

“If You Scan It, They Will Come”:
Marbled Paper in MSCUA’s Digital Archives

Elinor Appel, Laura Melton, and Christina Kulp

LIS 559: Digital Libraries

December 11, 2003

Introduction

Our project was in Manuscripts, Special Collections, and University Archives (MSCUA) department of Suzzallo Library and involved the Historical Book Arts collection. We worked with Sandra Kroupa, the collection's curator, and Kris Kinsey, who is in charge of creating the metadata for CONTENTdm, the database used by MSCUA. While this assignment was limited to working with marbled papers, Kris and Sandra foresaw an eventual expansion of the collection to all decorated papers.

The initial purpose of the digital collection was to serve as an instruction aid for Sandra, as well as a repository for her extensive subject knowledge. She and Kris were also interested in eventually making the collection available to the University of Washington community and possibly to the general public; this would both publicize their collections and draw people into visiting MSCUA. To these ends, our first goal was to use CONTENTdm to create a digital collection through which Sandra could pull up digital images for her classes. However, we kept in mind the needs of future users with unmediated Web access to the collection.

There were to be three deliverables for our project:

- A discussion of intellectual and physical access issues, to be used in the development of copyright and use policies
- A data dictionary for marbled papers
- Instructions for the insertion of marbled-paper records into the historical book arts metadata schema

These deliverables are included in this project write-up, though the last two are still a work in progress. We also hoped that we would be able to post records in the collection, but that was impossible due to lack of time. As Kris herself has pointed out to us, an enormous amount of upfront planning is necessary before the material is ready to be inserted in the database.

Our intellectual tools were various and plentiful: a variety of reference materials, including a printout of the data dictionary, samples of metadata

created for other collections, online thesauruses, and other archives' digital collections. In addition, MSCUA possessed a small collection of books on paper marbling. Sandra showed us all the books and allowed us to choose among them. (As we will discuss later in the paper, this freedom to choose brought about some interesting repercussions in the decisions we made in creating the metadata.) We each took primary responsibility for one of the three sections of the project, as enumerated above. Laura covered the policy questions, Elinor researched marbled paper and the creation of terms for the data dictionary, and Christy considered some of the problems inherent in the process of creating metadata for end users. Our write-up will consider each of these facets in turn and conclude by summarizing our lessons, experiences, and accomplishments.

It is easy enough to scan a photograph or a pamphlet and throw it up on the Web, but is it legal, and how will people use it? Any digital library project must answer these questions before turning on the scanner. [Well, not all DL projects *do* answer these questions before turning on the scanner.]

Copyright

Copyright is either very simple or very complicated. In the first determination, an object is either in public domain, in which case it can be used with impunity, or under copyright protection, in which case it cannot. In the latter case, there are three possibilities: ask permission, follow "fair use" guidelines, or don't use the object. [Fourth possibility: just take your chances] Not using the object is much easier than either asking permission or trying to gauge whether the use qualifies as "fair use."

In the case of digital archives, the decision is fairly clear; the age which makes many artifacts interesting for digitization also pushes them out of copyright protection and into public domain. [I don't follow this] Through careful selection of materials, it is simple to sidestep many of the copyright issues that could potentially complicate a digitization project.

In the case of Historical Book Arts, the age of many artifacts and the fact that copyright expires mean that copyright is not an issue. However, some of the marbled papers in MSCUA's collection were created during or after the 1920's, so copyright protections would come into play if those papers were to be digitized.

In my opinion, it is possible that it would be allowable under United States copyright law (17 U.S.C. §110) for Sandra to use digital copies of the marbled papers owned by MSCUA in her face-to-face classes. The legal code states,

Notwithstanding the provisions of section 106, the following are not infringements of copyright:

1) performance or display of a work by instructors or pupils in the course of face-to-face teaching activities of a nonprofit educational institution, in a classroom or similar place devoted to instruction, unless, in the case of a motion picture or other audiovisual work, the performance, or the display of individual images, is given by means of a copy that was not lawfully made under this title, and that the person responsible for the performance knew or had reason to believe was not lawfully made.¹

Providing that the displayed copy is legal, or that the responsible person has no reason to suspect that it is not legal, display for the purpose of teaching is legal. According to 17 U.S.C. §108, a library may make one copy of an item that is in its collections (except for a lot of restrictions which I will not list here, because they do not apply).² Thus the digital copy is legal, and its use for teaching is legal as well. Even if the point is argued that downloading the digital image from the server to the classroom PC effectively creates another copy, which would then be illegal because it is in excess of the single-reproduction restriction, I believe that since Sandra also has access to the original but would use a digital image only for the sake of convenience and magnified display in front of a class, this use scenario would be within the guidelines of "fair use." [A reasonable argument]

Unfortunately, no such allowances exist for the wider-use scenarios. If MSCUA intended to digitize newer decorated papers and to make them available to either the University of Washington community or to the world at large, they would need to ask the permission of the copyright holders. MSCUA staff is aware of this, and in fact one of the possible tasks that they mentioned for us was the drafting of both a form letter to send to copyright holders and a permission form for them to sign. The problem in this case is to honor copyright holders' rights while simultaneously providing for the University's needs and uses. We were unfortunately unable to complete this

¹ "TITLE 17 , CHAPTER 1 , Sec. 110."
(<http://www4.law.cornell.edu/uscode/17/110.html>), accessed on December 8, 2003.

