Eva K Sclippa. Illuminated Manuscript Facsimiles and the Art Historian's Research Process. A Master's Paper for the M.S. in L.S. degree. April, 2013. 60 pages. Advisor: Rebecca Vargha

This study examines the role of illuminated manuscript facsimiles in the research process of art historians focusing on the medieval and Byzantine periods, exploring this role in comparison with other illuminated manuscript reproductions, such as digital facsimiles, surveys, and monographs.

Through interviews with art historians and study of the reproductions themselves, it was concluded that the full context of the work is crucial, and that manuscript reproductions must come as close as possible to reproducing the experience of handling the art-object-as-book to serve their intended purpose. Additionally, the trend of resource-guided research appeared, a circumstance in which the facsimiles available to the art historian guided or determined their course of study. Finally, art historians used different kinds of image resources for different information needs, suggesting the importance of developing, providing, and advertising a variety of resources that incorporate the experiential context of the original manuscript.

Headings:

Academic libraries -- Use studies

Books -- Format

Library user satisfaction

Medieval manuscripts

Manuscripts -- Collections

Manuscripts -- Reproduction

ILLUMINATED MANUSCRIPT FACSIMILES AND THE ART HISTORIAN'S RESEARCH PROCESS

by Eva K Sclippa

A Master's paper submitted to the faculty of the School of Information and Library Science of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Science in Library Science.

Chapel Hill, North Carolina April 2013

Approved by		
Rebecca Vargha		

Table of Contents

I. Introduction	2
II. Literature Review	5
III. Methodology.	14
IV. Findings.	20
V. Discussion.	35
VI. Conclusion.	48
VII. Bibliography	50
VIII. Appendix A: Call for participants	53
IX. Appendix B: Consent form.	54
X. Appendix C: Interview guide	57

INTRODUCTION

The facsimile of an illuminated manuscript occupies a singular and singularly important place in the medieval art historian's research process. According to Manfred Kramer (2006), a facsimile is "the photo-mechanical reproduction of a unique, practically two-dimensional model; it eliminates as much as possible manual copy work, reflects to the highest degree the inner and outer aspects of the original, incorporates all possible technical means available, garantees [sp] the protection and preservation of the original, and is suitable for both scientific and artistic interests. A facsimile must act as a true surrogate of the original for research purposes and bibliophiles." (Kramer, 2006) For a student, professor, or other researcher wishing to study a medieval illuminated manuscript, the facsimile is often advertised as the closest possible reproduction of the fragile or difficult to access original. They are certainly priced accordingly. The facsimiles created by Facsimile Editions, one of the major producers in the field, range from \$850 at their cheapest to a whopping \$60,000, with one single-page Torah scroll fragment costing \$2,300 and an average of \$15,316 per facsimile. (Facsimile Editions, 2012)

Despite the high prices paid for many facsimiles, there has been surprisingly little research done into their role in the art historian's research process, their efficacy, or researchers' opinions of them as a format. For the most part, the only extant literature on facsimiles themselves is primarily from the discipline of textual analysis, but these

articles do provide a few useful insights, such as West, Roland, and Bornstein (2011), who all simultaneously emphasize the importance of manuscript facsimiles and their inability to completely reproduce the original.

The ability—or inability—of a manuscript facsimile to fully reproduce the original manuscript it depicts often appears to revolve around the manuscript's physicality, how it reproduces the original document in multiple sensory areas. It is important to consider how those creating and using these original manuscripts would have experienced them, a question addressed by the renowned medievalist Michael Camille. In his essay "The Iconic Page in Manuscript, Print, and Digital Culture," Camille (1998) walks his readers through the medieval perceptions of the senses. While the full description Camille provides is more nuanced, he clearly emphasizes the multisensory medieval experience of manuscripts; manuscripts were smelled, touched, kissed, and even stroked as part of the reading experience. He concludes that the corporeality of the manuscript is vital to a full understanding of it as an art object, and that, at least at its current stage of development, digital reproductions are an inadequate representation of the illuminated manuscript. Though it is unclear how effectively facsimiles fill this niche, it is clear that there is a need in the field of manuscript studies that is not being met by other resources.

Illuminated manuscript facsimiles should and could, potentially, serve in a significant role in the work of art historians and medievalists. The literature on this issue from art history and textual criticism establishes that there are flaws with any substitute for the original manuscript, but does not clearly define the roles, benefits, or drawbacks of using facsimiles. This study intends to explore these questions by teasing out common

themes from interviews with the users of such facsimiles—for the purposes of this study, a group of medievalist art historians—and also by examining and comparing the characteristics, benefits, and drawbacks of several different formats of manuscript reproductions.

LITERATURE REVIEW

The scarcity of items in the library and information science literature relating to the study of manuscript facsimiles—illuminated or otherwise—makes a review of the experimental literature difficult, and a review of the theoretical literature, often in outside disciplines such as textual analysis and art history, significantly more profitable. The bulk of the literature deals not with assessing facsimiles or other manuscript image resources but with the issues in manuscript studies important to the medievalist researcher. Even prior to interviewing the subjects for this study, a look at this literature revealed with two of the most primary concerns for those seeking to study medieval illuminated manuscripts are context and access.

Within library science, Ballion and Westermann (2006) explore the relationship of text and image in art historical resources, focusing on the contextual information that each provides for the other. The authors assert that, unlike in many other disciplines, images in art history are central, not "purely demonstrative," and as such must be available in a high quality, contextualized format. They describe the ideal text/image relationship as one in which "text directs your attention to the image, and the two interlock." The authors examine different media, primarily traditional digital and print, identifying the central problems with each. In modern print resources, the authors point out the common disjuncture between text and image, as images that the text refers to often fall "out of sync" with the text, requiring the reader to turn a page back, or even

navigate to other sections of the text entirely. Unintentionally, in revealing this they also demonstrate the difference between medieval illuminated manuscripts and how we understand books today, in which the format is far less central to the understanding of the whole. Digital media are also seen as problematic, in that "image quality deteriorates, the page is static, and special viewing tools cannot be deployed." Ballion and Westermann ultimately suggest using digital viewers and splitting word and image entirely to present them on two side-by-side screens, seeing ARTstor as a likely direction for future image access, but this dramatic separation is obviously problematic for manuscript studies, in which the text and image are so intertwined and inextricably linked.

Caie and Renevey (2008), though writing within the discipline of textual studies, organized a wealth of information on the importance of context in medieval manuscripts in their Medieval Texts in Context. They explain that reading a medieval text requires two modes of reading: reading "the text and its numerous textual glosses" and reading visual signs (p. 1). They also go onto explain that this "codicological" evidence—that is, the visual and physical evidence of the book surrounding the text—is often the only way to glean information about the audience of the work (p. 1). In their own words:

A comparison might be made with the archaeologist who considers an artifact not in isolation but in the physical context in which it is found. As Caie states in his chapter in this collection, the archaeologist would examine the other objects in the same find, the location, the condition and all the surrounds the object to illuminate its use and status. Yet all too often medieval texts are presented in a pristine condition in neat, edited form with little hint as to the manuscript context. Such editions are necessary for the modern

reader who wishes to enjoy the literary work, but if one wishes to recreate 'the medieval manuscript experience,' then the text must be examined in its manuscript context (p. 2-3).

This context can often come across as surprisingly physical and visual, remarkable for a group predominantly studying the texts themselves: "the quality of the membrane, the scribal hand, the layout or mise-en-page point to how the book was used, while gloss, marginal content, rubric and page ruling all speak volumes in themselves about attitudes to authorship and written authority," (p. 3). As exemplified in Camille's (1998) exploration of senses other than sight in the medieval experience of manuscripts, the authors assert that the medieval reader approached a text in a different way from a modern reader, and that the cues of the text's context—the manuscript itself—are our gateway to understanding those perceptions. Each of the essays in their book explores another aspect of this context. Caie, for instance, studies the meanings of the information in the margins and their contribution to an understanding of the mindset of the medieval reader, considering digital facsimiles as a possible way to present these pages in full (p. 10); Peikola examines the mise-en-page (or layout and organization of the page) as a manifestation of the book producers' decisions and intentions (p. 28); and Boffey studies the meanings ascribed to the manuscript by the order and program of groupings or sequences of lyrics (p. 85).

Clemens (2007), recommended by an interview subject, provides an overview of the skills needed by a student of manuscript studies to "read" illuminated manuscripts, not meaning to simply understand the words, but to read their full history from the visual and physical evidence. As in the essays collected in Caie and Renevey, Clemens lists necessary forms of knowledge that can only be gleaned with a thorough study of the

manuscript in its entirety—that is, being able to study not only all of each page, but every page, and the way in which they are collated and, sometimes, bound. Items of study include the "writing supports" (papyrus, paper, parchment, etc.), glosses, arrangement or program of the text and illustrations, construction and binding of the manuscript, inks and pigments, damage (intentional or unintentional), and broader topics like origin and provenance, which are often studied by searching for scribes' hands, signatures, and library or personal stamps.

Clemens also touches on issues of access, a topic that came up again and again in the interviews. Students, he writes, are often barred from accessing the originals of manuscripts until they've reached a certain point in their studies, manuscript holding institutions often require "blue seal" letters of recommendation from recognized institutions, and the staff of these institutions typically work to ensure that the originals are only accessed if the researcher absolutely cannot find what they need in a facsimile or digital rendition (p. xiii). Clemens recommends what he calls "distance reading" for these situations, meaning studying a reproduction of the manuscript, or of images in the manuscript. Interestingly, he discusses microfilm—in his opinion, substandard due to the lack of color, generally poor quality, and tendency to have missing or duplicated pages and digital—superior in that it is in color, allows preliminary examination before going to inspect the original, and is sometimes (as in digital facsimiles) set up to mimic the pageturning experience of a real manuscript, but dangerous in that these reproductions give the idea that seeing the digital facsimile is enough or the same as seeing the original (p. 71-72).

