

APPRAISING DIGITAL AND PAPER MATERIALS: A CASE STUDY IN
ARCHITECTURAL RECORDS

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Abstract:

Using the Alexander Architectural Archive at the University of Texas at Austin's appraisal practices as a case study, this paper seeks to evaluate the theoretical foundations of appraisal practices in architectural archives through the lens of appraising digital objects as opposed to paper objects. The aesthetic value of architectural records, coupled with their complex formats and relationships, allow for a salient comparison of practices. The findings indicate that in order to provide archival context in an architectural landscape, archiving the archive is a necessary requirement. This is especially true for digital records. Appraising digital records in an architectural landscape does not allow for the benefits of historical distance. Rather, it requires a thorough understanding of the present contextual landscape, of which the archive itself is a part.

Introduction and Overview:

The differences in appraising physical objects and digital objects reveal themselves distinctly in architectural archives. Aside from the obvious differences in technological production, appraisal decisions must account for an extremely large and diverse body of documentation. Terry Cook aptly describes how examining architectural records have potential to yield extraordinary insight into how appraisal decisions are conducted in his 1996 study, *Building an archives: appraisal theory for architectural records*. Cook observes the sheer size of the documentary universe in architectural record creation. He writes, "The architect's work is also integrated with its broader surroundings - not just the physical surroundings of the building, but also the political, social, economic, and cultural influences of the time."¹ He also notes that in addition to their clients, architects document and accommodate, "City planners, environmentalists, citizen lobbying groups, politicians, regulators, bankers, lawyers, engineers, interior designers, contractors, subcontractors, construction managers, suppliers, artists, users, and many others all have their influence on the architectural ideal, and they all create records relating to architecture."² The complexities of architectural records render appraisal decisions for architectural archives a truly difficult one. Given the vast nature of the documentary universe,

¹ Terry Cook, "Building an Archives: Appraisal Theory for Architectural Records," *American Archivist* 59, no. 2 (1996): 136-43, 138.

² *Ibid*, 138.

what does an architectural archive seek to collect? For the purposes of this paper, what appraisal strategies are in place in order to assess what the archive intends to preserve?

Traditional appraisal approaches in architectural archives are based on notions of intrinsic value. It is easy to understand how appraisal based on intrinsic value came to dominate architectural archives; one must look no further than the aesthetic quality of well-executed architectural drawings. When outlining intrinsic value, the National Archives and Record Administration (NARA) specifically cites architectural drawings. NARA's guidelines state that items having "aesthetic or artistic quality" such as "architectural drawings" have intrinsic value and should be retained in their original form.³ Yet, can the same intrinsic value judgments be made with digital records? Roy Rosenzweig would argue that it is impossible to appraise the value of paper materials and digital materials in the same manner. He notes, "[The] ones and zeros lack intrinsic meaning without software and hardware, which constantly change because of technological innovation and competitive market forces."⁴

This paper seeks to examine appraisal practices applied to both digital and paper records in architectural archives. Using the Alexander Architectural Archive, a branch of the University of Texas Libraries' Architecture and Planning Library, as a case study for how theory is applied in practice, appraising physical objects is compared to nascent appraisal practices adopted for digital objects. First, the paper will provide an overview of the issues surrounding architectural record appraisal and design records at large. The paper will then examine how appraisal theories are applied at the Alexander Architectural Archive, providing insight into determining archival value across technological mediums. Throughout the course of this paper, archival theories on

³ National Archives and Records Administration, "Intrinsic Value in Archival Material," Staff Information Paper Number 21, *Archives Library Information Center (ALIC)*, 1982, <http://www.archives.gov/research/alic/reference/archives-resources/archival-material-intrinsic-value.html>.

⁴ Roy Rosenzweig, "Scarcity or Abundance? Preserving the Past in a Digital Era," *The American Historical Review* 108, no. 3 (June 1, 2003): 735–62, doi:10.1086/529596, 742.

appraisal will be evaluated in context. It becomes apparent that preserving design records necessitates a nuanced approach to appraisal. Accordingly, appraisal practices and decisions must be both recorded and accessible in order to comprehend the documentary heritage in which the records were created, acquired, and preserved. Findings will be presented as a way to elucidate how self-archiving the archives' own practices and policies is a way to future proof appraisal decisions.

Defining the Scope of Architectural Records:

The Society of American Archivist's (SAA) publication on managing design and construction records is an attempt at providing guidance for handling the diverse body of architectural records. While the text advocates for considering use when making appraisal decisions and relying on a functional approach to acquisition, there are few implemental guidelines offered.⁵ The documentary universe of architectural work is as proliferous as it is complex. For each architectural project, there are hundreds of documents created in the course of building planning, design, construction, site planning, landscaping, contractual obligations, and subsequent functional history. Copies are made and distributed, often existing in a wide variety of formats. What's more, bodies of work inevitably become fragmented as architects move from site to site, hiring different companies in constructing the plans based on geographical location.