² "TITLE 17 , CHAPTER 1 , Sec. 108."
(<http://www4.law.cornell.edu/uscode/17/108.html>), accessed on December 8, 2003.

task, [why not?] although I have written a one-page summary of my conclusions about copyright, so that MSCUA can easily access the conclusion without reading through my extended explanation. (Appendix A).

A further issue for the interests of copyright holders is that of technological protection; how can we protect these artistic designs so that they do not turn up next month as Hallmark wrapping paper? This is a less solvable problem than copyright permissions, since to my knowledge, any method designed to prevent unlawful use would also disallow lawful use. If a Web browser can download the image to display on a web page, a user can save it, copy it, and do anything s/he wants to it. If we cannot provide a certain standard of protection, it is better not to distribute the images at all. This condition effectively eliminates the possibility of including most twentieth-century marbled papers in the Historical Book Arts database. [I'm not clear what form of argument you're making here: For you is the concern legal, economic, or ethical?]

The Importance of Three Dimensions

It seems inherently contradictory that archival collections are one of the primary sources of digital libraries or digital collections, in spite of the all-encompassing importance of the physical object in an archival environment. [An interesting point] The incontrovertible fact is that today's digital technology cannot fully represent a three-dimensional artifact, for many reasons:

- Representation on a computer monitor turns a three-dimensional object into a two-dimensional one.
- Computer monitors represent colors imperfectly, and each one has a slightly different color tint. A digital photograph or a scanned image, even if the color is "properly" recorded, will be incorrect when displayed on a computer monitor.
- Interacting with a three-dimensional artifact involves at least four senses (presumably, with the exception of taste!), whereas a digital

experience is merely visual (or, in the case of audio collections, only auditory).

- Pixels, hard-drive space, and bandwidth limit the amount of digital information that can be stored and transmitted.
- Digital technology is fleeting, due both to the speed of evolution and to the flimsiness of the physical media. (Compare the life of a compact disk to that of a clay tablet.)

These are just a few reasons that a digital surrogate can never fully match up to the advantage of a real object. The creation of a digital surrogate does not eliminate the need to maintain the original; in fact, it may even be necessary to make new digital representations from the original, as media degrades or technology improves and digital objects must be migrated to new storage materials and formats.

On the other hand, digital representations have several important advantages which physical objects lack, especially in an archival setting. Among others, these advantages are:

- Computer networks can transport digital objects in a matter of seconds, especially in this era of broadband.
- Computers can copy files perfectly and almost instantly.
- Access not only can be but nearly always is completely automated, eliminating the need for staff to provide that access individually.
- Once the digital surrogates are created, using them causes no degradation whatsoever on the part of the original object! [Unless you count the increased access to the original that may result from publicizing its existence.]

Obviously, the creation of digital archives is in response to the advantages of digital media over the original physical media. Unfortunately, many digital archives projects have apparently ignored the disadvantages of digital media, as well as the consequences of these disadvantages, in their eagerness to be a part of this "next big thing." [This is a very strong claim. What's your evidence?]

For better or worse, we as people and as a society still have a fixation for the traditional book. Take, for example, the almost complete flop of the e-book; people simply prefer to read from paper. Perhaps it is only that computer monitors are not yet up to snuff, or maybe we are sentimental fools, but the codex will be with us for years to come. Likewise, the experience of handling historical materials in one's hands is both important and irreproducible. Even if some people are content to use digital versions, some will want to see the Real Thing, and for those people, digitization only serves to advertise that the objects are in the archives.

“If You Scan It, They Will Come”

When users come knocking, asking to see that cool Babylonian clay tablet, what are the archives staff going to say? This is a question that must be answered before the digital collection goes live, before any user has a chance to come in. Maybe the usage will not increase after all, but in an archival environment, even one more user than usual is a significant increase.

As with many problems, there is a simple, easy, and wrong answer. In fact, there are two simple, easy, and wrong answers: allowing all access and forbidding all access. On the one hand, allowing all access could potentially cause degradation of collections or other problems; on the other, completely forbidding access would lead to questioning the purpose of the archives, if no one is allowed to use its collections. Clearly, neither of these options is acceptable, so some compromise must be negotiated.

The interests at stake are the users' needs and the preservation of the collection, and the archives' weighting of these interests will determine its policy. I attempted to find other archives' policies, but although most of them at least nod to copyright law, none of them mention what kind of hoops one must jump through in order to use the physical collection. For example, although Cornell's digital library site has a page entitled "Guidelines for Using Text and Images from Cornell Digital Library Collections," that page is entirely devoted to use of the digital objects and to copyright and makes no

mention at all of physical access to the materials.³ Either Cornell staff have decided that physical access is not available, or they are simply ignoring the issue. It seems from my research that MSCUA is alone in attempting to address users' need and desire for physicality. [Couldn't it simply be that Cornell has a policy about access to the physical items, but it isn't posted on their website?]

Allowing users access to artifactual collections is a constant trade-off between the conflicting values of preservation and of use. On the one hand, the collections exist to be used, but their lifespan should be maximized so that the longest and most effective use can be made of them. MSCUA staff have several tactics which they use simultaneously to manage this trade-off, including careful selection and reference interviews.