Wieck (1996) deals in some more detail with many of the issues of access already addressed by Clemens. "Folio Fugitiva" addresses the Victorian practice of removing leaves and even individual illuminations from manuscripts, sometimes, in "grangerization," pasting them into albums or new religious texts. The article illustrates one of the many issues making access to originals difficult; not only are there restrictions on who can access the manuscripts, provided one can get to where the manuscript is held, many of the originals have been taken apart and are in myriad locations, making a trip to see all of them difficult if not impossible. Additionally, fear of this cutting and collecting of manuscript pages has resulted in much stricter access privileges.

Image quality arises as an important issue in much of the previous literature, and it is vital to understand how image quality affects the study of art history. In another piece by Ballion and Westermann (2006), "Image Quality and Reader Access," the authors explain the genuine need for high quality images in art history, particularly high quality images on fine paper stock, which is not, they argue, merely due to an attachment to luxury, but a necessity. The authors write that the goal of art images is to give the reader and viewer a sufficient approximation of the experience of the work of art. If Clemens, et. al, are to be believed, for an illuminated manuscript, this would entail sufficiently approximating the experience of paging through a full tome. Ballion and Westermann are also confident that concerns over digital media will abate over time; their primary concern is with the preservation and access issues of digital images, particularly access, as protecting the rights of authors and publishers while still allowing sufficiently broad access has proven to be a challenge thus far.

Where Ballion and Westermann determine the overall importance and issues in the field of image quality, Ester (1990) works to determine what degree of variation in quality art historians (and researchers in general) can actually perceive, and to what degree their media preferences appear to be influenced by bias rather than actual image quality. In the study, which compared both perceptions of quality and perceptions of different media, the perceptions of different media were considered "softer" results than those of quality, being the most layered with bias. This may be an effect observable in this study, as well, but the primary goal is to study researchers' views of facsimiles and other manuscript image media, therefore it is less problematic than for Ester. Ultimately, the findings revealed that different image uses required different levels of quality, and that grayscale images require a much higher quality and resolution to be seen as acceptable.

McCann and Ravas (2010) go a few steps beyond this into studying how poor image quality—or at least perceptions of poor image quality—affect art historians' research processes. The authors ultimately conclude that art historians expect to have to take extra steps in order to get good quality images when reading an article, but image quality is less important than image placement in relation to the text or within the book. In other words, as discussed in the first section of this literature review, context is of great importance.

Though McCann and Ravas studied images only in art historical journals, this research will explore manuscript image resources across different forms of publication and media; it is consequently necessary to understand the world of art historical publishing, the different forms of art historical publication, and the copyright and access

issues associated with them. Returning to the arena of art historical publishing, Ballion and Westermann (2006) cover the primary forms of scholarly art historical publication in "Genres of Scholarly Publication," including monographs, surveys, museum publications, edited volumes, journal publications, and electronic journal publications. As they do not address facsimiles, the most relevant categories for this research are their views on monographs and surveys, which they describe, respectively, as the gold standard for tenure and promotion and broader, more general and often more easily published textbooks and resources.

One last Ballion and Westermann (2006) piece is relevant to this discussion, and that is their companion piece to "Genres of Scholarly Publication," "Copyright Ownership in Works of Art and Images." As it applies to medieval art such as the manuscripts in this study, copyright law states that any work created before 1976 is copyrighted for the life of the author plus seventy years—in which case any images of medieval manuscripts should be thoroughly out of copyright. However, as the authors point out, US copyright law is complex and often doesn't line up with the copyright law of other countries, and the holders of the original artwork often throw hitches in the process. That is, libraries, museums, and other cultural institutions often claim copyright for the manuscripts, making "life of the author" copyright claims more difficult to uphold. Finally, Ballion and Westermann explain the legal importance of the differences between "artistic" or "creative" use of an image and "slavish copying," which is especially relevant to facsimiles, as they occupy a legal gray area between the two.

The last piece on copyright, and on the broader topic of art images and manuscript research, is Heins and Beckles (2005). The public policy report is an extensive study of

the history, current status, and likely future of fair use in copyright law. The authors define fair use according to four factors: the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; the nature of the copyrighted work; the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and the effect of the use upon the potential market for or value of the copyrighted work. These factors are relevant to the study, as many of these researchers are using these images for educational purposes; even publishing them is not primarily intended for a profit.

Finally, the literature assessing the utility of manuscript facsimiles is entirely from the textual studies field. West (2011), in his aptly titled article "Are Manuscript Facsimiles Still Viable?", makes the need for such "next best things" clear by describing the difficulties scholars today face in accessing the originals of manuscripts. He writes that even for modern and early modern manuscripts researchers are now encouraged to access microfilm or digital images of their requested manuscript, and only allowed to handle the original as a last resort. While admitting that facsimiles are "only a representation of the original," West ultimately argues for their continued importance and prevalence. Digital reproductions, according to him, are significantly troubled by copyright issues, and offer their creators and contributors less prestige than those involved in the production of a printed facsimile. For West, manuscript facsimiles remain an excellent alternative for studying the original.

Meg Roland (2011) and George Bornstein (2011) are considerably less enthusiastic about manuscript facsimiles. Both authors, in separate articles, are concerned about the potential for facsimiles to lead their readers astray by promising

complete accuracy while delivering, in West's words, "only a representation." Roland's concerns primarily have to do with alterations to the text, however, a problem that seems to be much more prevalent in the world of modern manuscript reproduction, where editing and text selection are regular parts of the process. Bornstein is more engaged with the visual and tactile elements of the facsimile, bringing up examples such as the unavailability of a certain kind of rag paper for the reproduction of a Yeats book. But how seriously can such issues affect the researcher's understanding of a manuscript, and how do the researchers themselves perceive these differences?

METHODOLOGY

This study employs a mixed methods approach combining interviews with materials and document analysis of three manuscripts over several different reproductive media. While the scope of both portions of the study is limited, and the intent of this study is to be primarily exploratory, entering, as it does, into a field in which there is almost no previous research. Therefore, they are sufficient to provide a window on some of the major issues of illuminated manuscript facsimiles in a research context. The interviews, in particular, focusing on a selection of researchers in the Triangle area, raise questions not previously addressed in the literature, dealing with issues such as access, context, and publication rights.

Interviews

The interviews were the main body of the study. Participants were drawn from within the Triangle area, with six interview requests sent out and four positive responses. Respondents studied a wide range of medieval history, ranging from Byzantium and Mozarabic Spain to the Crusades.

The interviews were semi-structured and in-depth, guided by the interviewer around a series of eight topics and eleven subtopics. These topics, phrased as questions by the interviewer as appeared appropriate within the context of the conversation, were designed to uncover the art historians' manuscript reproduction usage

and preferences, particularly their use or non-use of facsimiles and views on the same, without unintentionally biasing them to consider facsimiles. Each interview took slightly under one hour to complete, and was recorded using an audio device and then transcribed by the researcher. All but one of the interviews was conducted in person; one was conducted over the phone because the participant had moved away, and the conversation was recorded through detailed notes as it was occurring.

The interviews were then coded in ATLAS.ti with inductive, emergent, descriptive codes and were coded for repeated themes and emphasis among several primary categories. There was some difficulty in maintaining consistency in the coverage of material during the interviews, as different participants tended to have different primary interests and pull the semi-structured interview in alternate directions. Despite this, there was great consistency in the code coverage between interviews when analyzed, seeming to indicate strong prevailing concepts and interrelationships between ideas.

Comparison and Content Analysis of Manuscript Reproductions

In order to study the more objective differences between modes of reproduction of illuminated manuscripts, several manuscripts were examined in three media of reproduction: facsimile, digital reproduction, and traditional print resource. For the purposes of this study, a facsimile was defined as a physical volume intended to reproduce an original illuminated manuscript, containing all of the pages of the original manuscript, though not necessarily in order, in color, or to scale. Defining a digital reproduction was perhaps the most difficult part of this stage, as almost all manuscripts

have multiple digital reproductions, but there is no uniformity to speak of in the type or quality of digital reproductions available from manuscript to manuscript. Rather than further limiting the available sample by requiring each included manuscript to have a digital facsimile, digital non-facsimile, and locally available physical facsimile (in addition to a traditional print source such as a monograph), the researcher chose to define a digital reproduction as the officially available digital images of the manuscript produced and organized by the manuscript's holding library. Finally, a traditional physical volume was defined as any print resource dedicated to the manuscript in question that cannot be defined as a facsimile.

In order to be able to study these facsimiles directly, the manuscripts selected were limited to those available in facsimile form on UNC's campus, with an appropriate digital reproduction also available. The three manuscripts ultimately selected were the Luttrell Psalter, the Psalter of Saint Louis, and the Hours of Catherine of Cleves. Not only do all three manuscripts meet the initial criteria of availability in terms of facsimiles and digital reproductions, they also span multiple different kinds of manuscripts—two psalters and a book of hours, to be exact—and each is held by a different institution. The importance of format, layout, and context in understanding a manuscript have already been addressed in this paper, and the variety of manuscript forms was designed to include this aspect in the research process. The selection of manuscripts held in three different institutions also allows the researcher to get a more accurate interpretation of the differences between the media themselves rather than the differences between institutional treatments of the media. The manuscripts included in the study—and the

forms in which they were examined—are organized according to manuscript type in the table below:

Manuscript Type	Physical Facsimile	Digital	Print Resource		
		Reproduction			
Book of Hours	The Hours of	The Morgan Library	The Hours of		
	Catherine of Cleves	& Museum Online	Catherine of		
		Exhibitions –	Cleves: demons,		
		Demons and	devotions, and daily		
		Devotion: The Hours	life in the fifteenth		
		of Catherine of	century		
		Cleves			
Psalter The Luttrell		Turning the Pages:	The World of the		
	Psalter: a Facsimile	High Quality	Luttrell Psalter		
		Version of the			
		Luttrell Psalter			
	Le Psautier de Saint		Picturing Kinship:		
	Louis	Gallica – Psautier dit	history and painting		
		de saint Louis	in the Psalter of		
			Saint Louis		

Having defined the three different modes of reproduction, the researcher then created a tool with which to evaluate the sources, assembling a list of relevant criteria drawn both from comparison studies such as Lynn (1999) and from the coding in the interviews. (See Figure 3.)

