Yale University, in New Haven, Connecticut, is a textbook case of a large, externally confusing array of libraries, museums, and archives that have benefited in the past from collaborative approaches of various kinds, but are arguably only scratching the surface of what is possible, and some might say absolutely necessary, as we move together into a challenging and uncertain digital future. On the continuum articulated in the OCLC Programs and Research report *Beyond the Silos of the LAMS*, Yale’s cultural heritage institutions have the "contact" and "cooperation" stages down pretty well. On a person-to-person basis, leveraging relationships within a large and long-serving community of cultural heritage professionals and the catalytic factor of a renowned and proactive faculty, it is possible to get quite a bit done across these various institutions in the service of specific projects, courses, and exhibitions. In the move towards the more complex end of the *Silos* continuum—coordination, collaboration, and convergence—Yale’s cultural heritage institutions have, in my estimation, taken exploratory steps, but have quite a long way to go in an effort that seems increasingly necessary for a variety of factors that I’ll discuss as this talk progresses.

For those unfamiliar with the landscape of cultural heritage fiefdoms at Yale, and without numbing you with details:

- There are Museums, from large, like the Yale University Art Gallery, the Yale Center for British Art, and the Peabody Museum of Natural History; to small, like the Yale Collection of Musical Instruments.
- There are Libraries, largely administratively grouped under the umbrella of the Yale University Library, but scattered geographically in about 20 buildings across the campus. The Law Library is administratively separate from the Yale University Library.
- And there are Archives, mostly located within the library system, ranging from large, like the Beinecke Rare Book and Manuscript Library, and the Manuscripts and Archives Department in the Sterling Memorial Library building; to small, for example archival collections maintained by the Divinity Library Special Collections and the Arts Library Special Collections.

I work in Manuscripts and Archives, which it is worth pointing out is the only repository at Yale whose focus is almost entirely on collecting and managing collections of personal papers and organizational records, and serving as the Yale University Archives, though we do have a small but heavily used collection of Yale publications ranging from the early 18th century to the present.

Entirely relevant to the topic of today’s session is the fact that administratively this passel of cultural heritage institutions reports up through not one or two, but four different Deputy
Provosts at Yale. This frequently makes a high-level administrative view of, or approach to issues concerning these institutions difficult to achieve. It also contributes to the reality that cooperative ventures have typically been instigated by specific needs or projects within specific museums, archives, and libraries, and transacted more on the basis of personal relationships than from an overarching organizational rationale or driver. Another very relevant factor in terms of challenges in moving Yale’s LAMs toward deeper, more systemic collaboration is that many of these institutions have substantial endowments of their own, or close relationships with the deans and endowment funding from specific schools and programs within the university. In many ways, it has been easier in the past for individual cultural heritage institutions at Yale just to turn to their own funding sources to solve a local problem than to expend the human capital required to identify, frame, and implement collaborative, inter-institutional solutions.

The good news, I’m happy to report, is that for a variety of reasons this situation appears to be changing at Yale. The pace of change sometimes seems glacial (though with global warming maybe even our conceptualization of glacial needs to be revisited). Moreover, the advent of the digital age often, from an individual perspective like mine at least, magnifies the impact of collaborative initiatives that weren’t designed and implemented yesterday, when the need for them seems so obviously pressing.

In the remainder of this talk, I’m going to sketch out a brief case study of the Collections Collaborative, a grant-funded initiative at Yale that, I think, laid significant groundwork for the current environment of change; talk about two significant opportunities that we have for actually instantiating this change; and conclude with a bunch of questions that I think ought to be, to paraphrase OCLC Programs and Research podcast series theme, "keeping us awake at night," regardless of the particular neck of the cultural heritage woods in which we base our individual professional practice.