Sandra's concept of selection was a new one to me. In this case, I am talking about a kind of "selection" which is more analogous to weeding than to acquisition. The reality is that every use of an object causes it to degrade slightly, so in order to reduce wear and tear on the overall collection, Sandra selects certain items which become, in a sense, "sacrificial lambs" to necessary use. She uses these most in teaching, because she believes strongly in allowing students to handle objects themselves. For example, if MSCUA owns a set of volumes, she might choose the book that is in the worst shape and take it apart in order to show the way the leaves were folded.

The other aspect of selection is that of choosing objects for digitization. The disadvantage of digitization is that it places a spotlight on those objects which are chosen for digitization; those items are the ones that users will request when they come to MSCUA in person. One way to deal with this is to digitize enough items that the load is spread fairly evenly; another is to choose items which users may be allowed to access without limitation.

³ "Guidelines for Using Text and Images from Cornell Digital Library Collections" (<http://cdl.library.cornell.edu/guidelines.html>), accessed on December 8, 2003.

In the case of marbled papers, the collection is finite but semi-renewable, simply because the papers come from circulating volumes that have been rebound. The samples are fairly sturdy, because they have already survived a long circulating life, and new papers arrive regularly from the bindery. Their volume, renewability, and durability suits marbled paper for the increased use that may result from digitization.

A final aspect of selection, which is intimately tied to the collection's purpose, is to choose items that may be used effectively in a digital setting. For example, MSCUA makes a small but useful profit from selling reproductions of photographs in its collection. The businesses that buy these reproductions simply peruse the digital collection and say "I want that one;" they neither need nor want to see the original. Matching objects to a digital purpose can limit wear and tear on the originals.

When a user comes into MSCUA, reference interviews are essential to determining the level of user need. For example, if someone requests the first edition of Lewis and Clark's journals, Sandra will ask if they truly need the first edition. In almost all cases a later edition will suffice, and she gives them a sturdier and less rare edition. Reference interviews provide a method of balancing user needs and the health of the collection.

One disadvantage of an online environment is that there is no human intermediation. Sandra plans to manage this problem by including some information about access in the metadata for each item. The default would be open access like most of the items in MSCUA's collections; that is, a user can simply come in with a call number and request the item. The other option would be a note to the effect that the user should make an appointment with the curator (Sandra) if s/he wishes to see the item. At that point, Sandra interviews the user, so that she can not only determine the nature of the user's need but explain MSCUA's rules and regulations in a meaningful manner. This note will eventually be integrated into the decorated papers metadata schema.

Risks of Physical Access and Digitization

As I have elaborated above, physical handling of materials conveys the risk of physical degradation. However, an even greater risk is that of theft. Particularly if the existence of a valuable item is publicized in a digital collection, someone will be tempted to steal it. According to Sandra, ninety percent of thefts are committed by archive staff. Therefore, before digitizing a particularly valuable artifact, MSCUA must make absolutely certain that the object is in a secure location and only accessible by a few trusted staff members, in order to reduce the likelihood of theft. If security cannot be assured, it may be better not to digitize the item at all.

[Very nice presentation of the issues]

Project Accomplishments

This section of the project was not necessarily harder than either of the others, but it was more abstract and thus more difficult to grasp and to turn into something concrete. Working on this section probably accomplished a lot more for me than it did for MSCUA, because it introduced me to access issues that I had never before encountered and forced me to write about them in order to make policy recommendations. What Sandra and Kris wanted was a start on policy formulation, which I believe I have accomplished through this write-up and through Appendix A. In addition, I believe that Sandra's time spent in talking to me about physical access issues may have clarified those issues in her mind as well, as she attempted to explain them to me in terms of formulating a general policy.

Creation of Terms

Because I knew nothing about marbled paper when I started this project I began by looking at resources on the topic. I looked through the books that Sandra showed us the first day and was pleased to find one that seemed both clear and comprehensive: *Marbled Paper: Its History, Techniques, and Patterns*, by Richard J. Wolfe (1990). Since my job was to come up with a list of terms to use as access points in retrieving digital images of marbled paper samples, I knew I wanted a resource that linked the patterns in the images with the names of these patterns. *Marbled Paper* contains plate after plate of color images of different kinds of marbled paper, organized by country and era of production. Over the course of my research, I also referred to an online resource: *Bookbinding and the Conservation of Books: A Dictionary of Descriptive Terminology*.⁴ and at some web sites created by marblers.⁵ I quickly discovered that there may be several names attached to one pattern. I also realized that coming up with standard terms could be more complicated than I had expected. A standard term to one specialist (or marbling hobbyist) might seem unusual to another. The terms I found were also ambiguous. A simple illustration of this is the country of origin: a searcher who wanted to bring up records of marbled paper created in Italy might type in "Italian" only to discover that s/he had retrieved all the patterns with that name, many of them produced in England and France. Other pattern titles, such as "Dutch," "French" and "Spanish" could also be misleading for the same reason. Such ambiguities could create access problems for searchers.⁶

⁴ <http://palimpsest.stanford.edu/don/don.html>

⁵ Two websites I looked at are:

http://members.aol.com/_ht_a/marbling/28Examples.htm and

<http://marbledpapers.booksworth.com/whatis.htm>.

