[slide 1] Good morning. My name is Rebecca Welzenbach. I'm a librarian at the University of Michigan, and my paper is called "The Dissolution of the Repository: Disbinding and Distributing Manuscript Surrogates in the Digital age."

[slide 2] According to Jennifer Summit's conclusion to *Memory's Library*, "[Li]braries always bear an especially rich and complex relationship with the past, which consists—no less today than in the Reformation—of one part preservation, one part invention, and one part disavowal" (Summit 239). In her study, Summit challenges us to look with fresh eyes on early modern, post-Dissolution libraries like those of Matthew Parker and Robert Cotton, in order to take stock of the historical, social, and political contexts that allowed them to come into being. I've found this book a useful framework through which to think about the analogous dissolution and disbinding I see going on right now among digitized medieval manuscripts and libraries.

[slide 3] Summit argues that libraries like Parker's and Cotton's "function less as transparent containers of historical truth than as embodiments of historically specific ideas about what constitutes truth in textual forms" (Summit 8). In other words, these collections (like all collections!) are neither neutral nor natural, but carefully shaped by the interests and circumstances of their creators and curators. Moreover, as circumstances change, collections embodying new interests and new values supplant old ones. These two claims will not be shocking to most of us. But in an historical moment like this one that, as Harold Billings suggests, "represents as significant an opportunity for a new orderliness in libraries as when knowledge was cast out of the monasteries to begin a journey toward different types of storage" (qtd. in Summit 236), I find Summit's point thought-provoking. When we digitize manuscripts from collections like Parker's and Cotton's and put them online, what "historically specific ideas" from the 16th and 17th centuries are we reinforcing, overturning, or obscuring in our

representations? And what "historically specific ideas" from our own moment in time are we layering on top of them? In short, how can we be transparent about the fact that our containers are not—and never have been? I will not attempt to answer all of these questions today, but I will propose a shift in thinking about manuscript digitization that I hope might be of use.

[slide 4] I come to these questions with training as an archivist, where careful attention to the context and representation of collections has long been a central concern of the profession. Eleven years ago, Beth Yakel wrote that "Archivists are in the container business, and the creation of appropriate containers continues to be a critical task" (140). Looking ahead to the digitization of archival collections, she foresaw that "the containers archivists develop must be malleable" (146). Frequently, digitization projects large and small focus on imitating the "original object"—such as a manuscript or collection—as closely as possible. But today social Web technologies like Twitter, Flickr, Facebook, blogs—even just web browsers themselves, as we'll shortly see—offer both opportunity and incentive for anyone encountering manuscripts online to re-draw or entirely disregard the boundaries that librarians, archivists, and curators try so hard to preserve.

In other words, if our containers are on the Web, they are malleable whether we like it or not. We are entering a second generation of digitization, in which web-based tools to display, search, and share digital resources are widely accessible and used. In response to this, I suggest that when planning digital manuscript projects, we shift our attention from the object being scanned to the infrastructure it's going into; from the facsimile to the fragment. Rather than attempting to reproduce online a manuscript or collection exactly like its physical counterpart—an endeavor that will always fall short of the mark—we should aim instead to create digital resources that work with with the existing tools, systems, and practices in use today.

In order to work with these practices and tools, creators of digital resources need to prepare their collections to be disbound, and dissolved. [slide 5] That is, we must make it possible for each image to be pulled out of its original context—while retaining all of the necessary information. I am *not* suggesting that images should stand alone in all cases, or that there's no place anymore for the digital edition, the facsimile, or the library. Indeed, most digitization projects rightly *begin* with an object or collection that ought to be online. I am suggesting, however, that this isn't where these projects should *end*. In May of this year, Mark Sample, assistant professor in the Department of English at George Mason University, wrote, [slide 6] "The promise of the digital is not in the way it allows us to ask new questions because of digital tools or because of new methodologies made possible by those tools. The promise is in the way the digital reshapes the representation, sharing, and discussion of knowledge" (http://www.samplereality.com/2011/05/25/the-digital-humanities-is-not-about-building-its-about-sharing/).