Access	How easy is it to access the reproduction? How many discrete steps							
	must be taken to access the reproduction/image resource? What							
	limitations are there on accessing the resource? For example: can it							
	only be accessed in one physical location?; is a card, password,							
	login, or otherwise specific and verifiable identity required?; do any							
	steps need to be repeated to access further portions of the resource?							
Accuracy	By comparing a single page across reproduction media—or, if a							
	single full page is unavailable, a single image—the researcher will							
	attempt to find commonalities and differences between the two.							
	Obviously, accuracy cannot truly be grasped in this context without							
	inspecting the original manuscript, but some sense of visual							
	consensus can be discerned.							

Bookness	Can the object be held, manipulated, and interacted with like a book,							
	and to what extent? This includes flipping back and forth between							
	chunks of pages, progressing from left to right, progressing one page							
	at a time, the action of turning pages, and being able to view the							
	book in two page spreads.							
Completeness	How much of the original manuscript is replicated in the resource?							
P	This is subdivided into several different levels of completion. The							
	highest level of completion/completeness is an entire manuscript							
	with a reproduction of the original cover, followed by the entire							
	manuscript without a replica cover, then all pages with miniatures							
	and illustrations (but not all text only pages), all pages with major							
	miniatures and illustrations (but not all pages with miniatures), some							
	pages with major miniatures and illustrations, and finally only some major miniatures and illustrations, separated from their pages.							
Cost								
Cost	If known or available, the researcher will compare the purchasing							
	cost of each resource. This is anticipated to be more difficult with							
	digital resources, and likely will primarily apply to physical							
	facsimiles and traditional print resources.							
Ease of Use	This criterion is often related to ease of access, but the two are not							
	entirely overlapping. Questions to ask in assessing ease of use							
	include: Is the source intuitive, and how much so? How well can							
	the user move within the document? Is it possible to see close up							
	views and, if so, how easily? Can the user save images for later use							
	somehow?							
Quality of	Without being able to measure the dpi of print images, this is again a							
Illustrations	less than perfectly objective metric, but certain differences can be							
	seen with the naked eye. Color versus black and white or grayscale							
	is one obvious difference, but clarity, detail, and size or							
	magnification are also all perceptible and relevant.							
Index/Image	Is there a guide, index, or other identification system corresponding							
Identification	to the miniatures in the reproduction itself? If so, how is it collated							
	with the actual pages and images? To what degree of granularity are							
	the images in the manuscript identified?							
Physicality	Can the user lift the reproduction or otherwise experience its volume							
	and mass? Does the object engage senses other than sight? If so,							
	which senses?							
Size	Are the reproduction and the images within it full size? Are they							
	accurate to the size of the original?							

The researcher then evaluated each resource individually using the criteria above. Beginning with the physical facsimile of each manuscript, the researcher proceeded to the traditional print and digital sources, operating within the resources of one manuscript before moving on to the next, so as to focus on comparing media rather than manuscripts. Some criteria, such as cost, could be evaluated quantitatively, but generally speaking each source was evaluated qualitatively, using the assessment tool above to attempt to limit subjectivity. The evaluation results are presented individually for each resource, arranged in sets correlating to the original manuscript.

FINDINGS

Interview Results

While the majority of the results of the interviews conducted were analyzed qualitatively, certain statistics drawn from the data using codes in ATLAS.ti revealed some meaningful trends. On the most basic level, the seven most frequently used codes are presented in Table 1:

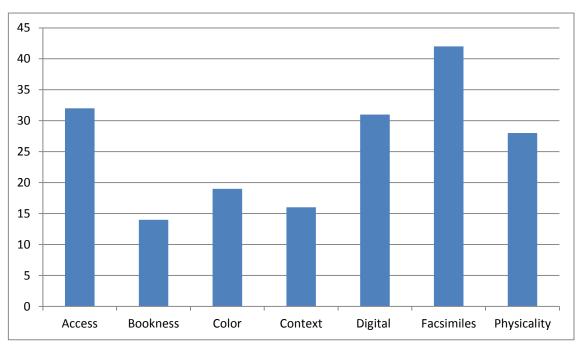


Figure 1. Individual code use counts.

The code use counts for individual codes dropped off sharply after "Bookness" and displayed little variation, hence their absence from the table. "Facsimiles," with 42 use counts, was by far the most commonly used code, with "Access" and "Digital" ranking second and a close third, with 32 and 31 individual code use counts respectively. "Physicality" was the only other code within the top four, at 28 use counts, leading to the first major drop off in frequency of use. Ultimately, these top four codes together account for

53.6% of all code usages, indicative of their relative dominance of the information provided by the interview subjects. "Bookness," "Color," and "Context" together take the next largest portion of the code usages, and the rest diminish consistently, with "Dissertation" and "Image Identification" as the two areas least discussed.

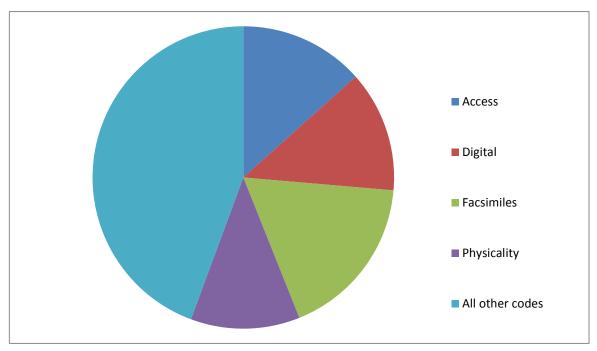


Figure 2. Portion of total code usage.

The importance of facsimiles to medieval manuscript researchers appears fairly clear from the occurrence data alone, but the code co-occurrence tables also proved a valuable source of information. The highest areas of co-occurrence are listed in the table below (Fig. 3), with the density of co-occurrences indicated by the color of the table cell, with the darkest cells being those with the highest concentration of overlapping codes. The predominance of the "Facsimiles" code is not surprising, given the large number of times it appeared in the interviews; with such a high number of use counts, the "Facsimiles" code had a proportionally higher chance of intersecting with other codes. The results were not entirely without surprises, however. Though "Physicality" is fourth in terms of overall code counts,

it was the single most common code to co-occur with "Facsimiles," suggesting a strong link between the two concepts. "Digital" was another code that co-occurred with "Facsimiles" at a high rate, but this may have been due to the discussion of digital facsimiles, and could indicate a need for a separate, specific "Digital Facsimiles" code. Finally, both "Bookness" and "Context" co-occurred with "Facsimiles" eight times each, possibly suggesting a triadic link with "Physicality," which will be addressed further in the Discussion Section.

	Access	Accuracy	Bookness	Color	Comperar	Context	Convenie	Cost	Digital	Facsimiles	Physicality	Resource-	Size
Access	0	3	1	1	1	0	0	2	6	11	4	2	1
Accuracy	3	0	0	4	0	0	0	1	1	5	2	0	0
Bookness	1	0	0	0	0	6	0	0	2	8	5	0	0
Color	1	4	0	0	1	0	1	0	6	5	4	0	0
Comperar	1	0	0	1	0	0	1	0	4	1	1	0	2
Context	0	0	6	0	0	0	0	0	1	8	2	0	0
Convenie	0	0	0	1	1	0	0	0	4	0	0	0	0
Cost	2	1	0	0	0	0	0	0	0	1	0	0	0
Digital	6	1	2	6	4	1	4	0	0	10	2	0	0
Dissertation	0	0	0	0	0	0	0	0	0	0	0	0	0
Expense	0	0	0	0	0	0	0	0	0	1	0	0	0
Facsimiles	11	5	8	5	1	8	0	1	10	0	12	4	3
Image Ide	1	0	0	0	0	0	0	0	1	0	0	0	0
Monograp	1	0	1	1	0	0	0	0	0	1	0	1	0
Permissio	1	0	1	1	0	0	0	0	2	2	0	0	0
Physicality	4	2	5	4	1	2	0	0	2	12	0	0	5
Publishing	0	0	0	1	0	0	0	0	1	1	0	0	0
Resource-	2	0	0	0	0	0	0	0	0	4	0	0	0
Size	1	0	0	0	2	0	0	0	0	3	5	0	0
Survey wo	0	0	1	1	0	0	0	0	1	1	1	0	0

Figure 3. Code co-occurrences.

Content Analysis Results

Manuscript Type: Psalter

Title: The Luttrell Psalter: a Facsimile

Format: Physical facsimile

Access: The user has to ask at the front desk, where they will have the facsimile delivered to them. Including traveling to the library, the access process comprised two steps. In terms of limitations, the resource is library use only; in theory, a UNC ID is required to use it, but this is not usually held up in practice, and was not applied when I asked to see it. No further steps were necessary to view additional parts of the manuscript.

Accuracy: Folio 202 verso, the page compared across the formats, appears to be accurate, containing the same content as depictions of the page in the other two resources.

Bookness: This resource expresses all of these qualities. The facsimile is large and heavy, and can be operated as it would have been in the original format.