⁶ Interestingly, when marbled paper first appeared in Europe in the 17th century, it was referred to as "Turkish" paper. (Wolfe, p. 14.) In contrast, according to Wolfe, during the early part of the 17th century, paper colored with stamped paste decoration was often called "marbled" paper. (Ibid, p. 24.) I did not find this connection verified in the *The Oxford English Dictionary* online.

In order to keep track of related pattern names, I started to write them down on a set of index cards. At about this point in the process Christy questioned me on two of my assumptions:

- a) Using the Wolfe book as my primary resource in coming up with terms
- b) Using pattern names as terms rather than focusing more on technique (though I did have the broad terms “combed” and “uncombed” in my list, as patterns fall into one category or the other).

I understood Christy’s point but did not agree with her. It seemed to me that even with all the variations, marbled-paper pattern names were the best terms to use in creating a controlled vocabulary for accessing the material, and it was clear to me that establishing a controlled vocabulary would be necessary. I decided to ask Sandra (our primary user at this point) what kinds of terms she was looking for in order to access the samples. Sandra listed how she wanted the samples described, in order of importance: pattern name, era in which the pattern was produced, country of origin, and colors. I also asked Sandra to select some samples so that could have a sense of what sorts of material she wanted to be able to show her classes. She selected ten samples, five flat sheets and five end sheets in books. We scanned the flat sheets as Kris showed us, and we emailed them to ourselves so that we could work on them on our own, outside MSCUA. (In the end, we did not have the time to move on to the samples in books.)

After doing some research, I drew up a table with the samples and the categories Sandra had listed for us (Appendix B). I also took my index cards and made a preliminary thesaurus of marbled-paper terms (Appendix C). This list of terms was mostly for my own reference, but I thought it would also be useful to have this list of terms if we got to the point where we were considering designing the user interface and creating the controlled vocabulary. While our project never got that far, I would be very interested to learn more about how to design a user interface for this material. Even though, as Kris has told me, the potential users would be relatively knowledgeable about the material, they would still need guidance in

searching the database owing to the varied and perhaps ambiguous terms. We would also need to identify the source of authority for our pattern identifications; whether or not Wolfe is ultimately the most authoritative source, his book would provide a useful reference point for searchers. Learning how to incorporate these elements into the interface are at the top of my to-do wish list for the project. [Definitely an interesting problem]

Data Dictionary

While working on this part of the project the image of the famous optical illusion of a face and a vase kept coming to mind. As you look at the image, it changes: one moment it is a face and the next moment it is a vase. It cannot be both at the same time, and yet it is both things. My job in this project was to force me to see the vase when I was used to only seeing the face. In other words, while I was used to looking at metadata for books and other printed material, and their associated access points of title, author, date of publication, I now needed to consider completely different aspects of the material and their associated access points. This difference made me feel somewhat unmoored. I also had a hard time understanding how to create the metadata because I did not trust that I would be able to come up with the kinds of descriptions that would bring up the most relevant samples for each search, by each different searcher. [I like your figure-ground metaphor. In this project you were definitely look at the book as object – in fact, just one portion or dimension of the book.]

I first approached the project by exploring how much I could change the rules for inserting our marbled paper sample records – in fact, I wanted to bend the rules or create our own dictionary! This is presumably the reaction of every cataloging neophyte: it is so much easier to make up your own rules than to apply established rules to your material. I also wanted to avoid using the General Notes field for nearly every descriptive element, which seemed to be an inelegant use of all those fields. I imagined that the notes field could get especially unwieldy for marbled paper samples that are still in books, which will have their own records and full notes fields. It seemed there was

something inherently wrong about a schema where different types of information are loaded into the same field. I was grateful for Kris's guidance. She showed me a data dictionary created by her metadata group for loose, hand written manuscripts; these presented a similar challenge to these marble samples in that neither collection contained printed material in books. After looking at this other project, I realized that filling the General Notes field was unavoidable. I would need to use the dictionary fields as they were, even though these fields were prepared for books rather than loose paper samples -- they were designed to describe the face and not the vase.

I also began to see another way a data dictionary can differ from a library catalog: instead of containing cryptic-seeming record-style database entries, which often need a librarian's "translation," data dictionaries can be written in a way that may be more understandable to the searcher. For instance, the first time I wrote the comments for the notes field, I simply listed each item's attributes. Kris pointed out to me that I could rewrite these attributes into simple phrases such as "The country of origin is probably Germany." In this way a searcher will pull up records that are somewhat "user friendly." [That's nice]

The data dictionary that I drew up is only a start to creating guidelines for producing metadata for marbled paper samples. (Appendix D). While I was sorry I had not been able to sign off on a completed task, I was relieved (and also not surprised) to learn that Kris regards some of her metadata projects as works in progress too. (She also commented to me that she has been reluctant to show some of the data dictionaries to the library catalogers, who follow strict, formalized, international standards like AACR2 and MARC.) I look forward to continuing this work next quarter. I also intend to take a cataloging course before I graduate and learn more about where cataloging and creating metadata for digital collections converge – and where they diverge. [Great!] Finally, with the growth of digital collections, it seems to me that metadata will need to evolve to where it can encompass both the "face" and the "vase" view of an item. It will be fascinating to see how this is

accomplished, if it can be accomplished. [Very nice description of your process]

Learning About Marbling

Like Elinor, I went into this project knowing nothing about marbled paper and decided that I needed some sort of background reference to tackle this issue. Though Elinor was the one coming up with the terms, I felt that I needed an informed opinion to work with her. When I looked at the book by Richard Wolfe, *Marbled Paper*, I was a little intimidated because it was so big. So I decided to begin with a more manageable book called *The Art of Marbled Paper: Marbled Patterns and How to Make Them*, by Einen Miura, a marbler from Japan. He took a very different approach by actually demonstrating how marbled patterns are created. His book included photographs and step-by-step techniques of what is actually involved in the creation of each design from chemicals used to equipment used.

