who led a pioneering study beginning in the late 1950s, conducting scientific analysis of historical paper specimens, in an attempt to reveal more information about paper permanence and durability, and how papermaking materials and methods changed over the centuries.<sup>2</sup> Results of Barrett's IMLS research, conducted with colleagues at various institutions, are still being tabulated, but seem to indicate that fifteenth-century papers had much higher levels of calcium and gelatin than paper made in subsequent centuries, and that higher calcium and gelatin levels can also be associated with lighter paper color.<sup>3</sup>

Barrett is currently hard at work preparing a website which will share the details and results of the project. As colleague and former apprentice Bridget O'Malley puts it, "He is highly committed to sharing his findings and understanding with students, apprentices, artists, and conservators alike. He does not want the secrets he has worked so hard to unlock to remain his alone. It is in sharing this knowledge that it becomes truly useful and worth the time and effort put toward obtaining it."

"Sharing new discoveries," Barrett concurs, "is what research is all about. In addition, ideally it generates more questions that others younger than I may feel compelled to try to answer. That helps keep the field alive and full of possibility for the future." Barrett was originally motivated largely by questions of paper aesthetics and stability, the answers to which he thought might prove helpful to contemporary papermakers and paper artists. But recently he has become increasingly motivated by the hope that by decoding the secrets of the skills of earlier anonymous craftspeople they may gain some recognition for their hard and careful work. "We





Teaching in the basement of the old Art Building at the University of Iowa about 1997, prior to the 2008 flood which completely submerged the room. The demo involved making a 4 x 8-foot Asian-style sheet from abaca fiber. The author is fourth from right, in back.

acknowledge individuals who made famous paintings and sculptures. But history minimizes the time, energy, and skill that men and women, at certain places and times, put into making gorgeous sheets of plain, ordinary paper. If my recent research gives them just a bit more of the respect and admiration they deserve, I'll feel much rewarded."

Juggling the research and other aspects of his work can certainly be a challenge for Barrett, but O'Malley contends that this multi-faceted approach gives Barrett a distinct advantage: "Tim is unique in that his understanding of the old papers is equal parts as historian, research scientist, master craftsman, and artist. All of these aspects overlap in many interesting ways. Because of this rare combination, Tim is able to transfer what he learns at the vat into research, or is able to test old papers and utilize that knowledge either in papers he makes himself or in teaching other papermakers."

**PD:** You've recently been very involved in the IMLS research project—could you talk about how you balance the different aspects of your work, and how the actual making of paper is integrated into your role as educator and researcher?

**TB:** As an employee of a university it is easy to get disconnected from papermaking reality. Nevertheless I always try to keep engaged enough in production to keep myself honest. I was, for me, extremely involved in the Japanese-style papermaking session that just ended. I did the cooking, sheet forming, and pressing, but all the other fiber preparation and the parting and drying work was done by Kathleen Tandy, Liz Munger, and Heather Wetzel. I couldn't have done it without them. The entire winter papermaking season yielded only about 600 sheets—a pittance by professional Japanese standards—but again enough to keep us all engaged, and thinking about the sources of quality in a sheet of paper. We'll soon shift back to paper case Western papermaking and for that, I try to train the students to take responsibility for all aspects of the process. It gives them more experience, and gives me more time to tend to other things. Ultimately, I look forward to being engaged in production. It's a great chance to just "be there" and leave all other aspects of papermaking behind. That said, I am constantly working to create and maintain an interface between production, research, and teaching. I don't think I'd be very good at any one of them, without the others attached. The amount of production tends to go up or down depending

mainly on how engaged I am in research or service. When I was director of the UICB, Lynn Amlie did a splendid job keeping production going, with a number of excellent students. I helped design and build crucial pieces of production equipment (mainly a press used in the Charters of Freedom project and a stamper beater) but it was Lynn and others who were at the vat.<sup>4</sup>

The way I see it is, if a university is working right the mentor is engaged in research or creative work that informs his or her teaching in the classroom, and the serious students, graduate or undergraduate, work with the mentor in the studio or lab, while exploring their own creative or research paths. I think I make this model work well at the UICB, in part because I throw in the crucial element of production. True, I am not a full-time production papermaker, and it is essential for people to understand that. Full-time production papermaking results in a type of knowledge and experience that just cannot be equaled in any other way.