Designing digital projects by looking only to recreate the experience of the original object not only doesn't fulfill the potential of this promise; it is actually impossible. So, rather than trying to enforce only one representation, one arrangement, at a time, we as creators or curators should expect that users, often with the very best of intentions, will virtually tear our manuscripts and collections apart and put them back together again to suit their own myriad purposes—just as early modern librarians did. And we should prepare our digital resources to withstand this kind of *disbinding* and *dissolution*. This, I argue, will accomplish three things.

[slide 7] It will allow us to: (1) provide greater access (and more use of) digitized manuscripts, (2) maintain *better* intellectual control over these resources than we can by trying to lock them

down, and (3) leave room for new modes of representation, sharing, and discussion as yet unknown.

I. Access through dissolution and disbinding

[slide 8] First, let's look at how access to digitized manuscripts changes in an environment of dissolution and disbinding. Over the last year, I have seen more and more digitized medieval manuscripts turning up in the twitterverse, the blogosphere, and other social media orbits. Often they come directly from the institutions that own them—in this case, on April Fools Day, the Getty museum used Twitter to draw timely attention to a 14th century French manuscript. The tweet links right back to the Getty's digital collections page (http://www.getty.edu/art/gettyguide/artObjectDetails?artobj=2922).

[slide 9] In other instances, institutions are using multiple social media platforms at once. Here, Will Noel, curator of manuscripts at the Walters Art Museum, tweets about a leaf from one of their Islamic manuscripts. The link doesn't take you to the Walters museum site, but instead to a collection on Flickr, a widely used photo sharing website owned by Yahoo. Although the Walters Museum does have an extensive digital gallery of its own, many images from its collection are made available on Flickr under a Creative Commons Attribution-NonCommercial-ShareAlike 2.0 Generic (CC BY-NC-SA 2.0) license, which makes it easy to legally share and reuse these images.

[slide 10] This trend is more than just a top-down outreach campaign run by museums. Web-based resources like those on Flickr are easily discovered by others, and they, too, tweet about what they've found. Here, a user called Medieval Manuscripts has tweeted about a Walters Manuscript available on Flickr, and another user, Medieval World has re-tweeted it, that is, re-

posted the message to all of *their* followers. The link to the object remains in the tweet, so anyone who sees it can get back to it.

[slide 11] These social media efforts are not just self-promotion—not that there's anything wrong with that. They represent a real change in the way digital manuscript collections appear on the Web. Many library-based digital collections rely platforms that, because of how the data is stored and rendered, are not indexed by Google or other search enginges--they are part of what Michael Bergman called the Deep Web (http://hdl.handle.net/2027/spo.3336451.0007.104). Services like Flickr, Twitter, and Facebook push this content to the surface, if you will, drawing the attention of users who are already following, but also leaving a trail by which future users are more likely to find these resources. This is the part where I confess that I don't have data from these projects about how this form of outreach has affected their usage statistics—this would be a clear next step for this project.

II. Control (or something like it) through dissolution and disbinding

As we've just seen, the desire to share digital resources doesn't come exclusively from the top, the collecting institution. [slide 12] And the fact is that the basic right click + save as technology supported by all of our Web browsers basically enables anyone to grab and re-use an image they like. [slide 13] This example is perhaps a librarian's worst nightmare—and I'm not talking about Lucifer. This screenshot is from the Facebook page "The Medieval World." This page, as well as the eponymous Twitter account and blog, are (according to the blog) operated by an undergraduate named Becky. A student of history, she posts images of, and writes about, about the middle ages. (http://themedievalworld.blogspot.com/). She posts interesting stuff, and a lot of it! But unfortunately, she frequently attributes her images partially, or not at all. Images like this one float in cyberspace, without any link—hyper or textual—connecting them to the

manuscript or the repository to which they belong. We can guess, of course, what happened here. She was doing research, or cruising a library or museum website (or even someone else's blog!), saw this, liked it, and grabbed it--not nefariously, but because she wanted to share the wealth, and she could.