For example, one of our samples is called Shell on Stormont (Sample 1 in Appendix B); using his descriptions this pattern actually combines two different techniques. The shell part of the design is created by using one color of ink mixed with oil, which produces distinctive white outlines around the ink and darker centers. The "Stormont" aspect of the design is created by using an ink mixed with turpentine, which is thrown onto the design and creates the look of white air bubbles. Our sample that is labeled "Peacock" in the table (Appendix B) is described by Miura as a design that begins with a nonpareil base (like our second sample) which is then manipulated further with a double row tooth comb (where most designs use a single row tooth comb). Using his descriptions of how these designs are actually made I was able to look at designs and have an understanding of how they were created and also recognize, to an extent, if more than one technique was present.

Because of this I began to realize, that while each creation is a unique work of its own, there is a common thread linking almost every design out there.

[Nice!] While marblers often closely guard their trade secrets⁷, they can produce very similar designs using similar techniques. I began wanting to categorize these designs by aspects of how they were created. For example, designs that started with a Turkish base (ink just thrown on the size randomly, one of the earliest designs) or with a nonpareil base, or which designs use chemicals like ox-gall or oil, etc.

It didn't take us long to realize that Elinor and I were beginning to come at this project from radically different directions so we took the issue straight to the source, Sandra. She shot a hole in my theory by pointing out (as an experienced marbler) that similar designs could also be created with different techniques and that there are so many factors involved in marbling. Thus it is almost impossible to create the exact same design more than once or even know how it was really created. A more practical angle was the one Elinor had chosen, by using the Wolfe book descriptions. Plus this was serving Sandra's needs since she was more interested in other aspects of the designs than how they might have been created.

Creating the Records

The next step I focused on was the practical issues of how to get Elinor's descriptions to fit into the database. We had less control of this part of the project. Due to staffing issues and other project plans it was decided that the Marbled Paper database would be added into an already existing Historical Book Arts Database. Elinor and I both agreed that trying to stuff everything into the notes field was very undesirable. We were both hoping that we would be able to stretch these boundaries but as Elinor has already stated, we were not.

Kris Kinsey was able to give us a brief tutorial on how records are loaded into CONTENTdm and what steps we would need to take to create several test records. I was convinced that if we had several samples to work with we

⁷ See webpage for contemporary Marbler, at http://members.aol.com/_ht_a/marbling/28Examples.htm, where she specifically states that her Blue Balloon Pattern is a trade secret.

could begin applying some of our issues to real samples. Kris showed us how they scan the items and then create several different sizes of the picture to fit into the database. She stated that the intent is not to scan these at “preservation” quality, but rather to create a picture that will load quickly and be of a consistent size with other pictures in the database. Thus our scanned items would mainly be for identifying the item with a smaller portion of the design blown up in a separate picture to highlight part of the detail. We scanned five paper samples with the hope to do more, but alas the clock struck midnight.

As my available time to devote to this project dwindled, Elinor stepped in to work one-on-one with Kris to create the data dictionary, which would directly affect how information is entered into a database. Thus I began focusing on how well the fit for Elinor’s data dictionary is for the existing Historical Book Arts data dictionary.

I took Elinor’s data dictionary and directly compared it to the fields for the Historical book arts collection (see Table in Appendix E). My understanding is this data dictionary was originally created to describe art directly associated with books, like the binding, unique illustrations or images, or ancient techniques no longer used. The first obvious problem with our collection of marbled paper is that many of the samples were “rescued” from the bindery after being ripped out of rebound volumes, thus they are now orphaned from their original book. There is no title or author or publication for many of the older samples. Also you can’t apply many of these fields directly to the paper sample itself because, even if it was still with its original book, who knows when or who actually created the marbled design. The only information to go on is the details of the design itself for our samples.

So I looked at the data dictionary and crunched some numbers. Of the total of thirty-two fields in the Historical Book Arts data dictionary, fifteen fields were either defaults (like the name of the collection) or independent of the sample itself (such as digital reproduction information or the reviewed field). Thirteen additional fields did not apply to our flat samples, though they would

be relevant for any samples still in the original work. This left only four potential fields for describing the actual design itself and a few of those were a stretch. For example, Date of Publication became more of a guess of when the design was popularly printed (c.a. 1900) or the field Physical Bibliographic Elements could describe the sample size. The call number field is a whole other issue, which left only one really useful field...the General Notes field. Thus try as we may, the only field flexible enough to be used to describe the unique features of the marbled paper was the one field we wanted largely to avoid.