When push comes to shove, I see my main task in life as raising the overall level of connoisseurship of handmade paper. If I succeed, the audience for handmade paper will be larger and more willing to pay a higher price for well-made paper. Over time, if I and others like me are invested in this goal, the demand for handmade paper should persist, if not expand. In summary, during my career I've decided that the path to greater appreciation for handmade paper requires a weird mix of teaching, production, research, art making, and publication.

In a thirty-year career of elevating connoisseurship, there has been any number of milestone achievements. Barrett has introduced first-hand the basics of papermaking to an estimated 5,000 or more individuals through demonstrations, lectures, and his classes at the UICB, Paper & Book Intensive (PBI), and Rare Book School. This figure does not include additional individuals who have benefitted from the thousands of copies of his two books, six videotapes, and 25 articles. Barrett has mentored a dozen or more who have gone on to careers in papermaking or allied fields. He has lectured on papermaking and book arts in nearly every state, and in ten countries. With his colleagues, he has developed a variety of papers, both specialty production papers that are widely used throughout the bookmaking and conservation communities as well as one-off projects such as the paper used to re-house the Declaration of Independence, the Bill of Rights, and the Constitution. Many are not aware that he has kept up a limited but continuing artistic output, producing artworks and artist books of his own creation, and engaging in collaborations with other artists. Barrett has also served as a consultant for many papermaking projects or groups, including the United Nations Industrial Development Organization's Indian Handmade Paper Industry Project in 1995.

**PD:** What do you feel are your greatest contributions to the papermaking and book arts community?

**TB:** I think it is safe to say that I and my same-age peers in the papermaking and book arts community have worked hard over the years to establish an inclusive atmosphere of exchange and support for very different ways of practicing and thinking about papermaking. The community includes paper artists, production papermakers, historians, scientists, educators, those who make hand papermaking equipment, and those who market papermaking supplies. There are instances where some, usually for sound business reasons, are reluctant to discuss proprietary processes, but typically there has always been an abundance of information sharing and support. I think to a large degree that sense of community is a reflection of the historical moment—the early 1970s—