**Slide 3** The Collections Collaborative initiative at Yale resulted from a successful application to the Andrew W. Mellon Foundation for funds, in the words of its home page, "to enhance access to and use of the museums, galleries, and library special collections across the university." It lasted from 2005-2008 and was run by a steering committee comprising representatives from various Yale cultural heritage institutions, the faculty, the Provost’s Office, and academic computing. The Collaborative solicited proposals for re-grants of funds from the Mellon award for specific projects, and hosted a series of forums and workshops at Yale to raise awareness of and encourage dialog on the issues the initiative sought to address. I don’t have time to focus on all of the projects funded by Collections Collaborative money, so I’ll briefly discuss two that I think positioned Yale's cultural heritage institutions to continue collaborative efforts beyond the period for which Mellon funding was available. **Slide 4**

- First, a cross-collection searching initiative explored issues, technical infrastructure, and cooperation that would be required in order to provide a true one-stop search interface for end users that would collocate descriptive metadata about all of Yale's rich collection resources. Among other things, this initiative resulted in the creation of a
Second, a project team undertook the development of an XML-based tool for the creation of collection-level guides. Slide 5 The tool, which we call FACT (Finding Aid Creation Tool) is a customization of the widely available X-MetaL software that provides a more word processing-like interface for data input, Slide 6 but still has the XML-based power of enforcing a schema and required descriptive elements to insure that all files created with FACT are well-formed XML and valid to the Yale Best Practices version of the Encoded Archival Description (EAD) XML schema. This has thus far primarily been used by Yale archivists for the creation of traditional finding aids. It was also used to create subject and genre-based guides to the Visual Resources Collection in the Arts Library, and the Library’s Catalog and Metadata Services Department is beginning to use it to create guides for large, subject-based collections of pamphlets and other printed ephemera.

Both of these Collections Collaborative projects prototyped cross-institutional tools and systems that, obviously, require a home and resources beyond the Mellon funding, which brings me to the first of two opportunities that have come onto the horizon at Yale in the past year or so. Slide 7 In September 2008, the Yale Provost created the Office of Digital Assets and Infrastructure (ODAI), headed by Meg Bellinger and reporting directly to the Provost. The Collections Collaborative was one of many factors influencing the creation of this office, and its purpose is to develop strategies and systems for accessing and preserving Yale’s digital assets across the campus, including faculty-created materials that are not in existing repositories. With one creative act, the Yale Provost’s Office established a centralized institutional driver for the types of inter-institutional collaborative efforts that were conceptualized and prototyped as part of the Collections Collaborative.

Slide 8 Moving many of the Collections Collaborative projects beyond prototype to production-level systems or tools is one important role for ODAI, working collaboratively with staff from all of the campus institutions that participated in the original Collaborative. Some examples of these initiatives are creating a truly institution-wide cross-collection search that would go well beyond just collection materials in existing cultural heritage repositories to include things like Office of Public Affairs podcasts and faculty collections; developing a robust Web Services layer around the handle system for persistent identifiers; and creating a campus-wide Digital Preservation Repository service and developing funding mechanisms to sustain it. ODAI is also defining new collaborative initiatives for which it serves as incubator and funding partner. An example of this with which most in today’s audience can probably identify is licensing and implementing a common Digital Asset Management system, initially in partnership with the two art museums and the Peabody Museum of Natural History, but hopefully eventually expanding to include at minimum the Yale University Library as well.
Finally, ODAI is deeply involved in the development of the second opportunity I wanted to discuss. Yale’s purchase in 2007 of the 136-acre former Bayer Health Care campus, seven miles southwest of Yale’s main campus in New Haven, has created the possibility for new space-intensive programs that were previously unthinkable in a tightly packed urban University space. Yale’s new West Campus came with 1.6 million square feet of space in twenty buildings, and ODAI is coordinating the creation of a centralized, multi-format collection digitization facility that will be available for use by all of Yale’s cultural heritage institutions, hopefully starting this summer. One of the largest buildings on the new West Campus has been designated as a collection storage space that will be shared by the museums and the Library, one that will serve as a secure space in which to stage collection materials for mass digitization.