Trying on the Slipper

As Elinor and I wrestled with these issues it became more obvious that the shoe just wasn't fitting. Though Sandra is a proponent of looking at each sample as a separate work of art, there was not a way of naming these pieces outside of the designs identified in them. But how do you really tell the difference between our two shell samples for instance? Yes one is red and one is blue but they both have features that are particular to that sample. This brings us to how to uniquely identify each sample, i.e. the call number issue. Currently they are filed in boxes using a technique only known to the librarians who handle the collection. But assuming this collection someday has hundreds of samples, how does a patron tell the librarian just which version of "shell" they want to see? But a call number implies going beyond merely describing these designs and actually cataloging these items. This is an issue that at this point, no one has been brave enough to take to the catalogers. [Definitely an interesting issue]

The authority issue is not truly settled, for what is really the name of these designs? We have agreed that Wolfe is essentially the most comprehensive source but in order to be user friendly we have to enable users who use different names to still find the designs they are looking for. Also there is not necessarily uniformity to what constitutes what design. How do you really name a design that has elements of Shell and Stormont or even a third or fourth method (or when marblers make "ghost marble" which means printing

two different designs on top of one another). We still need a user interface function that would explain to users the rationale behind the names chosen for the samples.

Of course the issue of whether to include techniques in sample descriptions hasn't really gone away (because I won't let it ☺). Though initial users might be experts, what will happen as the public begins to discover the wonders of marbled paper and a plethora of novices begin consulting the database? Will there be users like me who would be more interested in finding designs by those that use double row combs versus those that are blue, red and yellow? If we only address Sandra's needs are we truly setting the database up for a more universal audience? Then again should we sacrifice Sandra's needs for some users that may never come? [All good questions]

The time frame of this project left us with more questions than answers at this point. Like the prince's henchmen carting around the glass slipper we still haven't truly found the magic formula to make this work. I certainly have gained a new-found respect for the beauty of marbled paper (I will never look at it the same again) but also the intricate aspects of creating a digital database or library. The separate starting points that Elinor and I began at almost doomed us to never see this project from the same direction. In a way this is good because it would ideally in the end serve a wider audience, but it also forces us both to compromise. Trying to fit the descriptors for marbled paper into a data dictionary created for something else only compounded the problems. It is difficult to wear someone else's shoes, but I am confident that there can be a happy ending to this project. [A nice reflection on your process]

Conclusion/Reflection

Writing a conclusion for this project is difficult because it is nowhere near completion. We have only grasped the slippery tip of the iceberg in terms of the work that still needs to be done on this project, but our mental grasp of the intellectual and real-world issues is much stronger. We learned to put theory into practice and to apply what we have learned in the classroom to a real-world environment. We had to figure out how to do what we can with what we're given, in a limited amount of time. Finally, we had to take our miscellaneous bits and pieces and make them a coherent, meaningful whole.

Luckily, we did not need to worry about management issues such as staffing or budget, and we had a technological and schematic structure to work from. Sandra and Kris were an incredible resource, patient with our learning process and realistic about what we could accomplish in the course of one quarter. With their help, we created the beginnings of a copyright and use policy, a basis for a data dictionary, and a few digital images with associated metadata, to be entered in the database.

The project will be sustained in the near future by Elinor, who plans to continue the project through directed fieldwork in MSCUA next quarter. After that, it will be the responsibility of Sandra and Kris to find other volunteers. Elinor will attempt to leave the project in a state where it can be continued in the future. The critical issue here is simply research time; Sandra and Kris are experts of the subject and of the technology, so once the project is set up, they are capable of managing it.

[Laura, Elinor, and Christie: I'm pleased with the way this project turned out. It's obvious that you learned a lot, that you made good use of your subject experts (Sandra and Kris), and that you figured out how the three of you could work together (and apart) given the challenges of finding the time to meet up. This is a good writeup, too. I like the directness and honesty of your descriptions (what you did and why, what you didn't do).

In the introduction, you list your three deliverables. I'm sure you had to work these out among you. It might have been useful to hear how this came about. Grade: 3.7]

References

- Cornell Digital Library Collections. "Guidelines for Using Text and Images from Cornell Digital Library Collections." Accessed December 8, 2003. <<http://cdl.library.cornell.edu/guidelines.html>>.
- Roberts, Matt, and Don Etherington, *Bookbinding and the Conservation of Books, A Dictionary of Descriptive Terminology*, online version. Accessed November 4, 2003 <<http://palimpsest.stanford.edu/don/don.html>>.
- Legal Information Institute, Cornell University Law School. U.S. Legal Code. Accessed December 8, 2003. <<http://www4.law.cornell.edu/uscode/>>.
- Miura, Einen. *The Art of Marbled Paper: Marbled Patterns and How to Make Them*. London: Zaehensdorf, Ltd., 1989.
- Wolfe, Richard. *Marbled Paper: Its History, Techniques, and Patterns*. Philadelphia: University of Pennsylvania Press, 1990.

Arranged by the three “tiers of deployment” for the Historical Book Arts collection.

Sandra’s Teaching

According to U.S. copyright law (17 U.S.C. §107, §108, and §110), Sandra’s use of digital copies of marbled paper samples owned by MSCUA would not constitute infringement of copyright, even if those samples were created during or after the 1920’s and thus under copyright. I base my argument for this on the fact that libraries and teaching are explicitly mentioned as exceptions to copyright protection and on the fact that Sandra will be mediating the access so that students will not be able to access the digital samples independently of the classroom.