Completeness: Entire manuscript without a replica cover.

Cost: The facsimile is available used on Amazon for \$1,486.34, from the Folio Society for \$2,180.00. It is no longer available from the British Library, so the original asking price is unknown.

Ease of Use: As a book, it is quite intuitive, though the user must navigate past the essay and commentary to reach the facsimile itself. The user can move with ease within, though weight may present a problem for some. There is no built-in magnification system, but the user can get as close to the page as they like, and can use a magnifying glass—though this would require the use of outside equipment. Again, there is no inherent ability to save images; the only option is scanning or copying with outside equipment that may or may not be available.

Index/Image Identification: Yes. There is an in-depth page by page commentary at the front of the volume, identifying almost all images.

Physicality: The resource exhibits a concrete sense of volume and mass, interacts with some sense of smell, and some sense of touch.

Quality of Illustrations: The illustrations are full color, large and detailed, but with no magnification system. Some brush and pen strokes are visible, as is some paper texture. **Size:** Original – Cover 14.5 x 10.6 in., Pages 13.77 x 9.6 in., Written space 10 x 6.7 in.

Facsimile – Cover 14 in. x 10.75 in., Pages 13.75 x 9.5 in., Written space 10 x 7 in. Close enough that differences can be ascribed to minor measurement errors. The facsimile presents an accurate impression of the size of the original. Both the images and the pages are full size.

Manuscript Type: Psalter

Title: Turning the Pages: High Quality Version of the Luttrell Psalter

Format: Digital facsimile

Access: Locating the digital facsimile is one of the most difficult parts of accessing it. The user would need to know where the Luttrell Psalter is held (the British Library), and, to accurately pick what they wanted out of the search results, they would need to know that their digital facsimiles system is called Turning the Pages. Once the digital facsimile is located, ease of access depends on the nature of the computer from which the user is accessing it. On my personal computer, I was able to access the facsimile quite easily, but on other computers the program has refused to load or has required the additional installation of Silverlight. Assuming the user does not have to install additional programs, access requires two steps: locating the correct website and successfully loading the facsimile. The only limitations for accessing this resource are the need for a computer with an internet connection that has the software needed to handle the website. No steps need to be repeated to access separate parts of the resource.

Accuracy: Folio 202 verso, the page compared across the formats, appears to be accurate, containing the same content as depictions of the page in the other two resources. Bookness: The object cannot be held or physically manipulated like a book, but it can be operated more or less like a book, proceeding from one page to another with "turning the page" and "lifting the cover" animations. The slider bar at the bottom of the page allows the user to skip between segments rather than individual pages if they desire, and even shows which page spread the user will arrive at as the bar is slid before the user has selected it. However, the user cannot view two spreads at once (as would be possible by holding different sections open in a book). That said, the digital facsimile is arranged in two-page spreads, as with an actual book.

Completeness: Some pages with major miniatures and illustrations. This source is somewhat misleading, actually, as the website advertises it as a digital version of the Luttrell Psalter, not specifying that it is only a few pages from a much larger text. The

folio numbers are not included in the digital facsimile, so there is no way of knowing where they fall in the actual text or that there are significant gaps, and the inclusion of a back cover at the end gives the impression that the last page in the digital facsimile is the last page of the manuscript—which is not the case.

Cost: The cost for the developers/the British Library unknown, but the resource is free to use.

Ease of Use: Once loaded, the source is fairly intuitive, though perhaps not quite to the same degree as a physical book. The user can move quite well through the document, being able to navigate one page at a time by clicking on the pages or in sections by using the slider bar. There is a magnifying glass tool that works very well, though it magnifies only a small square at a time. Images can only be saved by taking a screen shot of the webpage, which would produce a very small, low-quality image.

Index/Image Identification: There is no index or system of image identification.

Physicality: The user cannot physically lift or otherwise engage with the reproduction. The only sense engaged is sight.

Quality of Illustrations: The overall quality of the illustrations, once they are magnified (as they are somewhat too small to really analyze without the magnifying glass tool), is quite good. Some brush strokes and pen marks are visible, but at times they are difficult to distinguish from the pixels. It is not possibly to magnify in such a way as to see quite as much detail as in the print facsimile, where physical proximity to the page is completely under the user's control. All images are in color.

Size: Original – Cover 14.5 x 10.6 in., Pages 13.77 x 9.6 in., Written space 10 x 6.7 in.

The size of the digital facsimile varies according to screen size and screen resolution, but during this evaluation, the sizes were as follows:

Cover 5 x 3.5 in., Pages 5 x 3.25 in., Written space 4 x 2.75 in.

This resource is clearly much smaller than the original, barring the use of an unrealistically large computer monitor.

Manuscript Type: Psalter

Title: The World of the Luttrell Psalter

Format: Monograph

Access: The process to access the resource is very simple. The only steps necessary are getting to the library and finding the book on the shelf, making it two steps at most.

There are no limitations to access, though to take it out of the library requires a UNC ID. No steps need be repeated to continue accessing further parts of the resource.

Accuracy: The resource appears to contain the same content as the other formats on folio 202 verso, though the pages are cropped somewhat.

Bookness: The source itself meets all the criteria, though the pages of the Psalter itself are not laid out in consistent book format—they are scattered throughout the volume. In that respect, the reproduction cannot be interacted with as a book.

Completeness: Between "some pages with major illustrations and miniatures" and "some major miniatures and illustrations, separated from their pages."

Cost: The book costs \$19.95 on Amazon.

Ease of Use: The source is completely intuitive, easily moved through and manipulated. The user can get as close to the page as they wish, but detailed views are limited by the size and quality of the images. Magnification and saving (by scanning and copying) both require external tools that may or may not be present.

Index/Image Identification: Each image in the monograph is identified and explained to some degree, though not every aspect/artwork within these images is identified. The information is scattered throughout the volume, but usually within one page of the relevant image.

Physicality: The resource can be lifted and experienced, though it does not have much mass compared to the facsimile or original. The book engages the senses of touch, and some smell.

Quality of Illustrations: Though all images are in full color, they are lacking in clarity, detail, and size. The original's brushstrokes and pen marks are often hidden by the ink spots/print grain on the page.

Size: Original – Cover 14.5 x 10.6 in., Pages 13.77 x 9.6 in., Written space 10 x 6.7 in. Book – Cover 9.25 x 6.25 in., Pages 9.25 x 6.15 in., Written space 6.75 x 4.5 in. The resource is significantly smaller than the original manuscript.

Manuscript Type: Psalter

Title: Le Psautier de Saint Louis

Format: Physical facsimile

Access: The user has to ask at the front desk, where they will have the facsimile delivered to them. Including traveling to the library, the access process comprised two

steps. In terms of limitations, the resource is library use only; in theory, a UNC ID is required to use it, but this is not usually held up in practice, and was not applied when I asked to see it. No further steps were necessary to view additional parts of the manuscript.

Accuracy: Images in the manuscript appear to be consistent with other versions of folio 85 verso. The facsimile's pagination is more or less accurate until they start leaving out pages, but they erased the bleed-through on the backs of all the pages. Page edges in the facsimile appear to be cut in such a way as to imitate the original.

Bookness: This resource expresses all of these qualities.

Completeness: Difficult to determine, but appears to be all pages with major miniatures and illustrations.

Cost: New copies of the facsimile are no longer in print, so the original sale price is unknown. The facsimile is available used on Amazon for \$218.80.

Ease of Use: The resource is fairly intuitive, though the detached introduction and poorly marked page numbers can be confusing. The user can move with ease within. There is no built-in magnification system, but the user can get as close to the page as they like, and can use a magnifying glass, though this requires the use of outside equipment. Again, the resource comes with no inherent ability to save images; the only option is scanning or copying them with outside equipment that may or may not be available.

Index/Image Identification: The only image identification system is the notes written in the past on the manuscript itself. These are on the reverse side of each illustration, and in French.

Physicality: The resource exhibits a concrete sense of volume and mass, interacts with some sense of smell, and some sense of touch, having very slightly raised gilding. **Quality of Illustrations:** The images in the facsimile are somewhat grainy/pixelated, but still good quality, and they are all color images. The use of reflective gold is a plus,

though it is sometimes applied slightly off from the actual lines beneath.

Size: Original – Cover unknown (original now detached), Pages 8.3 x 6.1 in., Written space 4.8 x 3.35 in.

Facsimile – Cover 8.5 x 6 in., Pages 8 x 5.5 in. (varies), Written space 5 x 3.75 in.

Manuscript Type: Psalter

Title: Gallica - Psautier dit de Saint Louis

Format: Digital facsimile

Access: The most difficult part of accessing this reproduction of the manuscript is finding it in the first place. The user must first know to go to Gallica (the digitized resources branch of the Bibliotheque Nationale), then how to search for the manuscript, and finally which result is the one they are looking for. I should point out further that the entire website, including all of the navigation tools, is in French. The title of the reproduction is especially confusing, as in almost all other sources the manuscript is referred to as the "Psautier de Saint Louis" or "Psalter of Saint Louis," without the "dit."

Accuracy: Images appear to be consistent with other version of folio 85 verso. Page numbering is definitely consistent and accurate. Original page edges are included.

Bookness: The object cannot be held like a book, and while the viewer/user does or can progress page by page and more or less in order, there is no "page turning" mechanism and no way to view the book in two-page spreads; there is often only slight indication (in the form of the placement of the spine/part between the pages, where visible) of whether the folio is on the right or left of the page opening, though experienced manuscript readers can discern such questions by looking for the "r" or "v," standing for "recto" (front/right) and "verso" (reverse/left). The user can skip around within the book, but through a drop-down list of specific single pages.

