Abstract

Although all of us come into the field of conservation through a variety of paths, there are two things that bind us together. The first are the “objects” under our care and the second are the shared perspectives by which we view them. To view objects only from a conservation perspective that focuses on condition problems and how to solve them is too limiting and more likely to result in our failing the object. Such a narrow perspective may lead the conservator to make decisions based on the treatments that best meet his or her personal or professional needs rather than those of the object. The more diverse our historical, technical and technological, material, and cultural perspectives, especially those based on practical experience, the richer and more dimensional objects will become and the sounder our decision-making abilities will be to better serve them.

Our common perspectives come from a variety of experiences and begin when we are very young. We come to objects initially as users, creators, and students. While our parents wanted us to be careful with our toys, our first impulse was probably to investigate them, often destroying or altering them in the process of exploring their playfulness. This curiosity about objects—revealed to our parents by the words why, how, and what—is instinctive in human beings, and yet curiosity is often quashed by harried parents and impatient teachers; when I was growing up in the late 1940s and 1950s, this was especially true in the case of girls. This is a pity because our natural curiosity needs to be constantly nurtured if an individual’s goal to be a lifelong learner is to be achieved. It may be annoying for us to answer the why, how, and what questions, whether from our children, students, or colleagues, especially if we do not know the answer, but this exchange of information leading to deeper knowledge benefits both giver and receiver, the objects under our care, and the conservation and preservation professions as a whole. The desire to learn is inspired in teacher and student if such exchanges are encouraged and cultivated. The teacher-student situation is thus an important one, for it is when valuable information is passed on to other conservators and institutional colleagues in forums such as professional conferences and publications, in the workplace, and in the classroom. This exchange is also to be encouraged between conservators and the public. In both cases, discussions enrich the perspectives of students and teachers as opposed to formal, one-sided presentations.

Our first introduction to the creator perspective was as child artists working with crayons and finger-paints, molding clay ashtrays, or weaving pot-holders. Like many of you, I found these early creative efforts very satisfying, but unfortunately, by the early 1960s in high school, I was not allowed to take art classes as these were considered unnecessary for college-bound students. I started on a pre-med track at the University of Michigan but was soon derailed by organic chemistry. Clearly pre-med was not for me, and I switched to a major that was as far away from science as I could find: art history. What I did not know then was that all of the subjects that had interested me to that point, namely science, art, and art history, would be linked in conservation.

From the art historian’s perspective with a BA program bias toward fine paintings, sculpture, and architecture, I was taught to regard certain objects as worthy of study and criticism. In Michigan’s art history department at that time, there was a decided bias against taking fine art classes, but I was allowed to take courses on color theory and design. This proved important in critiquing art, but it only whetted my appetite for more information about craftsmanship. If I had been taught then about “how” objects
were made and of “what,” I would have been more inter-
ested in those “pretty pictures.” And that brings up another
often-neglected perspective in the study of art history—
analyzing, appreciating, and enjoying the real object. My
art history education was gleaned exclusively from photo-
graphic reproductions in books and from slides shown in
lectures. I do not recall any of my classes visiting the uni-
versity’s art museum to look at actual paintings, sculpture,
or even to discuss the architecture of the surrounding
buildings. Without the experience of viewing (even touch-
ing) actual objects and recognizing details of their
production—for example, impasto on canvas and tool
marks in marble—such perspective remains as flat as text-
book illustrations.

After graduating from Michigan in 1967, I was finally
able to gain the latter perspective while lecturing to all
kinds of groups—from kindergarteners to retirees—about
the wonderful collections in the Toledo Museum of Art. It
was then that I learned from children how to look at
objects to see what was actually there. This nuanced per-
spective, uncluttered by art historical jargon, revealed the
object as it was superficially. To see through the surface was
a perspective that came later through conservation prac-
tice, historical research, and more creative experiences.

While at Toledo, I became aware of paintings conservation
through Richard Buck, and by the time I left the museum
in mid-1968, I realized that I wanted to pursue a career in
the conservation of paintings. At that time, however, I
already had plans to move to England, and with reluctance
I put that goal aside.