[slide 14] This brings me back to Yakel's meditation on containers. She writes, "The importance of archival containers and managing containment, or access, persists and perhaps grows more significant in the digital environment. Digital technologies may even make the containers more critical if they incorporate means of maintaining an authentic context and essential evidence for records of enduring value. Digital technologies also make containment both harder and easier" (141). In 2001, a digital collection without a container as the organizing structure was inconceivable--even though it was already evident that these containers were going to be problematic. Today, we can gate access, make our resources hard to find and use, and go through all kinds of contortions in an attempt to maintain control over how they are encountered. But I suggest that instead, that we support this kind of activity in a strategic way: for example, by applying Creative Commons licenses like the Walters, so that users know they have permission to use the content under certain conditions. Then, by making it easy to cite properly. This could take any number of forms, from offering sample citations to ensuring that bibliographic information is visible from every page, to something more involved, like embedding metadata in the code that can be downloaded, along with the manuscript, directly to reference software like EndNote or Zotero.

III. Transparency through dissolution and disbinding

So far, my argument for creating disbindable, dissoluble digital resources has been largely pragmatic. I have shown you some examples of what I see happening every day online,

and suggested, basically, if you can't beat 'em, join 'em. Be glad that people want to learn, read, see, and share, and make it easy for them to do it properly. Now, I want to turn to slightly more thorny issues, suggesting that, additionally, building our digital collections to be disbound and dissolved is actually the most transparent for us to represent them onine, because it prevents us from obscuring our own interventions and decisions, which might mislead or ortherwise impact users. Here, I must admit, I almost fear to tread, as I'll be commenting on some very prestigious and well done existing projects. I want to be clear that it is not my intention to undermine the importance of these resources, which are a huge boon to many. Instead, I want to show a growing gap between what the web is capable of, and how even the best projects have been planned in a way that doesn't fully take advantage of these strengths.

[slide 15] The British Library's Turning the Pages application—available online as well as in terminals at the library--has troubled me for years because of the way it represents rare treasures. Here, we're looking at the Lindisfarne Gospels, or BL Cotton MS Nero D.iv, a late 7th or early 8th-century Anglo-Saxon manuscript owned by Robert Cotton in the 17th century, and now at the British Library. Turning the Pages shows just a handful of the manuscript's 259 leaves, and that's OK. Digitization needn't be comprehensive to be valuable. The problem, though, is in the way the interface obscures this information. In this view, a user might reasonably think we are looking at "pages 9 and 10," when in reality, these facing pages are f.26v and 27r. And when they turn the page, they might assume—again, reasonably—that the next pages follow consecutively in the original manuscript—just a page flip away! But this, too, is incorrect. By attempting to give the user the true experience of "turning the pages," of the book, this boutique interface crosses over into actually being misleading. Focusing on the individual pages—even just a few of them!—and matching them up to the right metadata, would

give users a much more straightforward understanding of this important manuscript. [slide 16] In fairness I am glad to point out that just this year, the BL has released the digitized Lindisfarne Gospels again in their new Manuscript viewer

(http://www.bl.uk/manuscripts/FullDisplay.aspx?ref=Cotton_MS_Nero_D_IV). This time, not only have they provided the entire manuscript, but this new interface treats each image as exactly that: an image.

[slide 17] The same issue occurs on a larger scale when it comes to reproducing a collection in its entirety. Matthew Parker's Library is one of the largest collections of medieval manuscripts salvaged from the Dissolution of the monasteries. In 1575, he gave nearly 600 books to Corpus Christi Library at Cambridge University. (Summit, Jennifer 103). The collection has continued to grow and remains at Corpus Christi to this day, where it was recently the subject of a unique and important digitization project, The Parker Library on the Web. According to its website, the goal of this project was "to produce a high-resolution digital copy of every imageable page of most manuscripts in the Parker Library of Corpus Christi College " (http://parkerweb.stanford.edu/parker/actions/page?forward=about_project).

In her examination of the Parker library, Summit writes that "what gave value to the books that were preserved was the very restrictiveness of the 'choyse' applied to them. Some books were determined to be library-worthy, in other words, only through distinction from the many other books that were not" (Summit, Jennifer 110). These books are understood to have a particular meaning and role in English history; their inclusion in the Parker Library tells us something about Parker and his environment. No doubt the Parker Library ought to be digitized. But are the nuances of these historical circumstances preserved?