Completeness: Entire manuscript with a reproduction of the original cover. There are even multiple views of the cover, and digitized images of previous, older, detached covers.

Cost: As with the British Library's "Turning the Pages" system, no costs were available for the digitization of the work. Similarly, access is free, so long as one has access to a computer with the internet.

Ease of Use: The source is moderately intuitive. The "next page" and "previous page" buttons will be fairly self-explanatory to those familiar with digital resources, and perhaps the "first page" and "last page" buttons will not be entirely unusual to the user. Other controls are less easy to understand. If the user desires to navigate to a specific page, they can use the drop down menu at the top of the website, but, as mentioned above, they must have a fair amount of previous knowledge, including the meaning of abbreviations like "r" and "v," and the ability to translate the French titles of the covers and other framing materials surrounding the folios themselves. If the user has this

previous knowledge, navigation is fairly simple, though not as quick, clean, and intuitive as in Turning the Pages' Luttrell Psalter, but without it navigating this resource in any way other than browsing page by page could become quite difficult. There is a zoom/magnification function, but it is somewhat cumbersome; clicking on the magnifying glass reloads the page in another, smaller frame, and the user must then zoom in several more times to achieve a meaningful level of magnification, while shifting the magnification rectangle onto the part of the page they wish to see. Rather than sliding around the page easily, this also causes the page to reload. That said, the degree to which the tool can zoom is fairly impressive. It is also very difficult to get out of the zoom mode. The imagesaving possibilities are impressive, however. Though the user cannot right click and save the image, as they may be used to, the website provides the option to download one section of or the entire document as a pdf, truly astounding in light of many museum copyright policies.

Index/Image Identification: Aside from the page numbers and cover identification in the drop down menu, there is no image identification or index to speak of.

Physicality: The user cannot lift the reproduction or otherwise experience it in a physical sense. No other senses are engaged.

Quality of Illustrations: Excellent image quality. Crisp, clean, accurate colors, great detail and clarity.

Size: Original – Cover unknown (original now detached), Pages 8.3 x 6.1 in., Written space 4.8 x 3.35 in. As with other digital resources, the size varies depending on the screen resolution and zoom. However, when initially loaded on the computer used for this study, the approximate dimensions were:

Cover 15 x 9.5 in., Pages 14 x 9.5 in., Written space 8.5 x 6.5 in.

Manuscript Type: Psalter

Title: Picturing Kinship: history and painting in the Psalter of Saint Louis

Format: Monograph

Access: The process to access the resource is very simple. The only steps necessary are getting to the library and finding the book on the shelf, making it two steps at most. The only limitation to access is that the book cannot be removed from the library.

Accuracy: The images seem to be consistent across the formats, though the color in this one is slightly different from the others.

Bookness: The source itself meets all the criteria, though the pages of the Psalter itself are not laid out in consistent book format—they are scattered throughout the volume. In that respect, the reproduction cannot be interacted with as a book.

Completeness: All pages with miniatures and illustrations.

Cost: The book costs \$91.95 on Amazon.

Ease of Use: The source is completely intuitive, easily moved through and manipulated. The user can get as close to the page as they wish, but detailed views are limited by the size and quality of the images. Magnification and saving (by scanning and copying) both require external tools that may or may not be present. The multiplicity of guides and indices makes it easier to navigate.

Index/Image Identification: Many such indices are scattered throughout the book, primarily gathered at the back of the volume in the appendices. The resource includes great identification of almost all parts of the work—at least those included in the resource.

Physicality: The resource can be lifted and experienced, and is actually significantly heavier than the original. The book engages the senses of touch, and some smell.

Quality of Illustrations: The quality of the illustrations is quite high and they are all in full color, though their quality is somewhat limited by their size.

Size: Original – Cover 14.5 x 10.6 in., Pages 13.77 x 9.6 in., Written space 10 x 6.7 in.

Book – Manuscript cover not depicted, Book Cover 11.25 x 8.75 in., Pages 5.75 x 4.25 in., Written space 4.6 x 3.5 in.

The size of the manuscript as depicted in the resource is smaller than the original, despite the much larger size of the monograph itself.

Manuscript Type: Book of Hours

Title: The Hours of Catherine of Cleves

Format: Physical facsimile

Access: The user has to ask at the front desk, where they will have the facsimile delivered to them. Including traveling to the library, the access process comprised two steps. In terms of limitations, the resource is library use only; in theory, a UNC ID is required to use it, but this is not usually held up in practice, and was not applied when I asked to see it. No further steps were necessary to view additional parts of the manuscript.

Accuracy: Folio 168 verso, the page compared across the formats, appears to be accurate, containing the same content as depictions of the page in the other two resources.

Bookness: This resource expresses all of these qualities, though the manuscript pages within the facsimile are not arranged so as to be viewed in their original two page layout.

Completeness: All pages with miniatures and illustrations, but not all text pages.

Cost: Available reprinted on Amazon from \$45 to \$110.68.

Ease of Use: As a book, it is quite intuitive, though the user must navigate past the essay and commentary to reach the facsimile itself. The user can move with ease within the facsimile. There is no built-in magnification system, but the user can get as close to the page as they like, and can use a magnifying glass—though this would require the use of outside equipment. Again, there is no inherent ability to save images; the only option is scanning or copying with outside equipment that may or may not be available.

Index/Image Identification: There is an in-depth page by page commentary at the front of the volume, identifying almost all images, as well as full page descriptions of each image included, and several appendices in the back covering the manuscript's layout and contents.

Physicality: The resource exhibits a concrete sense of volume and mass, interacts with some sense of smell, and some sense of touch.

Quality of Illustrations: The illustrations are full color, detailed but with no magnification option, and somewhat small. There are no visible pixels or other grain issues in the printing, but it is not quite detailed enough to see pen and brush strokes.

Size: Original – Cover unknown, original binding missing, Pages 7.6 x 5.13 in., Written space 4.19 x 2.43 in.

Facsimile – Cover 8.25 x 5.5 in., Pages 7.5 x 5 in., Written space 4.25 x 2.45 Measurements of facsimile are based on the size of the depicted pages, as they do not fill the pages of the facsimile/the entire page has been displayed, including the edges. The facsimile's images are similar in size but not identical.

Manuscript Type: Book of Hours

Title: Demons and Devotion: The Hours of Catherine of Cleves

Format: Digital facsimile

Access: As with most digital facsimiles thus far, the most difficult part of accessing this facsimile is finding it. A search for "Hours of Catherine of Cleves, digital facsimile,"

fortunately, does bring it up, so the user is not required to know where the manuscript is held. The software involved is fairly basic, and I have not had difficulties with it on the computer designated for this study. The website can be accessed from any computer with an internet connection.

Accuracy: Folio 168 verso, the page compared across the formats, appears to be accurate, containing the same content as depictions of the page in the other two resources.

Bookness: The reproduction cannot be handled or manipulated like a book, though it does progress a page at a time and can be viewed in two page spreads. There is no way to really flip between sections, though the user can navigate to a page that is not adjacent using the thumbnails.

Completeness: Entire manuscript without a replica cover.

Cost: The cost for the developers/the Morgan Library are unknown, but the resource is free to use.

Ease of Use: The source is only moderately intuitive, though it does offer many excellent tools, should the user be able to discern them. Unfortunately, many of them are tucked away; the buttons for navigating through the book are pushed to one side, for instance, and other features simply aren't explained or advertised. The thumbnails, as mentioned, are the only way to navigate directly to a specific page, but unfortunately the thumbnails themselves are cropped to such an extreme that it is difficult for anyone who has not already seen the full pages they are taken from to recognize them. Additionally, no identification information on each folio is provided in the thumbnails beyond the manuscript and page numbers. Perhaps the Morgan Library's best contribution to the understanding of this manuscript in reproduction form is their inclusion of readings of the prayers on each page, which the user can listen to. The magnification tool is simple and excellent, magnifying to a very high degree, and it is easy to drag the zoom tool around the page and view the page full screen—though, again, the button is so small and out of the way that it is easy to miss.

Index/Image Identification: The "about this page" link on each screen provides full information about the images on the page. There is no separate index or guide.

Physicality: The reproduction cannot be handled in any way, but it does activate the sense of hearing through the spoken prayers.

Quality of Illustrations: Excellent. Full color, incredible magnification, and perfect clarity, down to the smallest brushstroke.

Size: Original – Cover unknown, original binding missing, Pages 7.6 x 5.13 in., Written space 4.19 x 2.43 in.

Reproduction (varies due to different levels of magnification and screen resolution, but on my computer and at the digital facsimile's standard settings) – Cover unknown, Pages 4.15 x 2.75 in., Written space 2.25 x 1.5 in.

Manuscript Type: Book of Hours

Title: The Hours of Catherine of Cleves: Devotion, Demons and Daily Life in the

Fifteenth Century

Format: Monograph

Access: The process to access the resource is very simple. The only steps necessary are getting to the library and finding the book on the shelf, making it two steps at most. There are no limitations to access, although the book cannot be removed from the library without a UNC ID. No steps need to be repeated to continue accessing the resource.

Accuracy: Images on folio 168 verso appear to be consistent across formats.

Bookness: The source itself meets all the criteria, though the pages of the manuscript itself are not laid out in two page spreads. In that respect, the reproduction cannot be interacted with as a book.

Completeness: All pages with miniatures and illustrations (but not all text only pages).

Cost: The book is available on Amazon for \$123.76.

Ease of Use: The source is fairly intuitive; it is easy to manipulate, but navigating the "catalog" section, where the primary images are found, can be difficult for those without knowledge of the terminology. Magnification and saving (by scanning and copying) both require external tools that may or may not be present.

Index/Image Identification: The catalog contains a separate spread for each page of the manuscript, and each spread has a page of identifying information.