Both ODAI and Yale’s West Campus are in their infancy as components of a complex university, but both offer new impetus for the continued evolution of collaborations among Yale’s cultural heritage institutions towards the kind of deep collaboration and transformational change envisioned by Ken Soehner, as quoted in the Silos report. Much of this nudging along the continuum from contact to possible convergence at Yale is absolutely the result of resources, one of the catalysts or drivers identified in the Silos report. Other catalysts—such as vision, mandate, incentives, change agents, flexibility, and trust—have been active at Yale in varying degrees for decades without moving its varied cultural heritage organizations much beyond fairly superficial cooperation. The deepening of collaborative efforts seen at Yale under the Collections Collaborative happened because the Mellon Foundation was willing to inject substantial resources. The creation of ODAI as an organizational incubator, in terms of both human and financial capital, for collaborations independent of individual campus institutions happened because of resource decisions made at the provostial level. Of the catalysts articulated in the Silos report, at least in the Yale context, it seems that some are infinitely more powerful and effective than others, which probably doesn’t come as a great surprise.

Transforming our personal and organizational conceptualizations of how we collect, organize, describe, maintain, preserve, and provide access to cultural heritage materials is, I believe, in the process of a radical shift that we will either embrace through the transformation of our institutions, or risk being marginalized and possibly, to quote one of my favorite British expressions, made redundant. I want to close with some parting questions that sometimes keep me up at night, but with the caveat that I am speaking from the perspective of someone trained and working as an archivist. What the means, practically speaking, is that I am oriented more towards collection-level control of documentation assembled, maintained, and used by individuals, families, and organizations than I am towards collecting and interpreting individual objects or artifacts, though I have a great appreciation for the latter.

Q1: How rosy is the future of the model Yale has chosen in establishing ODAI independently of any specific campus collecting institution? Are there limits to progress? Is ODAI just another player in the competition for resources on campus? I don’t have even a hunch towards an answer to these questions, but I would surmise that delivering some successes relatively early on that benefit the broad constituency of Yale cultural heritage
institutions, and that impact faculty and students visibly and positively will be critical for ODAI’s success.

**Slide 12** Q2: How do individual collecting institutions on a campus like Yale maintain their cultural uniqueness and provide services to what are often specialized campus constituencies as collaborations deepen and move towards convergence? So much of what we are as institutions has been defined by what we have in our collections, in ways that may be problematic for us as more of our collecting is oriented towards born-digital materials that challenge the paradigm of physicality that has governed our practice for much of our existence. Which leads to ...

**Slide 13** Q3: How well do our current institutional silos prepare us to collect the kinds of materials *right now* that will continue to insure that Yale faculty and students one hundred years from now have access to the same stellar collections of primary sources that their predecessors studying and researching in New Haven in 2009 did? Does our current preoccupation with digitizing what we already have and preserving digital surrogates of our existing physical collections place a set of blinders on our ability to conceptualize how, institutionally, we should be organizing ourselves to effectively develop world-class collections in the born-digital age? When will we start developing the same administrative attitudes towards funding the storage of bits and bytes that we've evolved over the centuries towards funding storage of artwork, physical specimens, and bound or boxed paper products? This is the question that *really* keeps me up at night.

**Slide 14** And finally, Q4: How does our current and evolving infrastructure look from the perspective of new audiences, especially those incoming undergraduates and faculty at Yale five or fifteen or twenty-five years from now? If we haven't shaken it by then, will the access burdens of our physicality-obsessed collection silos seem quaint, or just annoying and off-putting? Will students and faculty with research interests in the art, physical science, and the lives and social interactions of people from the time period of 2010-2020 understand in 2050 and beyond why we have a dearth of primary sources reflecting how those people went about their lives and work?

These are just some of the questions that I wish were the real drivers behind discussions of convergence within Yale's cultural institutions and the administrative and fiscal infrastructure that supports and shapes their work.

Thank you.