The archive must make decisions about collecting records, given the size of architectural record bodies, and yet implementation is difficult given the records' complex provenance. Not only is there extremely diverse documentation, but they also serve diverse functions and

⁵ Waverly B. Lowell and Tawny Ryan Nelb, *Architectural Records: Managing Design and Construction Records* (Society of American Archivists, 2006).

activities, and represent a wide range of transactions and structures. And, as Cook astutely points out, “what of our un-built heritage, those often grandiose schemes for buildings and other structures that have never seen the light of day, that lost out in the architectural competitions, and yet may reveal much about our architectural world, past and present?”⁶ Tawny Nelb’s examination of the difficulties encountered with appraisal for the Michigan Architecture Project, an effort to document Michigan’s Architectural history by the Bureau of Michigan history, confirms Cook’s observations.⁷

Nelb also points out that among the issues faced, that there may be as many as 170 locations for each body of architectural records. In all of these locations a diverse range of materials related to the *fonds* could exist. Thus:

Each institution or firm may ask, "What is it about architecture that should be documented? Is it the design process? Is it important to have a record of how the design was conceptualized and then developed? Is it the realized project, such as a building, a bridge, a landscape? Is it theory, such as research or the speaking and writing architects might do to educate students, other practitioners, or the general public? Is it the administrative operations that sustain an architect's business, like marketing or other support functions, or human resources management? Or should one document the services architects provide to the community in both the public and professional sectors, in the form of self-regulation or as consultants to their colleagues?" (230)⁸

As computer-aided design becomes adopted in many architectural firms and schools, record creation is even more wide-ranging and vast. Duplicating and sharing records can be done with very little cost, all the while archivists struggle with what it is that we should capture. The temporal nature of computer-aided design (CAD) further complicates appraisal practices in architectural archives.

⁶ Cook, “Building an Archives.” 138.

⁷“There are five fundamental problems with the appraisal of architectural records; they are dispersed, widely duplicated, voluminous, transitory, and vulnerable.” Tawny Nelb, “Architectural Records Appraisal: Discussion of Problems and Strategies for the Documenting Michigan Architecture Project,” *American Archivist* 59, no. 2 (April 1, 1996): 228–39. (228)

⁸ Ibid.

Alex Ball provides a focused overview of the CAD modeling, and the difficulties archives face when presented with CAD material. He summarizes, “Computer-Aided Design (CAD) is, as the name suggests, the use of computers to assist with the design of manufactured products, the built environment, or fictitious environments. More specifically, it refers to software – and originally computer hardware as well – for creating digital models of physical objects.”⁹ There are dozens of CAD software programs, most of which is in a proprietary format. The competitive nature of the software development companies, which include Autodesk, Microsoft and Google, create an environment where it is not cost effective to include high performing export features or make software backwards compatible. In the digital environment, architectural record appraisal must happen very soon after record creation. The landscape for appraising digital objects is thus fundamentally different from appraising physical objects, although the same complexities of quantity and provenance exist.¹⁰

Indeed, when faced with architectural record appraisal, the Chicago Historical Society decided that, “although it was possible to reduce the volume of an architectural collection, it was impossible to set general criteria for appraisal of architectural records.”¹¹ The problematic nature of architectural records discussed here is intertwined in practices across all forms of media and formats. Distinctions and similarities will become clearer through documenting how broad professional approaches and theoretical models are applied to appraisal practices at the Alexander Architectural Archive.

Documenting Appraisal in the Alexander Architectural Archive:

⁹ Alex Ball, *Preserving Computer-Aided Design (CAD)* (Digital Preservation Coalition, April 1, 2013), <http://opus.bath.ac.uk/36455/>.

¹⁰ Ibid.

¹¹ Nelb, “Architectural Records Appraisal,” 232.