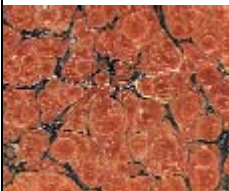




On-Campus or Worldwide Access

In this case, MSCUA would need to ask permission from copyright owners to digitize and display their works. However, if permission were obtained, MSCUA would have a responsibility to provide a standard of protection to the digital copies, and I am unaware of a method which would suffice for the needs of both owners and users. Until such a method is found, MSCUA cannot accept the responsibility of such protection and must refrain from digitizing and publishing materials which are under copyright.

See Title 17 on the website of the Legal Information Institute at Cornell (<http://www4.law.cornell.edu/uscode/17/>).

Appendix B: Decorated Paper Samples

(Elinor)

Decorated Paper Sample	Pattern	Alt. Pattern names	Dates	Country of Origin	Alt. Countries of Origin	Colors	Predominant Color
 <p>Marble-1</p>	Shell on Stormont	Shell, Stormont, Empire, French	1830, 1840	Britain		Rose, Black	Rose
 <p>Marble-2</p>	Nonpareil		1840, 1850, 1860, 1870	Britain	America	Green, Red, Black, Buff/Chin ese White	
 <p>Marble-3</p>	Peacock	Zig-zag, Bouquet	1860, 1870, 1880	Britain	Germany	Red, Green, Blue, White	
 <p>Marble-4</p>	Schrottell	Schroötzel, Schroffel	1830, 1840, 1850, 1860, 1870, 1880	German		Gray, Black, Red veins, Yellow veins	Gray
 <p>Marble-5</p>	Small shell	Shell	1830, 1840, 1850	France	Germany	Blue, Black, Yellow veins, Red veins	Blue

Note:

When I put together this table, I generally inserted only pattern names or alternative names. However, in some cases I also included broader terms to increase the number of search returns. Having this many access points could be a problem in a big database, but I am not quite sure where the "cut off" would be. For instance, the first sample is a combination of two patterns. I included each separate pattern name as well (Shell, Stormont, Empire, French), which may well be unnecessary and decrease the number of relevant hits. I think a decision to include these terms or not may depend on how knowledgeable we imagine our user to be, and how well we can create a useful, linked thesaurus.

American		
Antique		
Bouquet	RT	Peacock
British		
Combed	NT	Dutch
	NT	Old Dutch
	NT	Nonpareil
	NT	Parsley
	NT	Peacock
Curl	=	French Curl
	=	Commun
	=	Snail
Double Comb	RT	Double Comb Waved
	RT	Double Comb Curled
Drawn	NT	American
	NT	Bouquet
	NT	Peacock
	NT	Snail
Dutch	=	Old Dutch
	RT	Small Combed
	RT	Large Combed
	RT	Dutch Curled
	RT	Dutch Swirled
Swirled	NT	Dutch Swirled
Italian		
Marbled	=	Paste (early)
Nonpareil	NT	Peacock
	NT	Bouquet
Parsley	=	Persillé
Paste	=	Marbled (17 th century)
Peacock	=	Bouquet
	RT	Zig-zag
	RT	Pfauen (20 th century)
Placard		
Polish	=	Polnisch
Romantic	=	Broken
	=	Marbres Cassés
Shell	NT	French Shell
	NT	Shell on Stormont
	NT	Shell on Shell
	NT	Small Shell
Spanish	=	Waved
	=	Griechisch
	NT	Moiré
	NT	Spanish Shell

Spot	=	Stone
	=	Turkish
Stormont	=	French
	=	Empire
	RT	Blue Stormont
	RT	Stormont on Shell
	RT	Shell on Stormont
Tiger	=	Tigré
	=	Tieger
Turkish	=	Spot
	=	Stone
	RT	Small Turkish
Uncombed	NT	Shell
	NT	Spot
	NT	Stormont
	NT	Antique
	NT	Placard
	NT	Italian
	NT	Turkish
	NT	Parsley
	NT	Snail
	NT	Italian
	NT	Spanish
	NT	Shell
	NT	Schrottell
	NT	Romantic

Note:

I collected these terms from a number of sources. An effective thesaurus would include all the terms gleaned from a variety of sources and then guide the user to the best term possible for accessing the material. So far, this is simply an undeveloped collection of terms and their relationship to each other. As anyone with knowledge of marbling will gather, the difference between a related term in a pattern and a narrower term still needs to be clarified. Also, I need to investigate further whether "swirled," like "curled" is a true marbling term or just one used by Wolfe in his book!

Appendix D: Data Dictionary

(Elinor)

Sample sheet of marbled paper:



Field Title	Example	Comments
Collection	Historical Book Arts	This will be the default.
Title	(leave blank)	N/A
Detail	Marbled Paper.	This refers to the image detail.
Uniform Title	(leave blank)	N/A
Creator/Author	(leave blank)	N/A
Publisher	(leave blank)	N/A
Place of Pub.	(leave blank)	N/A
Date of Pub.	Ca. 19 th Century	Assign an approximate date, using the form "ca" and in consultation with the Book Arts Librarian.
Subject	(leave blank)	N/A
Genre Heading	(leave blank)	N/A
Physical Bibliographic Elements	30 cm x 24 cm	Measure sample: length by width.
Printing Elements	(leave blank)	N/A
Printing Method	(leave blank)	N/A
Printer	(leave blank)	N/A
Image Production Process	(leave blank)	N/A ⁸
Illustrator	(leave blank)	N/A
Binding	(leave blank)	N/A
General Notes	This pattern is called Shrottel. Alternate pattern names: Schroëtel, Schroffel. The country of origin is probably Germany.	List the primary pattern first, use Wolfe as the first resource in finding the pattern name. List alternate pattern names. Country of Origin. Alternate country of origin. List pattern colors, primary

⁸ Kris told me that she and Sandra are considering possibly using this field for paper decorations such as wood cuts or engravings. This is also where in other collections the type of paper is placed, i.e. "Imprint on laid paper." We still don't have a place to put in the type of paper in the marbled paper collection – unless we add it to the Notes field as well.