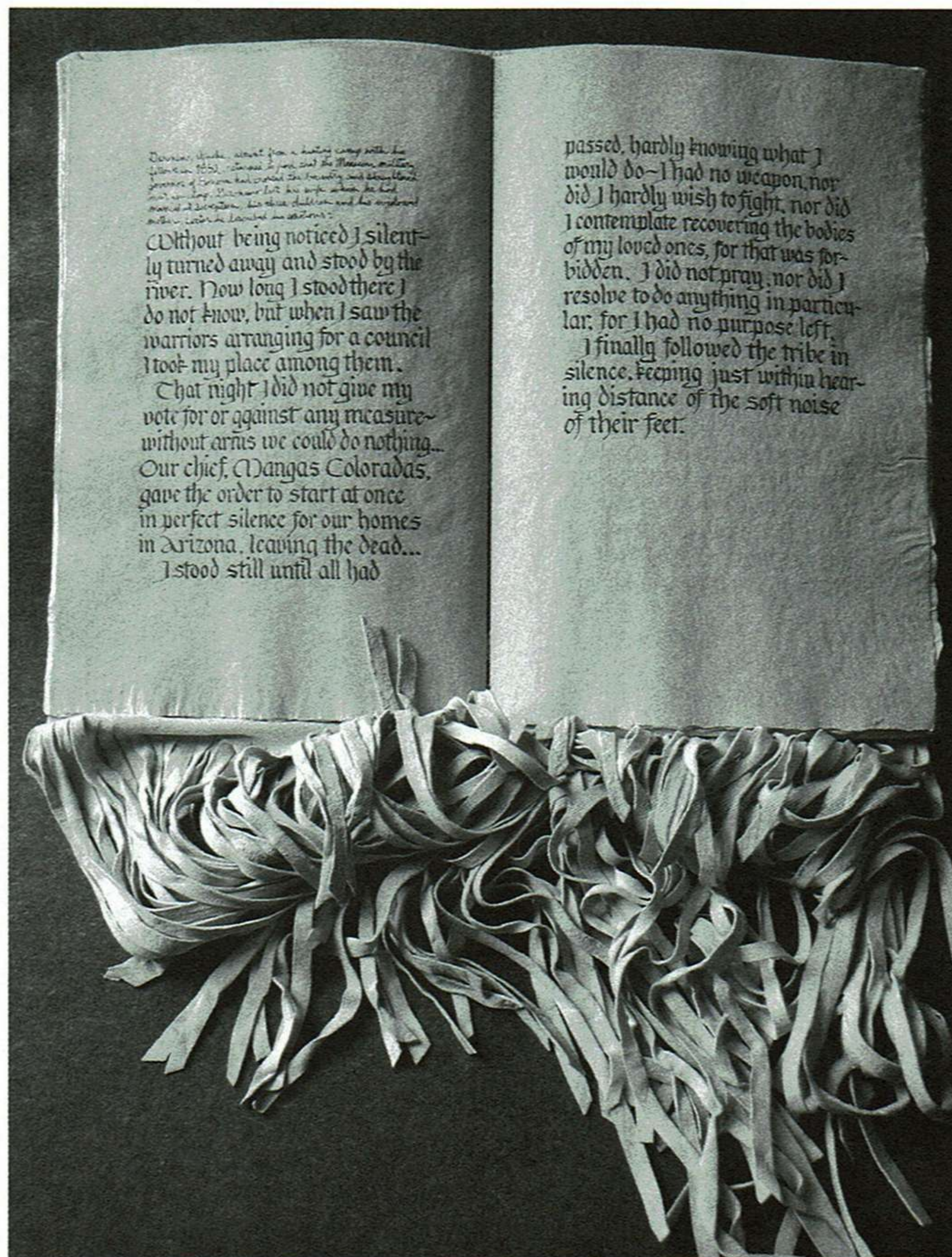
Barrett and graduate student research assistant Jessica White test a book and a fine art print using XRF and NIR non-destructive instruments as part of Barrett's three-year research project completed in 2010. During the study, they analyzed 1,579 papers made between the fourteenth and nineteenth centuries. Photo: Nathan Popp. Courtesy of University of Iowa Museum of Art, Iowa City.

when many of us were first getting started in the book arts or papermaking. It was a mildly euphoric, optimistic episode in American history when communes, an atmosphere of shared trust, and an assumption there was no reason everyone couldn't work together—was all standard practice. This sensibility prevailed and permeated campuses and gatherings of all kinds. PBI certainly played a role in embellishing that sense of community, and being one of the founding co-directors (along with Gary Frost and Hedi Kyle) is one of my accomplishments I'm most pleased with. I'm happy my generation made that sense of community a priority and I hope it sticks for the future.

This commitment to community, with all-inclusive benefit as a kind of core value, may be one of the underlying factors in Barrett's most recent accolade. In September 2009, Barrett was named a MacArthur Fellow. The self-stated purpose of that endowment is to "enable recipients to exercise their own creative instincts for the benefit of human society."<sup>5</sup>

**PD:** How do you feel the MacArthur Award will influence what you do as a researcher and as an instructor, and how do you envision the award helping the papermaking and book arts community at large?

**TB:** The MacArthur allows me to think about a number of research and creative paths I would otherwise not be able to pursue, or would need to approach much more conservatively as funds and time permit. Some of the things that I'd like to get to include the following: two research experiments now in progress for which funding was running out, both related to changes in historical papers that occur during aqueous conservation treatment and the degree to which non-destructive instrumentation can monitor those changes. The funds will also help with the launch of the website with the data from the IMLS research. I have two experiments I've always wanted to get to: one is a 3-D imaging analysis of the actual location of gelatin within the structure of a sized sheet of paper. The other is a papermaking experiment using a pair of small



Timothy Barrett, *This Land is Your Land, This Land is My Land*, 1990, 30 x 7 x ½ inches closed, flax paper, chamois, thread, ink. Barrett made this artist book in response to his curiosity about how the American government originally gained ownership of the land now called the United States. Barrett comments, "The selection of paper, leather, fringed binding style, and calligraphy were all intended to honor and somehow make sacred the words of the Native American speakers gathered in the book."