Physicality: The resource can be lifted and experienced, and is actually significantly heavier than the original. The book engages the senses of touch, and some smell.

Quality of Illustrations: The quality of the illustrations is quite high and they are all in full color.

Size: Original – Cover unknown, original binding missing, Pages 7.6 x 5.13 in., Written space 4.19 x 2.43 in.

Reproduction – Cover unknown, Pages 10.25 x 6.85 in., Written space 5.75 x 3.4 in.

All in all, this resource is significantly larger than the original.

DISCUSSION

Interviews

Physicality, Access, and Facsimiles

"The actual experience of the object is never to be underestimated." These words, taken directly from the transcript of one of the interviews, may very well outline the dominant message of this study. Participants varied on many other messages, focusing more or less on different topics according to their personal interests, but they always came back to this ultimate conclusion, sometimes repeating it during the interview session: the physical experience and context of the manuscript is crucial to a full understanding of the original.

A cursory examination of the code use counts and co-occurrences would demonstrate the simple importance to the interview subjects of a resource's physicality, but a more nuanced perspective reveals additional layers of meaning. As presented in the results, the most frequently used codes were, in order of frequency, "Facsimiles," "Access," "Digital," and "Physicality," with co-occurrences between "Facsimiles" and "Physicality," "Access," "Digital," and "Bookness" respectively ranking highest. The prominence of the term Digital, however, while certainly not to be discounted, appears to be an issue of terminology rather than of direct importance and interest to the interview subjects. Rather than splitting the term "Facsimiles" into "Digital Facsimiles" and "Physical Facsimiles," the term "Facsimiles" was used for both forms of facsimile, with "Digital" added to the transcript when the subject was referring to a digital facsimile.

This allowed the collective importance of the facsimile format to appear in the results, but may have falsely inflated the importance of the "Digital" code. Consequently, the terms ranked just after "Digital" in both cases—that is, "Physicality" and the co-occurrence of "Facsimiles" and "Bookness"—will be considered at least as important as "Digital" for the purposes of this discussion.

With this in mind, the combination of "Physicality," "Access," and "Bookness" as the top co-occurrences with "Facsimiles"—aside from "Digital," which may be explained by the difficulties with coding terminology—seems to indicate that the subjects may value facsimiles in particular for their ability to provide access to something functionally similar to the manuscript, both in its physicality and its book-like qualities.

Issues of access are inevitably important for any library resource—what is the point of a resource than cannot be accessed by its target users?—but the ability to access images of medieval manuscripts is a particularly complicated and fraught scenario.

Unlike other works of art, which may be examined without physical manipulation—paintings, for instance, which can be looked at in a museum without any actual contact—manuscripts by definition must have their fragile pages lifted and turned to access their contents, and their covers and spines must also be bent and adjusted. These actions, no matter what level of care is taken to, all gradually damage the several hundred year old documents, and many librarians and curators with medieval manuscripts in their collections see it as their primary charge to preserve the works, with patron access a secondary concern, if it is on the list at all. One interview subject related the stories of her often frustrated attempts to access manuscripts held in Spanish monasteries and other institutions, relating scenes in which she was turned away despite having all the proper

documentation, or given vague promises of "maybe tomorrow" in response to her requests.

Admittedly, the existence of facsimiles, both physical and digital, can sometimes further complicate questions of access. The same interview subject who spoke about her difficulties gaining access to original medieval manuscripts elaborated these stories with examples of times when manuscript repositories attempted to convince her to look at a manuscript facsimile instead of the original. In her own words:

"Next thing, the library may say 'we have a facsimile,' and they bring that out, and the bad news is in some libraries they will insist that you use the facsimile instead of looking at the original manuscript because they don't want to bring it out. Unless you can make a case for why you need to see the original manuscript, they will not allow you to see the original manuscript, saying that the facsimile is good enough, so you have to convince them why you have to see the original manuscript.

Now there are perfectly good reasons why somebody might need to see the original manuscript, ... and you'll just have to know about those and if those are the things you're trying to find out about that manuscript. But it's gotten to be a problem, because sometimes they won't relent, they won't bring out the original manuscript, they'll insist you have to use the facsimile. And the facsimile, however good it is, is not the original manuscript, it doesn't have all the information."

Other institutions insisted on the researcher using a CD-ROM containing a digital version of the facsimile instead of seeing the original. The interview subject returned to this idea later in the conversation, attempting to get at the heart of the matter—the erroneous idea of the interchangeability of manuscript and facsimile:

"One of the problems with facsimiles is that sometimes when collections produce one they think that that means that they no longer have to let people access the original. There's this erroneous idea that copy B equals original A, and they're basically the same, right? And that's not the case at all, because there's certain things that you can't tell from a facsimile, you can't tell wear patterns, which areas of the book were most used, you can't tell that from the facsimile unless it's really super obvious, like somebody's written all over one section of the book or something. But in terms of what pages have fingers been on, you can't really tell that from the facsimile."

However, the art historians interviewed also made it clear that physical facsimiles are often the "next best thing," offering access to a resource that provides an experience similar to that of the original, and making it accessible to those who cannot study the original, whether due to a lack of the funds necessary for travel or because of recalcitrant gatekeepers. One interview subject even referred to facsimiles as serving "as a prosthetic," a kind of artificial extension of the original body of the manuscript. The traits of facsimiles, particularly print facsimiles, that make them so valuable to art historians appeared in a triadic formation in the interview analysis process, as seen in the links between physicality, bookness, and context. They key to the print manuscript's experiential similarity to the original manuscript appears to be in a combination of these traits.

Different researchers addressed different aspects of these traits, emphasizing a certain collection of them as particularly important. One subject discussed the senses of touch and time, seemingly corroborating Michael Camille's (1998) assertion that a full understanding of medieval manuscripts requires an appreciation of the object through more than just the sense of sight. Explaining why she considers the physical aspects of a manuscript reproduction, the researcher said:

"First of all, the time element, you know, of the time that it takes to page through the manuscript, that to me is a really important aspect of it, whether you flip through it like a flip book or whether you page through contemplating it or read it, that's important. The scale is important. The sense of touch, that you're actually touching and feeling the manuscript, that may sound kind of crazy, but the other part of it is if you've looked at a facsimile or worked with manuscripts, the hair side versus the skin side, thinking about those sorts of things."

Another interview subject repeated these evocations of the physicality of the facsimile in its book form, criticizing digital reproductions and facsimiles for providing

no sense of what it's like to turn the page, and for having "no sense of weight" and "not much sense of color and shape."

Though none of the quotes provided thus far have mentioned it directly, the concept binding these statements together is the idea of context—the vital physical and visual context that a good manuscript reproduction must provide. In some cases, context can be very basic, the visual context of the page that surrounds a given miniature or illustration:

"Things that would go wrong, would be, I'd be wanting to talk about the relationship of text to image, or even the framing device to the image, and all I could find would be a photograph where the photographer had gone in, cut out all the decorative framing, and had just done as if it was a picture. You know what I mean? So I couldn't talk about the framing, I couldn't talk about the page layout, and I could [just] say, well trust me on that—well, you know."

Another interview subject, discussing this problem as it relates to monographs and survey texts on medieval manuscripts:

"That's also part of a larger, broader issue, that people were reproducing illuminated books as if they were wall paintings. So: 'we don't need the decorative frame, we don't need the text layout;' now I think more and more, and I think a lot of scholars and teachers have been driving that, you really need to show the whole image. So we're starting to get more of that, but you'd be surprised just looking through books how many of them don't show the full page opening."

Yet another art historian compared studying a manuscript illumination without the visual context to studying a carved column capital without ever being able to see the church it came from. Visual context is clearly important to the medievalist art historian, and often a source of great frustration.

The phrases "as if they were wall paintings" and "as if it was a picture" express another form of context important to the interview subjects, and that is the manuscript's context as a book, within the experiential world of books and volumes. With our post-

Renaissance assumption that the painting—particularly the figural painting—is the archetypal artwork, it can be easy to see an illuminated manuscript as merely a collected volume of paintings with irrelevant material around each artwork or between the folios. This assumption is one that all of the interview subjects deemed highly problematic, and their concern with context in a manuscript reproduction extended to the experience of the manuscript as a book. One researcher, speaking about the difficulties of representing manuscripts in an instruction setting, commented:

"I mean teaching with manuscripts also kind of brings up other issues that sort of go against how I personally think that you should study manuscripts, because for me, that whole idea of use and actually being able to flip through the pages, and that whole experience of reading, that experiential quality tends to be lost when we teach our manuscripts, because what we're doing is, we can't---unless you're doing a class on that particular manuscript or a few manuscripts, you're trying to explicate certain ideas, so you're just going to throw up an image from that manuscript, probably excised from all of the text, excised from the rest of the book, so it's not accurate in a way."

The interview subject's discontent with the inability to experience the manuscript as a book is clearly not merely an aesthetic or sensory preference—according to her, the accuracy of the resource is damaged when an image from a manuscript is taken out of context. Other speakers were more concise, but echoed the same refrain, valuing facsimiles because they allow them "to treat the art object as a book" rather than merely providing the single image they need. The book/non-book experiential divide also split along the lines of codex versus scroll, with one participant noting that the "scrolling" format of most online sites and applications is peculiar because "the codex really is a better format to flip back and forth with." For this researcher, it is not merely the physical form of the book that is important—it is the way in which she is able to navigate through the resource, needing to be able to flip back and forth between large portions of

the volume. The manuscript placed in its context as a book and as a physical, touchable object appears to be at the heart of the participants' concerns with manuscript reproductions.