	There are no alternate countries of origin. Pattern colors: gray and black with yellow and red veins.	color first. Add vein colors if applicable.
Previous Owners	(leave blank)	Check with Book Arts Librarian
References	(leave blank)	N/A
Language	(leave blank)	N/A
Restrictions/Copyright	(To be determined.)	This will be established later.
Repository	MSCUA	This is the default term.
Repository Collection	Marbled Paper Collection	This is the default term.
Call Number	Marble-4	Insert sample's ID. ⁹
Contributors	University of Washington Libraries, Special Collections, Manuscripts and University Archives Division.	Person or organization who has made a significant contribution to the collection. This is the default.
Digital Collection:	Historical Book Arts Collection	This is the default for this collection.
Digital Reproduction Information	(leave blank)	This information is to be supplied by Kris Kinsey, or whoever scans or photographs the paper.
Reviewed	"xyz"	This default is used until the record has been completed. At that time, "xyz" is deleted from the data cell.
Content	(leave blank)	
Acquisition		Include gift/purchase date, name of donor.
Staff Notes	?	?

⁹ Right now most repositories do not give a unique ID to each piece of ephemera. Instead, the location is given, such as a box or file. The creation of digital databases means that this kind of cataloging has to go deeper. I would be interested to get a general idea of how different institutions handle this problem. I noticed for instance that at the British Library decorated paper collections are listed online. The content of each box is given, along with a brief description of each sample. These descriptions are searchable to a certain extent but none of the samples has been digitized. This seems like a good compromise to me: unless the material is to be used for teaching, I can't imagine the effort of digitizing and entering extensive, searchable terms in a database always, or even often, being worth the end result! Ultimately, this will have to be Sandra's decision, and her decision will of course affect how to some extent how physically accessible these items are.

Appendix E: Data Dictionary

(Christy)

The Table I created comparing the Book Arts Data Dictionary to an early version of Elinor's Data Dictionary. Christy Kulp

Field Title	Book Arts Definition	Marbled Paper Definition
Collection	Collection Material Belongs to	Same
Title	Title of Book	Title of Book if sample still in original book – not all samples in a book (blank)
Detail	Source of Digital Image – what is the picture of the binding, sewing, etc.	For this collection default would be marbled paper
Uniform Title	Cataloging record title	See issue for Title – only relevant if sample still in original book
Creator / Author	Author of authority record (i.e. who wrote the book being described)	For most samples this can not be known (blank), may be possible for contemporary samples
Publisher	Who published the book	Only applies if sample still in original book
Place of Publication	Self explanatory	Same as above – usually blank
Date of Publication	Specific date book published	For most samples this is undeterminable – instead rough date of when pattern most likely produced based on research on when patterns popularly produced
Subject	LC subject headings	Blank – items not officially cataloged
Genre Heading	Not in original book arts Data dictionary	Would be default for all samples, based on HBA terms, problem none truly apply
Physical Bibliographic Elements	Description of actual book from marc record	For flat samples – include size of sample, in contained in original book include book dimensions
Printing Elements	Unknown	(Blank) doesn't really apply
Printing Method	Printing Process of the paper	May be applicable to other types of decorated paper but not necessarily marbled paper
Printer	Could be same as publisher	Does not apply (blank)
Image Production Process	Description for images in the book	Only applicable if special image or technique used to add image to marbling

Illustrator	Who created images	Does not apply (blank)
Binding	Details of how item bound, especially if original binding	Only applies if sample in original book, where binding is significant
General Notes	Amplify physical bibliographic description	Focus of marbled paper data: Comment 1: Pattern Name (Wolfe's book as authority) Comment 2: Alt. Pattern Name Comment 3: Country of Origin Comment 4: Alt. Country of Origin Comment 5: Colors (predominant color listed first) Comment 6: Vein colors if present
Previous Owners	From acquisition, bookplates, collection owners, etc	Mostly does not apply
References	Used to substantiate info provided by cataloger	Possibly used if research on design conducted
Language	Language of Text	Does not apply (unless writing on sample)
Restrictions / Copyright	To be determined	Would only apply to modern samples, could apply to trade secret techniques
Repository	MSCUA default	MSCUA default
Repository Collection	Historical Book Arts default	Same default
Call Number	If Book Cataloged or location	Most items not catalogued, do we include a unique identifier for each sample or indication of storage location
Contributors	Who made significant contribution to the digital resource or image / default MSCUA	Same default
Digital Collection	Historical Book Arts default	Different digital collection default "Decorated Papers"
Digital Reproduction Information	How image acquired (scanning, photo, etc), color, format, size etc.	Same
Reviewed	Staff designation for works in progress "xyz" means still in progress	Same
Content	For intellectual content	Does not apply
Acquisition	How item acquired	Same
Staff Notes	?	?