From the start I need to say that this project is a fantastic one. Not only are the resources themselves incredible, but their public documentation and explanation is really thorough. The creators of this project have done nearly everything right...which I fear I'm now going to use against them. It must be confessed that there are certain gaps and impossibilities of representation here--in fact, the project website (to its credit) describes many of them itself. [slide 18] For example, understandably, the project does not capture "a few manuscripts with paper pages which are badly damaged by moisture, or those with very fragile bindings, which at present cannot be successfully imaged in their totality" (http://parkerweb.stanford.edu/parker/actions/page?forward=about project). Decisions about the project scope also impacted which books were included. For example,, "A very small number of [...] printed books, mistakenly catalogued as manuscripts in the 18th century, [...] have been excluded." (http://parkerweb.stanford.edu/parker/actions/page?forward=about project). And finally, the project was developed around a catalog completed in 1912 by M. R. James, though manuscripts acquired after 1912 have also been included (with cataloging provided by the Vaughan and Fines handlist and by the Parker Librarian).

(http://parkerweb.stanford.edu/parker/actions/page?forward=about project).

So, on the one hand, Summit argues that the Parker library as a whole is a specific and important historical artifact. What's in and what's out mattered a great deal at the time that it was formed, and this meaning isn't something we should lose sight of today. Yet, in the process of digitizing the collection, we can't help but do so. Some books are excluded by necessity. Others, declared out of scope. As a result, strangely, while project does provide extensive access to 559 manuscripts, it does not quite represent the Parker Library of Parker's day, nor of James', nor even of the present. Like the BL's Turning the Pages Lindisfarne Gospels, the library represented

in the resource is a fictition. Moreover, its long and complex history is flattened into two stages: the analog, and its digital representation.

To begin to address all of the problems I have mentioned, I suggest a shift in the focus of digitization projects from the boundaries--the covers, the catalog—to fragments or, more specifically, the single digital image, which is in fact the currency in which users are most likely to deal. There are a number of ways an institution might emphasize this shift, and an fact I was surprised to note how many are already doing it very well. For example, the Pierpont Morgan library's database, [slide 19] CORSAIR, not only specifically describes its content as manuscript *images*—even when an entire manuscript is available--but even makes it possible to search image by image. Language usage is one way to strategically prepare a collection for disbinding. Another approach is the choice of platform. [slide 20] For example, when the Walters Museum chose to use Flickr, an application that is explicitly and specifically about sharing photographs, they made a clear statement: "we've got images!" not "we've got manuscripts!" [slide 19] The Beinecke also does this well, while I must admit that my own institution, the University of Michigan, does not—it remains too loyal to the idea of the page turner for my taste.

Summit reminds us that the decisions Parker made to include certain manuscripts in his library, or that Cotton made about how to bind and present his manuscripts, impact to this day the way scholars understand these works (even though they may not be aware of it). Likewise, the decisions we make today about language, interfaces, and platforms will inform our future users, silently shaping how they will understand these digital representations.

[slide 22] As such, we're doing ourselves and future users a disservice when we restrict our digital representations of medieval manuscripts to only one structure and arrangement. By

allowing them to be disbound, dissolving our imagined repositories, we gain ground to represent not just one version (or imagined version) of the past, but the whole complex range--imagine applying filters to the Parker on the Web to watch manuscripts appear and disappear over time! Further, we provide room for new contexts to come and go--acknowledging that it's ok for some to be ephemeral.

When we define an artifact by its boundaries, we tie ourselves to a Reformation-era model of change that Summit has described elsewhere in this way: "Reformation library making is...aligned with, and even contingent upon, the act of library breaking," (Summit 2003 9). In other words, as Sîan Echard puts in, "Each archive or catalog buries the ideas and practices of the previous owner" (202). This is inevitably true in physical collections, and when we define their digital counterparts by the same boundaries, we find ourselves limited in the same way, though we don't need to be. Instead, by de-centralizing boundaries, which entails treating this information as metadata, rather than a natural part of the obejct, and accepting and even planning for a grassroots dissolution of the repository--we can both acknowledge that contexts change, and give them permission to do so. In this way, we maintain all three parts of Summit's recipe: preservation, invention, and disavowal, at the same time.