Other issues important to the interview subjects came up frequently in discussion but were not accounted for in the initial coding, and did not seem to co-occur with any one code in particular. The researchers' need to find comperanda was one such issue. Multiple interview subjects reported using manuscript image resources and reproductions for the purpose of finding images in other manuscripts to compare to the work they were studying. Although some discussed using facsimiles for this purpose, it was much more common for them to use digital image libraries. This indicates that there are at least two modes of illuminated manuscript reproduction use among medievalist art historians. In one, the researcher is intimately studying a single manuscript, and needs to examine it in every possible aspect; in this instance, physical facsimiles are typically the reproduction format of choice. In the other mode, the researcher is seeking specific images or kinds of images from a variety of manuscripts, and consequently relies on the greater breadth of digital image databases, sacrificing depth and context for access.

Another issue not covered in the codes was significant to the researchers in a more long-term sense: the phenomenon of the availability of resources, particularly physical facsimiles, guiding the art historian's research. For the purposes of this paper, this will be referred to as "resource-guided research," and discussion of this issue made up about a fifth of the total interview transcripts. Resource-guided research—which also extends to resource-guided instruction—is not always related to a particular reproduction format. On the most basic level, researchers pointed out that "the availability of images

is what dictated what I taught." This frequently related to which libraries and institutions made reproductions of their manuscripts most easily available; according to one participant, illuminated manuscripts from the British Isles tend to be taught more than manuscripts from other collections because images of them are so much more accessible. In some circumstances, it was a new monograph on a certain manuscript, as in the case of the interview subject who taught a seminar on the Psalter of Saint Louis because a new book had been published on the topic, giving them new material to work with. Finally, there were situations in which the researcher's local library's collection of manuscript facsimiles determined the direction of their research. As one participant put it when explaining how she selected a manuscript for her master's thesis:

"I found out about it because my advisor was one of the faculty members that ordered it, and so she told me about it, and kind of how we decided what I was going to work on ... is what's available here at UNC, so that really goes to show you that availability of these facsimiles really drives research. If you don't have an available facsimile, then doing research on the manuscript is not really that feasible."

The difficulty of studying a given manuscript without access to a facsimile is important here, and underlines once more some of the main messages repeated in the interviews. Medievalist art historians often cannot access the original manuscripts they intend to study, and in the reproductions they work with, they require a resource that provides as much context as possible, from the visual context of the contents of each page to the physical, experiential qualities of the work as a book. Though facsimiles cause some problems when institutional guardians begin to see them as adequate replacements

¹ Incidentally, this description applies to my art historical research as well. The decision I made to work with the Luttrell Psalter was made in large part because of the availability at my university of an excellent facsimile of it.

for the originals, in the course of these interviews print facsimiles appear to be seen as the best way for researchers to gain access to such context-rich reproductions.

Comparison and Content Analysis

Bookness, Completeness, and Ease of Use

Any discussion of the content analysis results requires that the most important areas or terms within the analysis be identified, both to determine their importance independent of the interview results and to see how the two parts of the study compare. As no code counts are created in this process, the data is more qualitative than quantitative, but certain elements can be picked out as important based on how much they differed from resource to resource. Categories in which the formats were notably different are important because they indicate ways in which said formats are detectably better or worse than others.

A top five listing of the categories most dramatically different from resource to resource would have to include "Bookness," "Completeness," "Cost," "Ease of Use," and "Size." Two of these—cost and size—will be excluded from the top three because of difficulties in accurately collecting data about them. Cost was the most consistently problematic area for facsimiles, whether digital or physical. For physical facsimiles, the original resource was often out of print, and no cost could be obtained. For digital facsimiles, while there was never a direct cost to the patron or library making use of the resource, there was also no single flat purchase fee—the "cost" of a digital facsimile could only be described as the funds required for the original institution to develop it, a number also not available to this study. Size, meanwhile, was excluded for technical reasons. Whereas it was fairly simple to compare the size of a physical facsimile to the

size of the original manuscript, monographs and digital resources both presented significant challenges. Monographs were often one size but presented images or pages of the manuscript in a different, smaller size, or in many different sizes that had no evident correlation to the overall size of the work. Digital images, meanwhile, depend largely on the screen size and resolution of the display monitor to determine their measurements, rendering any appraisal and comparison in inches more or less meaningless.

"Bookness," "Completeness," and "Cost," then, appear to be the qualities that separate one format from another. "Bookness" is a familiar focus from the interview results, encompassing as it does issues of context and the experiential qualities of an original manuscript. While "Bookness" might seem like a term that would apply equally to any print resource and not at all to a digital resource, this can be deceiving. What the art historian is assessing in a given reproduction is not its own book-like qualities, but how close it comes to reproducing the original manuscript as a book, in the correct order and format. In most cases, though the print facsimile was often one of the best resources in terms of accurately reproducing the manuscript as a book, the monograph—the only other actually book-shaped resource—was typically the worst, with pages from the manuscript scattered throughout the volume as illustrations, generally not in any order correlating with the original. Digital facsimiles, meanwhile, had a complex and variable relationship to the original book format. The "Turning the Pages" digital facsimile of the Luttrell Psalter, for instance, presented the facsimile as close as possible to its original book form, even including an animation for the action of turning the pages. The digital facsimile for the Psalter of Saint Louis, meanwhile, though providing excellent, large, high-quality images of every single page in the volume, presented those pages as if each

one were an independent entity. Only one page could be viewed at a time, often with little indication of whether it was a recto (front) or verso (back), and flipping back and forth between large portions of the source, as in a real book, was difficult, and could be managed only with a cumbersome drop down list.

It is important to note here that, despite its importance in the interview results, "Physicality" does not have a particularly important role to play in this content analysis. Though it could be argued that being able to directly experience the heft and weight of a facsimile, especially a larger one like the Luttrell Psalter, is valuable, other sensory criteria did not hold much relevance to the original manuscript. The sense of smell, for instance, while more present in the print resources, could not replicate the scent of actual animal-skin vellum—or at least that technology has not yet been invented. In terms of the most striking differences between formats, the function and functionality of a book appear to be more important than the actual form.

The example of the digital facsimile of the Luttrell Psalter, mentioned earlier, also brings up the issue of "Completeness," which, unlike "Bookness," was rarely mentioned in the interviews but appeared to be a crucial distinction between resources. Though the "Turning the Pages" digital facsimile of the Psalter is set up to closely replicate the experience of navigating through a physical book, the actual selection of pages is only a very small sample of the entire manuscript. Worse, there is no indication of this lacuna, there are no folio numbers, and the back cover is placed after the last digitized page, as if to indicate the viewer had reached the end of the work. Such gaps in information might be acceptable to the casual browser or museum-goer who wished to see more images of the Luttrell Psalter without having a particular academic goal in mind, but for an art

historian or other researcher, these would be hugely detrimental to their ability to use the resource.

Neither monographs nor physical facsimiles are immune from this fault, however. Print facsimiles, given their reputation as "the next best thing" and as a full reproduction, tend to have more of the original, but the facsimiles of both the Psalter of Saint Louis and the Hours of Catherine of Cleves included only pages with illustrations and illuminations. Text-only pages, or those that were predominantly text with only a few marginal images, were excluded. Monographs, again, fared even worse, with at times only some of the major illustrations included, and those illustrations often separated from their pages. These severances—of images from the page, or of the page from the manuscript—eliminate the context of the manuscript that the interview subjects, all practicing art historians themselves, found so important.

Finally, there is "Ease of Use," a category in which printed matter, a format familiar to most, had a distinct advantage. This is not to say that the print facsimiles and monographs were without faults in this area; intended for more academic audiences, these resources were often loaded with discipline-specific terminology and sparse on guidance. The facsimile of the Psalter of Saint Louis, for instance, contained little to no explanation of the manuscript itself, leaving it to the user to determine the origin and translation of the French inscriptions on the back of each leaf. Additionally, while the print sources benefited from the simple process required to access their materials—opening the book and beginning to read—they were able to offer fewer additional features than the digital facsimiles. These bells and whistles ranged from the entertaining, such as the Luttrell Psalter's page-turning visuals, to the vitally useful, such

as the ability to save the entire Psalter of Saint Louis to one's desktop, or the built-in magnification tools available in all the digital resources. Some of the digital facsimiles seemed to be moving in a more multi-sensory direction, as if attempting to reincorporate the sensual experience of the manuscript described by Camille. Demons and Devotion, for instance, the Morgan Library's digital facsimile of the Hours of Catherine of Cleves, featured audio recordings of the chants and prayers on each page. Such innovative steps hint at a new direction for digital manuscript resources, one in which the absence of a physical manuscript experience is addressed, if not entirely solved.

CONCLUSION

The results of the two parts of this study do not entirely overlap, but together they create a consistent narrative in art historical manuscripts research, one in which print facsimiles have an important, if not always perfectly understood, role. The areas in which the different formats of manuscript reproductions studied varied most significantly, and hence the areas most important to an evaluation of the resources themselves, were ease of use, degree of completeness of the reproduction, and "bookness," the extent to which the reproduction allowed the user to experience the manuscript like a book. On the surface, these do not correlate with the areas deemed most important by the interview subjects—namely, physicality and access—but the three former qualities can be seen as aspects of the broader concepts introduced by the researchers themselves. For the researchers, access did not simply mean the ability to access any resource—it meant the ability to access a full and complete resource, something as close to the original manuscript as possible. This includes qualities like physicality (the sensory aspects of the resource), but also completeness and bookness. Fewer situations were deemed more frustrating than when a manuscript was presented in an incomplete form, with images or pages severed from their context in the book as a whole. The identity of the illuminated manuscript as a book—as physical, complete, and accessible in an accurate context—provides the touchstone for the art historian's ideal manuscript reproduction.