After two years working for a reprint publishing com-
pany, I was extremely lucky to get a secretarial position in
the Courtauld Institute of Art’s restoration department.
The head, Stephen Rees Jones, Sr., listened to my excited
wishes to be a paintings conservator, and he generously
gave me a painting to “restore” in my spare time. I was well
aware, however, of a distinct disadvantage in not having a
fine art background, as the director of the Courtauld
Institute, Anthony Blunt, had once remarked to me that
they made the best restorers. This may have been tr
ue, however, of the latter to aspire, the danger of such restorations was not
promised the condition of the work or where tears had been misaligned, etc. These simple treatments were performed
without any special equipment, such as a suction table, but
instead with a steady hand, patience, and a growing knowl-
edge about materials—old papers and adhesives and
conservation-quality ones. In those rare cases when a more
invasive procedure was appropriate, Kasia approached each
with great deliberation, and I soon understood that wet
treatments, e.g., to reduce disfiguring staining or a damag-
ing backing, were to be taken neither lightly nor routinely.
In only rare instances was the risk of altering a pen stroke
outweighed by the reduction of a very disfiguring stain. In
those specific cases when invasive treatment seemed appro-
priate, the institutional perspective, that of the Galleries’
curator, Philip Troutman, was sought.

Initially my conservation perspective was primarily diag-
nostic in nature. Over time, however, this was tempered by the exposure to literally hundreds of old master draw-
ings that came into my “lab.” I was beginning to recognize
how drawings from particular periods and artists looked.
Perhaps if I had been exposed to the role that preparatory
sketches and presentation drawings played in the develop-
ment of Western fine art in any of my art history courses or
while at Toledo, I might have been able to appreciate the
cultural and historic importance of these objects well
before working at the Courtauld. A few of these drawings,
mostly in iron-gall ink, were in pristine condition while
most displayed evidence of wear and tear to varying
degrees. While the former could have served as models for
the latter to aspire, the danger of such restorations was not
lost on me, even though my experience in washing (not to
mention, bleaching) drawings was slight. While I look back
on the minimal treatments that I performed for thousands
of old master drawings with pride, I now realize that an
essential historical perspective about the technology and
material science of those objects was woefully absent dur-
ing those formative years. This deficiency in my knowledge about traditional papermaking and media, such as iron gall-ink, meant that I could not experience a full appreciation for the works of art on paper that passed through my hands.

Early in my conservation career, for example, after treating a van de Velden print, I was horrified to see regularly-spaced dark shadows in the paper when I happened to look at it in transmitted light. That basic lack of knowledge about papermaking seems astonishing to me now, but it was not until I read Dard Hunter’s book on the history of papermaking a year or so after this event that I found out that those dark lines were typical of antique-laid paper. At the time, I was sure that I had done something wrong to cause that “defect,” and this experience highlights one of the best reasons for the documentation of our observations. If I had been required by the profession or my institution to write down both the characteristics and conditions. If I had been required by the profession or my institution to write down both the characteristics and condition of that print before I began treatment, I would not have been so bewildered about how it looked afterward, regardless of the reason for the “defect.”

During my last two years at the Courtauld, I taught mini-courses in paper conservation, and by the time I decided to return to the United States in 1978, it had become my goal to teach. I was lucky enough to get a position at the Cooperstown, New York, graduate conservation program. Those early years of teaching were perhaps the most challenging of my career as I sought to learn as much about paper and media as possible.

Two events occurred in the 1980s that began an ongoing investigation into paper and papermaking. In 1981, acting as program chair for the newly-formed Book and Paper Group, I arranged for Timothy Barrett to demonstrate Japanese hand papermaking during the session. Fortunately, a balcony surrounding the ballroom enabled many to look down, fascinated, as Tim deftly manipulated the mould and viscous pulp to form sheets of delicate paper. So this was what Dard Hunter was trying to explain to me from the pages of his book!

I finally had the opportunity to make paper as well as practice other book arts while in the fine arts master’s program at Syracuse University in the mid-1980s. I distinctly remember the first session of the intaglio printmaking course I took with a group of eager undergraduates, who were making complete messes of all the communal work spaces. The conservator in me desperately needed to keep things neatly in their place, but plates were ground and etched, images were printed, and hands got inky. It was while gaining this artistic perspective that I saw a possible explanation for those mysterious white spots found on otherwise discolored prints of the past. Cortese taught us the traditional technique of “drying” inky hands by patting them with magnesium carbonate, thus allowing us to handle paper without leaving fingerprints in the corners. One day, I observed one of the students as he clapped his hands. Carbonate powder flew everywhere, including heavier bits that landed on a sheet of dampened, ready-to-be-printed paper. It seemed clear to me that it was these minute deposits of alkaline reserve that caused those white spots.