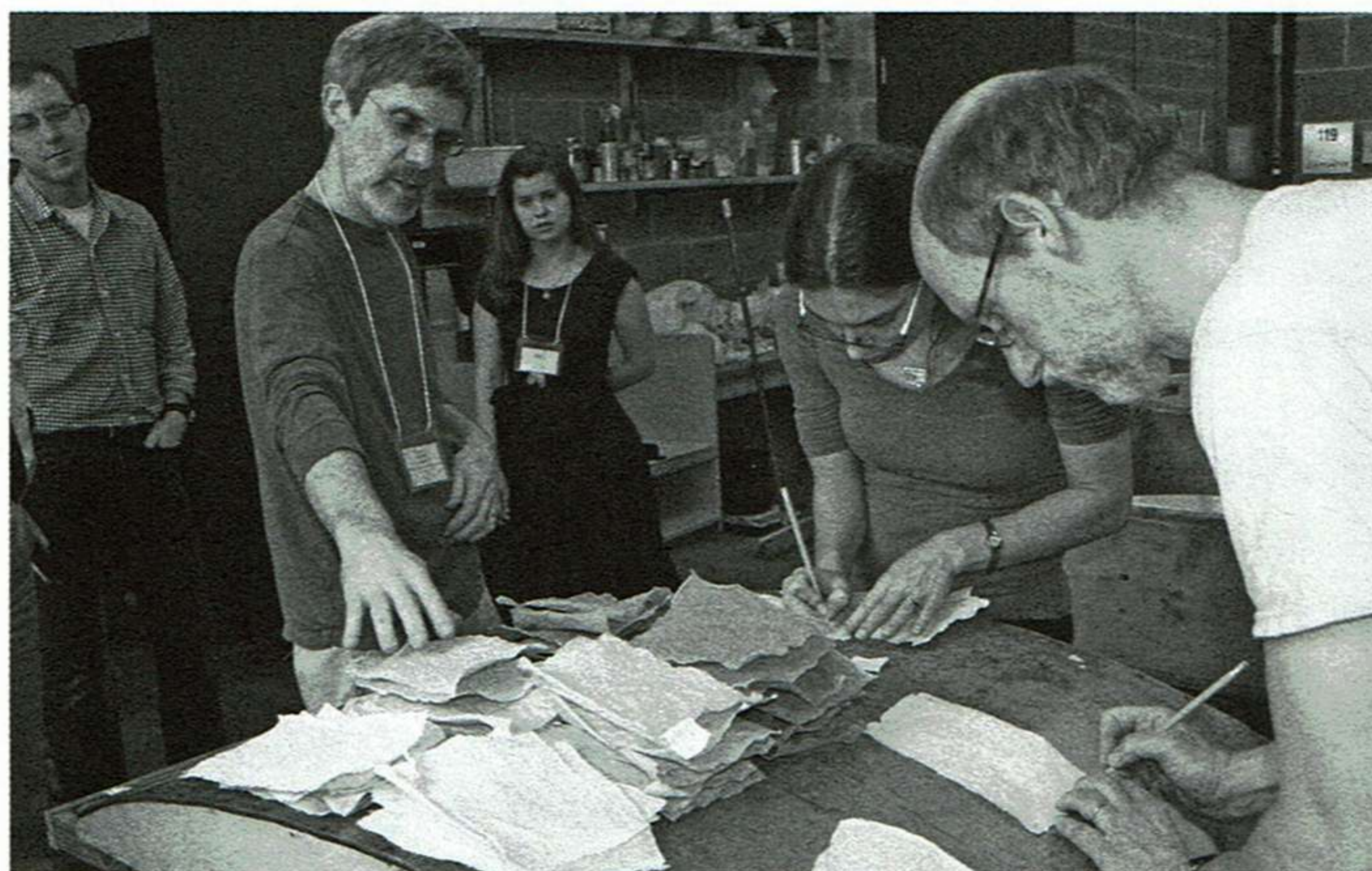
moulds and a three-person team to try to replicate early daily production quotas and see how that impacts the quality and aesthetic properties of the finished sheets. I want to complete a book on Western papermaking to complement the one on Japanese-style papermaking. And finally, I have some more wacky ideas: more one-of-a-kind artist books, design ideas for more user-friendly e-books, some performance ideas (if you can believe it), and Native American brain-tanned deerskin book bindings and clothing. As is usually the case, I find my research and creative efforts naturally feed my classroom presentations, so hopefully there will be some new and intriguing things surfacing in my classes and public talks.