For the art historians themselves, this touchstone primarily took the shape of the physical facsimile. Though they acknowledged turning to other resources, particularly image databases, frequently, especially when seeking a specific image, physical facsimiles formed the core of their initial exploration process, and often directed the course of their research. Despite the high cost, then, it seems that art libraries and libraries serving art historians should not only maintain a varied and high quality collection of manuscript facsimiles, but also advertise them heavily to library patrons. By allowing greater flexibility to students seeking to write on illuminated manuscripts, such increased collections and marketing may also encourage scholarship on previously under-published materials. As one of the interview subjects emphatically stated:

"Scholarship will suffer if we don't have facsimiles."

BIBLIOGRAPHY

- Ballon, H., & Westermann, M. (2006, December 1). *Copyright Ownership in Works of Art and Images*. Retrieved from the Connexions Web site: http://cnx.org/content/m13912/1.2/
- Ballon, H., & Westermann, M. (2006, December 1). *Genres of Scholarly Publication*.

 Retrieved from the Connexions Web site: http://cnx.org/content/m13921/1.2/
- Ballon, H., & Westermann, M. (2006, December 1). *Image Quality and Reader Access*.

 Retrieved from the Connexions Web site: http://cnx.org/content/m13918/1.2/
- Ballon, H., & Westermann, M. (2006, December 1). *Word and Image Synchronized*.

 Retrieved from the Connexions Web site: http://cnx.org/content/m13961/1.2/
- Boffey, J. (2008). 'Cy ensuent trois chaunceons': groups and sequences of Middle

 English lyrics. In G. D. Caie & D. Renevy (Eds.), *Medieval Texts in Context* (pp. 85-95). London: Routledge.
- Bornstein, G. (2011). Facsimiles and their limits: the new edition of Yeats's: The Winding Stair and Other Poems. *Textual Cultures*, 6.2. Retrieved from http://go.galegroup.com.libproxy.lib.unc.edu/ps/i.do?id=GALE%7CA287517170 &v=2.1&u=unc_main&it=r&p=AONE&sw=w
- Caie, G. D., & Renevy, D. (Eds.). (2008). Medieval Texts in Context. London: Routledge.

- Caie, G. D. (2008). The manuscript experience: what medieval vernacular manuscripts tell us about authors and texts. In G. D. Caie & D. Renevy (Eds.), *Medieval Texts in Context* (pp. 10-27). London: Routledge.
- Camille, M. (1998). Sensations of the page: imaging technologies and medieval illuminated manuscripts. In G. Bornstein & T. Tinkle (Eds.), *The Iconic Page in Manuscript, Print, and Digital Culture* (pp. 33-54). Ann Arbor: University of Michigan Press.
- Clemens, R., & Graham, T. (2007). *Introduction to Manuscript Studies*. Ithaca: Cornell University Press.
- Ester, M. (1990). Image quality and viewer perception. *Leonardo. Supplemental Issue*, *3*.

 Retrieved from http://www.jstor.org/stable/1557895
- Facsimile Editions Limited. (2013). Facsimile Editions publishers of the world's finest illuminated facsimiles. Retrieved from http://www.facsimile-editions.com/en/
- Heins, M., & Beckles, T. (2005). Will fair use survive? Free expression in the age of copyright control. Retrieved from http://www.fepproject.org/policyreports/WillFairUseSurvive.pdf
- Kramer, M. (2006). What is a facsimile? The history and technique of the facsimile.

 Retrieved from http://www.omifacsimiles.com/kramer.html
- Lynn, S. (1999). A comparison of print vs. www-based read-reference sources. Retrieved from UNC-Chapel Hill Master's Paper Collection.
- McCann, S., & Ravas, T. (2010). Impact of image quality in online art history journals: A user study. *Art Documentation*, 29(1), 41-48.

- Peikola, M. (2008). Aspects of *mise-en-page* in manuscripts of the *Wycliffite Bible*. In G. D. Caie & D. Renevy (Eds.), *Medieval Texts in Context* (pp. 28-67). London: Routledge.
- Roland, M. Facsimile editions: gesture and projection. *Textual Cultures*, 6.2. Retrieved from:

West, J. L. W., III. Are manuscript facsimiles still viable? *Textual Cultures*, 6.2. Retrieved from:

Wieck, R. S. *Folia Fugitiva*: The pursuit of the illuminated manuscript leaf. *The Journal of the Walters Art Gallery*, *54*. Retrieved from:

http://www.jstor.org/stable/20169120

Dear [NAME]

My name is Eva Sclippa. I am a master's student from UNC doing a research study on the role of facsimiles in the study of illuminated manuscripts.

I am writing you because you are an expert in the field of [FIELD], and [NAME] suggested I speak with you for this project.

I would like to interview you to get your thoughts. Would you be willing to meet with me and answer a few questions?

The interview would last between 30 minutes and an hour, depending on your schedule. If you are willing, when are you available to talk? Thank you in advance.

Sincerely,

Eva Sclippa Graduate Student School of Information and Library Science UNC Chapel Hill University of North Carolina at Chapel Hill Consent to Participate in a Research Study Adult Participants

Consent Form Version Date: 9/6/12

IRB Study # 12-1846

Title of Study: Illuminated Manuscript Image Resources and the Art Historian's Research

Process

Principal Investigator: Eva Sclippa

Principal Investigator Department: School of Information and Library Science

Principal Investigator Phone number: 8434785813

Principal Investigator Email Address: sclippa@live.unc.edu

Faculty Advisor: Rebecca Vargha

Faculty Advisor Contact Information: vargha@email.unc.edu

What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study.

You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this research study is to examine the role of illuminated manuscript image resources in the research process of art historians focusing on the medieval and Byzantine periods. The main aims of the study are to compare facsimiles, monographs, digital images, and other reproductions. These issues will be explored through interviews with academicians in the field of medieval art history.

How many people will take part in this study?

There will be approximately eight people in this research study.

How long will your part in this study last?

The interview you will participate in will take no longer than one hour, and possibly less. No further meetings or contact are necessary.

What will happen if you take part in the study?

During this study, you will be interviewed by the researcher for up to one hour and at least thirty minutes. This interview is an unstructured interview, which means that many of the questions will vary according to where you choose to take the conversation. The topics discussed will include your previous use of and interactions with manuscript image resources, your views on various forms of manuscript reproduction, and your research process as a whole. The researcher will be taking notes and recording the interview on a digital audio recorder.

What are the possible benefits from being in this study?

Research is designed to benefit society by gaining new knowledge. You will not benefit personally from being in this research study.

What are the possible risks or discomforts involved from being in this study?

There are no known risks associated with participation in this study.

There may be uncommon or previously unknown risks. You should report any problems to the researcher.

What if we learn about new findings or information during the study?

You will be given any new information gained during the course of the study that might affect your willingness to continue your participation.

How will your privacy be protected?

The interview transcripts will not be labeled with identifying information, and will be stored on a password-protected computer.

Participants will not be identified in any report or publication about this study. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies (for example, the FDA) for purposes such as quality control or safety.

What if you want to stop before your part in the study is complete?

You can withdraw from this study at any time, without penalty. The investigators also have the right to stop your participation at any time. This could be because you have had

an unexpected reaction, or have failed to follow instructions, or because the entire study has been stopped.

Will you receive anything for being in this study?

You will not receive any compensation for being in this study.

Will it cost you anything to be in this study?

It will not cost you anything to be in this study.

What if you are a UNC employee?

Taking part in this research is not a part of your University duties, and refusing will not affect your job. You will not be offered or receive any special job-related consideration if you take part in this research.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions about the study (including payments), complaints, concerns, or if a research-related injury occurs, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

Signature of Research Participant	Date
Printed Name of Research Participant	Date
Signature of Research Team Member Obtaining Consent	Date
Printed Name of Research Team Member Obtaining Consent	Date

- 1. How do you go about doing your research? How do you find images and information on illuminated manuscripts?
 - (Either continue on to facsimiles section or non-facsimiles, depending on response/focus.)
- 2. What is a manuscript facsimile to you?
 - a. Could you tell me when you started using manuscript facsimiles? What was that like?
 - i. FOLLOW UP: in what contexts have you used illuminated manuscript facsimiles before?
- 3. Could you walk me through the last time you used a manuscript facsimile?
 - i. Was this a typical experience for you?
 - 1. If not, can you describe another time you used a manuscript facsimile?
 - 2. If typical, FOLLOW UP: Could you tell me more about that?
 - ii. Can you talk about why you decided to use the facsimile?
 - iii. Did you ultimately feel like you got what you needed/wanted from the experience?
 - 1. [If yes] how did this happen? Could you describe how you found the information/image you were looking for? (What happened/what was it about the facsimile that made this possible?)
 - 2. [If not] Could you tell me what happened there?
- 4. How do you think your colleagues feel about using manuscript facsimiles?
- 5. What's something you'd like to see done differently?
 - a. What do you envision in 5-10 years?
- 6. What is a (digital facsimile/monograph/other resource) to you?

- a. Could you tell me when you started using {the resource they mentioned, if applicable}?
 - i. FOLLOW UP: in what contexts have you used {this resource} before?
- b. Could you walk me through the last time you used a {non-facsimile reproduction}?
 - i. Was this a typical experience for you?
 - 1. If not, can you describe another time you used this kind of resource?
 - 2. If typical, FOLLOW UP: Could you tell me more about that?
 - ii. Can you talk about why you decided to use the {resource}?
 - iii. Did you ultimately feel like you got what you needed/wanted from the experience?
 - 1. [If yes] how did this happen? Could you describe how you found the information/image you were looking for? (What happened/what was it about the facsimile that made this possible?)
 - 2. [If not] Could you tell me what happened there?
- 7. How do you think your colleagues feel about using {these resources}?
- 8. What's something you'd like to see done differently?
 - a. What do you envision in 5-10 years?