As importantly, I was able to make a great deal of Western-style paper by hand from rags I prepared myself. By varying fiber types and beating times, I gained a greater perspective on the qualities of paper based on processing. It was also while I was in that program that I first set type, composed a haiku, and printed it on paper I had made myself. I even bound (badly) a few blank books.

During the early years that I taught in the Cooperstown program (in 1987 it moved to the SUNY College at Buffalo and became the Art Conservation Department), one thing became evident: typical American works of art, brought into the program’s conservation “clinics” by public institutions and private owners, were on a different quality paper compared to European works. This was especially true for decorative prints produced from the middle to the end of the nineteenth century for the mass-es. During that period, chromolithography became a common illustrative medium. Meant as popular fine art, these prints were often produced on soft and absorbent, fluffy and weak, slack-sized and short-fibered paper—ideal for dry-paper printing but especially vulnerable to the absorption of moisture and gaseous pollutants. Framed and hung on countless walls in the homes of America’s burgeoning middle class, many of these prints exhibited stains from dampness or water, from air pollution seeping in between gaps in the wooden slants used at the back of the frames, and from acidic matting materials.

To return these prints to something close to their former splendor meant that rather drastic conservation steps were needed, including washing and often bleaching. At first, I was only a few steps ahead of the program students as we learned the best ways to deal with these often fragile works of art. Mistakes were made, but we discussed what had gone wrong, and from these conversations, we learned to look more carefully at similar works, to anticipate more accurately the possible results of a variety of treatments, and to consider less-risky approaches, for example, using window mats to mask unbleached stained edges. Nevertheless, these works—encountered most frequently by conservators in private practice—remain the most difficult to treat, whether from a conservation (to chemically and physically stabilize) or a restoration (to return to original appearance) approach.
After a few years of teaching and supervising students, I began to understand the adage: We don’t know what we know until we know what we don’t know. By the late 1980s, I was beginning to understand how little I actually understood about paper, specifically, and the fine and book arts, generally. The responsibility of teaching was taking most of my time, leaving little for research into the history of papermaking technology. Then, in 1991, I had the opportunity to complete the biography of Dard Hunter, the world-renowned paper historian, begun by an art historian and colleague, Patricia Scott, who passed away in 1989. Taking a year’s sabbatical leave, I embarked on a journey that enriched my perspectives about the book arts and the organization, use, and preservation of archival materials.

During my sabbatical, much archival material was discovered in Mountain House (Hunter’s home in Chillicothe, Ohio), and it was clear that most of the contents were in no particular order, either by subject, correspondent, or date. Regrettably, I had only begun to organize the archive before having to return to teaching. It was difficult, but in 1993, I made the decision to give up my tenured position in the Art Conservation Department to return to Mountain House to delve completely into the life of a remarkable man of the book. A consummate craftsman and scholar, Hunter spent much of his life as a printer, publisher, scholar, and historian of print media that enriched my perspectives about the book arts and traditional arts of hand papermaking, cutting punches and hand-casting type, and printing on the hand press, he practiced these crafts and used his considerable skills to create unique and beautiful books. For some unknown reason, the only book craft that Hunter did not have much interest in performing was binding.

By the time I moved into Mountain House in late 1993 (and where I lived until mid-1996), many more bundles had come to light. Over the next year, I sorted through over ten thousand letters and photographs, looked through hundreds of books for hidden treasures such as marginal notations and sketches, book-sales records, works of art, Roycroft and other graphic designs, and so on. Objects other than paper-borne ones included wood-engraved blocks, hammered-copper bookends, iron printing presses, lead type, and stained glass. All of these were amazing enough, but the greatest thrill was to handle and document them, and on a few occasions, to use Hunter’s paper, type, and presses to create works of my own.

The most important discovery from a preservation perspective, however, was the condition of the paper records that Hunter left behind. Although poorly-stored in a drafty house without central heating or air conditioning, the papers that comprised the archive—dating from the early nineteenth century to Hunter’s death in 1966—were in remarkably good condition. This was even true of the lignin-containing, alum-resin-sized carbon paper from the World War II period. It was becoming clear to me that under less-than-ideal storage conditions, even poor-quality paper could degrade and yet remain useable.