I'm also determined to expand the reach of the award beyond the personal and into the greater community. As I mentioned earlier, Peter Thomas, Sue Gosin, and I are working on an online family tree of hand papermakers that anyone could post themselves on. If that needs support, I'd like to help make it happen. And I'm interested in ideas from others for things they think would be good for the broader community that I could help with. I guess that rather than any given program or point of view I would want to invest in watering holes; forums for dialogue that are inspiring and generate ideas and enthusiasm for the maximum number of people in attendance. I have a particular bias for PBI as a model format, in that it provides a combination of lecture/discussion sessions and hands-on sessions, away from normal responsibilities for an extended period of time, in a natural setting that is emotionally





One of Barrett's favorite images from PBI, circa 1983. He notes, "These people look exhausted. Those who were there will say they were, and others will say the expressions on their faces came from trying to follow Gary Frost's analysis of early binding structures. I know that these folks had way more new book history and creative ideas swimming around in their heads than they could possibly keep straight. They had been up late the night before talking, sharing knowledge, and working on books and paper. The people in the photo are exhausted, but they are filled up inside in a way that is rare and deeply moving. Something very similar has been happening at PBI ever since."



Roughly every two years, Barrett co-teaches "History of European and American Papermaking" with John Bidwell (on right) at the University of Virginia's summer Rare Book School. The one-week class consists of lectures by both instructors intermixed with hands-on sessions taught by Barrett. In this image students are annotating sheets made from multiple pulps prior to a gelatin sizing session. Courtesy Rare Book School.

and physically nurturing, with good food provided (without the need to shop, prepare, or clean up). The hands-on element is particularly important for papermakers, book artists, and book conservators, but for book scholars as well. The handwork is meditative and fully different than the intellectual work that goes on at a normal conference, and yet it is still immediately relevant to the dialogue. The combination can be intoxicating, with people staying up long into the evening to talk or work. If I had to pick one thing, that kind of opportunity is where I would want to put the coinage and the effort.

PD: What's up next?

TB: Right now my big focus is to finish some remaining work on the research project and make the results available online. After that I hope it will be teaching, research, and creative efforts made possible by the MacArthur, helping to build UICB programming, and making generative things happen in the papermaking and book arts community overall.

#### NOTES

1. Henry Morris, "Confessions of an Amateur Papermaker," *The Paper Maker* vol. 33, no. 2 (Wilmington, DE: Wilmington Hercules Powder Co., 1964).
2. See Timothy Barrett, "Research as a Path in Papermaking," *Hand Papermaking* vol. 22, no. 2 (Winter 2007): 18–21.
3. Co-researchers in the project are Mark Ormsby, National Archives and Records Administration; Robert Shannon, Bruker Elemental; Michael Shilling and Joy Mazurek, Getty Conservation Institute; Jennifer Wade, Library of Congress; Irene Brückle, State Academy of Art and Design; Joseph Lang, University of Iowa; Jessica White, University of Iowa Center for the Book.
4. See Lynn Amlie, "The Charters of Freedom: Support Paper for the Re-encasement Project," *Hand Papermaking* vol. 16, no. 1 (Summer 2001): 14–19.
5. MacArthur Foundation, "2009 MacArthur Fellows—Timothy Barrett," from the MacArthur Foundation website, [www.macfound.org/fellows/2009/barrett](http://www.macfound.org/fellows/2009/barrett) (accessed April 22, 2010).