Once the Hunter papers were sorted, placed in folders, and filed in cabinets, the information in them was read and compiled into the story of Hunter’s rich life and work. In order to make more sense of his hand-crafted books, I read voraciously in the areas of cutting and casting type, papermaking, letterpress printing, fine printmaking, and binding. This was most enjoyable, but the desire to participate in actual book production grew as the manuscript neared completion in early 1996. By this time, I felt that I needed to complement the knowledge acquired through research with extensive practical experience in order to make sense of both the books I read and the objects I examined. With the goal of building on my feeble book arts experiences at Syracuse and Mountain House, I moved to Tuscaloosa, Alabama, with the fervent hope that I would be allowed to assist in the production of the hand-printed, limited edition of my book, *By His Own Labor: The Biography of Dard Hunter*.

Before the production phase of that project began, however, I entered the MFA in Book Arts Program at the University of Alabama in 1997. Over the next few years, I set a lot of type by hand, printed on my own hand-operated presses, and bound books from pamphlets in editions to unique, full-leather bindings. I gained even more experience making paper by hand, and during a summer internship with Staney Nelson at the National Museum of American History; I also learned to cut steel punches, strike and justify matrices, and cast type in a hand-mold. One of the first books that I printed under my imprint, The Legacy Press, was a group of poems by Jennifer Futernick entitled, *One Carve of Sugars*.

With this book-making experience under my belt, Steve Miller, proprietor of the Red Hydra Press, asked me to be the “printer’s devil” on the Hunter biography. Beginning in 1998 through late fall 1999, we printed the book. Approximately 360 pagged-out galleys of type were corrected and printed on more than 16,000 sheets of the Twinrocker Mill’s special handmade paper, every sheet of which was dampened, printed on both sides, some in two colors, and air-dried. This incredible experience was deeply important not only because it reinforced my creator perspective, but also my user perspective as I strove to make the book reader-friendly and not simply an objet d’art. This experience also enabled me to undertake full responsibility for the design, letterpress printing, and publication of my thesis project, a book entitled, *End grain Designs & Repetitions: The Pattern Papers of John DePol*.

Again, just as at Syracuse, while in the Alabama program I experienced some conservation vs. creator conflicts. For example, there are three basic adhesives used in bookbinding: the traditional animal glue, PVA, and paste. Personally,
I have no use for animal glue and neither did my instructor, Don Glaiser, and my initial concerns about PVA were not much better. However, I eventually had to allow that the working properties of PVA in certain procedures were appropriate for the task. On the other hand, I also think that the addition of a high viscosity grade methyl cellulose to PVA and paste can improve them both by enhancing their reversibility and workability. This new perspective altered the general advice that I now give to creators: Use the most stable material available without compromising the effect you want to achieve. The same principle can be applied to the choice of printing paper. For example, there is a substantial difference between a tough, hard, hand-made rag paper that has to be dampened before printing and a machine-made, chemical-wood-pulp paper, especially designed for dry-printing, such as Mohawk Superfine. Many would argue that the former will outlast the latter based on fiber-content alone, but I personally do not think that is true, especially in the well-protected environment of the bound book.

Decisions about the kinds of materials used to create objects should not be based primarily on permanence and durability, but should include such factors as the desired effect, budget, facilities, and the expertise of the creator. What creators need to have at their fingertips is basic information about materials, technology, and techniques, and such publications should come from conservators who have the requisite perspectives needed to compile and present this information. This will enable those who keep conservators in business to make informed decisions while not compromising their artistic or craftsmanship visions, abilities, and resources. I completely agree with my colleague Randy Silverman when he says that it is time for conservation to move from the negative to the positive by emphasizing what non-conservators can do, and this positive attitude becomes easier for conservators as we gain different perspectives via practical experiences.

For example, those involved in mass treatments of books and archival materials would benefit greatly from an intensive, hands-on examination of numerous objects from many different periods and countries in order to help them better understand the remarkable resiliency and beauty of aged and aging paper and the media upon them. Ideally these examinations should be unfettered by conservation or preservation considerations. Instead attention should be paid to the acquisition of knowledge about and sensitivity toward objects based on their materiality, craftsmanship, and aesthetic qualities. It seems to me that the recommendations of the past few decades relative to acidic paper have hinged on the concept that all papers but alkaline ones are rapidly self-destructing. Even a cursory examination of a hundred or so books or archival artifacts from the past few centuries should confirm that nothing could be farther from the truth.

The main constituent of paper, cellulose, is a very stable compound. Being impervious to all but the most extreme wavelengths of light and most chemicals except the strongest acids and bases, pure cellulose is nearly indestructible. Outside factors, such as microbes, pests, and fire, are the usual suspects in those rare cases of complete disintegration or "paper death." Of course when pure cellulose is processed to make paper, this stability is somewhat compromised. The traditional processes that were practiced for two thousand years in the East insured that the native cellulose was barely altered. This resulted in very stable papers, a few early examples of which are extant. Early Western papermaking technology, because it had to break down rotten rags, was mechanically more destructive compared to Eastern hand-beating techniques, and, from 1800 on, Western pulping processes have involved the use of strong chemicals, heat, and pressure together with mechanical action to reduce wood chips or woven textiles into pulp. The structure of these fibers is fragmented and exposed, which makes them more vulnerable to deterioration processes from external sources such as air pollution. Despite this alteration of fibers, the cellulose is still remarkably resilient to the effects of aging, buffered in large part by the surface sizing that is applied to the sheet, particularly gelatin.

Unfortunately, many who make decisions about how to slow or stop the deterioration rate of paper seem to think that paper is somehow akin to human beings who always die. Unlike most living organisms, however, paper copes with its surroundings with much greater success. The primary reason for this longevity is the stable nature of cellulose. There seems to be an assumption among some conservation practitioners, administrators, scientists, and manufacturers that the older paper is, the more it must require some type of intervention. In reality, however, this is not the case. Millions of dollars have been devoted to washing flat paper and deacidifying books that do not require such interventions to survive or to be used. What is needed is a way to convince those people who make decisions about the preservation of bound and unbound paper-borne objects that aging paper and unusability are not correlated. Indeed, the longer a paper has existed, the more likely it will multiply that existence, especially in today's climatic-controlled, institutional environments. Thus custodial and conservation professionals should evaluate the condition of paper not on its chronological age or appearance, but rather on how it feels. The next step is then to assess what kinds of demands will be made on that paper in terms of handling.

The same argument holds true for those who believe that by quantifying the various properties of aged paper, assuming that this can be done without destroying it, we can somehow predict its permanence and durability, whether untreated or treated. Surface-measurement of the...
pH of a piece of paper may indicate the level of acidity in the sheet, but can anyone be absolutely sure that this test is measuring the pH of the cellulose (which is naturally acidic) or the surface layer of gelatin (also naturally acidic)? While we may think that paper is two-dimensional, it is decidedly three-dimensional, and what has occurred on the surfaces of paper is not necessarily an indication of the condition of the much greater percentage of fibers comprising the interior bulk of the sheet. The same goes for artificial aging. An artificially-aged paper should only be compared to another artificially-aged paper; there is no evidence that such aging techniques can be viewed as somehow predicting longevity or equating natural aging. For example, I have no doubt that if the WWII-era carbon paper found in the Hunter archives had been artificially-aged when new, it would not resemble the naturally-aged papers. Again both handling paper to determine its physical condition and being able to make an educated guess about its manufacture and constituents will yield more useful clues as to a predictable future with or without treatment compared to conclusions based primarily on its age or on empirical data concerning its pH, folding endurance, or color.


My copy [of Treasure Island], which I still possess, was one of the cheapest…its coarse pages are jaundiced and brittle, yet they’ve outlived their manufacturer; they will outlive their reader—always comforting yet a bit sad. The pages, in fact, smell their age, their decrepitude, and the jam smear is like an ancient bruise….That book and I loved each other, and I don’t mean just the text: that book, which then was new, its cover slick and shiny, its paper agleam with the tossing sea and armed, as Long John Silver was, for a fight, its binding tight as the elastic of new underwear, not slack as it is now, after many openings and closings, so many dry years…. (Gass 1999, 46-7)

Gass felt, as we all should, no negative connotation between the effects of aging and an enjoyment of objects acquiring a patina. The perspectives of readers and users should be an important consideration when invasive treatments are proposed. My most recent experiences as a researcher and user of printed materials for my dissertation have served to strengthen my perspective from these vantage points. Not only was I able to handle many examples of books and newspapers published in Mobile, Alabama, in the decade prior to the Civil War, but I was also fortunate to examine numerous copies of Confederate imprints. While there has been a great deal written about the poor quality of the paper produced during the war years from 1861 to 1865, the fact remains that as many examples of discolored paper can be found among antebellum imprints. However, I discovered only a few sheets of a dyed-brown paper within a few books that can be described as so brittle as to be unusable. Additionally, the losses around edges of newspapers, particularly, can be attributed to poor storage and handling, not to poor materials. In the case of often-requested materials in archives and special collections, some kind of reproductive media, such as photocopies and microfilm, can reduce wear and tear, but as often as possible, the original materials should be made available to patrons as there is a great deal of information to be gained from fully sensing the real object. As it is, our computer-oriented world is becoming increasingly removed from the real, and cultural institutions would be wise to take every opportunity to provide hands-on enjoyment of original materials to their patrons. Preservation policies should also emphasize teaching both patrons and staff members the correct ways to handle objects, and I have to say that I have personally seen significant damage done by staff members, especially the heads of collections, and we would do well to start at the top.

Over the past eleven years, my long-held view that paper was inherently resilient has been confirmed many times over. However, for those flat paper artifacts and books that have become so brittle that they can no longer be handled at all, we have two preservation choices. The first entails taking invasive steps in order to preserve them, even if this may lead to a loss of some inherent qualities. I was therefore pleased to read about the paper-splitting treatments that are currently being considered for brittle paper. I remain unconvinced about the efficacy of the mass deacidification of book papers that might deteriorate. While such preventive conservation treatments may seem like a good idea, time and money resources would be better directed to the collection’s housing and storage and to the conservation of truly endangered, oft-requested materials.

The second preservation choice involves reproductive or reformatting methods. We need to focus on those technologies that will allow us to efficiently and economically scan paper simultaneously face-up and down thus requiring minimal handling. Whichever choice is made, it should be based on the rarity of the material or information and on its actual use, rather than on blanket treatments involving large numbers of never- or rarely-requested material.

And finally a few words about certification. If we accept Webster’s definition of “profession” as “a calling requiring specialized knowledge and often long and intensive academic preparation,” then we must accept the essential element of formal learning as honest discussion and the acquisition of as many perspectives as feasible. No trade progressed into a profession as long as the apprenticeship system discouraged those inherently human questions: how, what, and why. For any profession to move forward, it is incumbent upon its members to question not only the unfamiliar but also the obvious, which may, in fact, not be
well-understood after all. Even if the number of conservators who are needed to serve institutions and the general public could be supplied via the few academic graduate programs, we still should publish information so that anyone interested enough to study it can do so. Because I do not think that conservation has provided that information, I did not vote for certification.

I am not suggesting that this body of knowledge be of the “how-to” variety, quite the contrary. Like basic textbooks that the conservation profession still does not have, these publications must explore complicated subjects deeply, and the complexity of such books will weed out inappropriate readers. Such publications should not be compilations of treatments, but rather what materials comprise objects, how objects were made, and finally, their functions. Answering that last question may seem unimportant, but knowledge about the original end-uses of objects enhances perspectives required to carry out ethical conservation treatments. For example, the intended use-difference between a preparatory sketch and a presentation drawing should be an overriding consideration in any conservation recommendation. It is only after we provide everyone with equal access to basic information about the technology and materiality of objects and deterioration processes, as well as general conservation and preservation objectives, procedures, and policies, that conservation be ready for certification.

I see this view as practical and inclusive, based on a number of interrelated perspectives that all of us have experienced to a greater or lesser extent. The key to responsible conservation practice is to apply these varied perspectives in common-sense approaches to the preservation and conservation of those objects that fall under our care. We must also ensure that those who create objects and all of those who regard conservation as a “calling” have equal access to the basic information needed to understand objects as fully as possible, crucial information that will ultimately lead to ethical and professional decisions.

REFERENCE


DR. CATHLEEN A. BAKER, FAIC
Tuscaloosa, Alabama
cbaker45@comcast.net