The Alexander Architectural Archives' Collection Development Policy is broken up into a mission statement and a set of collection guidelines. The purpose reads that the Archive serves the following function:

To support instruction in the School of Architecture through the doctoral level in architectural design, history, preservation, and community and regional planning, the master's level in landscape architecture and the bachelor level in Interior Design. The Archive is expected to support research in history, art history, American Studies, anthropology, and engineering, as well as that undertaken by design professionals, governmental agencies, and others involved in the preservation and restoration of buildings. The Alexander Architectural Archive is an archival repository and is a part of the Architecture and Planning Library.¹²

The collections policy as stated is quite broad and can allow for a wide variety of interpretations. Given the diversity of architectural records, the collection policy lends itself to an open-ended approach. The guidelines are printed in six-part list, displayed as follows:

- A. Languages: Not applicable.
- B. Chronological Guidelines: No limitations.
- C. Geographical Guidelines: Emphasis will be on architectural records relating to buildings and architectural practices in the United States.
- D. Treatment of Subject: Architectural and urban design records significant to the Southwest region; records which document the architectural development of The University of Texas; representative records which further the understanding of the development of American architecture.
- E. Types of Materials: Architectural records in all formats are collected with the intent of documenting the design process from conception to completion and to record any subsequent changes, commentary or criticism.
- F. Other General Considerations: Acquisitions are primarily by donation. All collections will be reviewed on their individual merits. Supplementing this repository is the Architecture and Planning Library, the Center for American History, the Benson Latin American Collection, the Harry Ransom Humanities Research Center, and the Austin History Center of the Austin Public Library. The Austin History Center collects all architectural records for Travis County with the exception of those related to the University of Texas.¹³

Defining a broad scope is not uncommon for architectural archives; Alan Lathrop's case study documenting appraisal practices at the Northwest Architectural Archives reflects a similarly

¹² "Collection Development Policy | University of Texas at Austin Libraries," accessed April 20, 2014, http://www.lib.utexas.edu/apl/aaa/aaa_coll_dev_policy.html.

¹³ Ibid.

broad collection policy. He observes, “The collection development policy adopted by the archives was to take as broad a sweep as possible, not to rule out anything so long as it fell under the general heading of architecture and the building arts. This has probably resulted in some oddball collections - although the staff doesn't think they are, of course.”¹⁴

Mark Greene astutely points out that a more focused collection policy is one way to ease the burden placed on the archivist. Greene is a proponent of creating a focused collections policy that can assist archives in the appraisal process. In his study *Doing less before it's done to unto you: Reshaping workflows for efficiency before the wolf is at the door*, Green notes, “Collecting policies, in essence, define certain appraisal decisions in advance. Rather than having to physically examine every collection offered, the archivist will know ahead of time what sorts of collections to decline to be able to spend time instead soliciting others.”¹⁵ The Alexander Architectural Archive’s Collections Policy does not outline with precision which collections it will accept, nor does it provide much guidance for the archivist. Greene’s views on collection policies are echoed in the SAA’s *Architectural Records* manual. In the section on appraisal, Waverly Lowell claims “it is easier to accept a collection than to turn one away, a well-written collection policy is always the first and best line of defense.”¹⁶ However, the institutional and political pressures in creating collections policies cannot be ignored.

The self-stated mission of the Alexander Architectural Archive is to support the School of Architecture. Making appraisal decisions is thus intertwined with institutional goals of the School. One benefit of having a broad collections policy is that it leaves more room to build

¹⁴ Alan Lathrop, “Appraisal of Architectural Records in Practice: The Northwest Architectural Archives,” *American Archivist* 59, no. 2 (April 1, 1996): 223.

¹⁵ Mark A. Greene, “Doing Less Before It’s Done Unto You: Reshaping Workflows for Efficiency Before the Wolf Is at the Door,” *RBM: A Journal of Rare Books, Manuscripts and Cultural Heritage* 12, no. 2 (September 21, 2011): 99.

¹⁶ Lowell and Nelb, *Architectural Records*, 71.

donor relationships across a diverse range of agents. Rather than publishing a focused collections policy, the archivist can decide how to implement the collections policy at the point of appraisal, rather than using predefined criteria. It is worth mentioning that Greene advocates for integrating more product less process (MPLP) policies into appraisal at the collection policy level. He writes, “Acquisition decisions should be based not on a case-by-case basis, but on well-planned policies that approach the documentation universe broadly.”¹⁷

This pragmatic approach that allows for less time spent appraising during accession and processing. MPLP appraisal attempts to eliminate weeding activities, and should be based on a balance between resources, user needs, and donor needs, through strongly defining the scope of documentary heritage to be archived. To illustrate his point, Greene purports that:

In making functional decisions archivists should consider-not the traditions of the past-but the mission, audience, and resources of the present; that collections [should] be assessed individually using the most rational, user-friendly approach. MPLP appraisal, similar to MPLP processing, reflects an attempt to balance increasingly limited resources with the growing quantities of potential documentation, to keep user needs first but donor and resource allocator opinions a close second, and to finally become what we need to be as archival professionals – selectors rather than collectors (181).¹⁸

The Archive’s collections policy was last updated in 2004, nine years after Beth Dodd took up residency as Head Librarian for the Alexander and Planning Library and Head Curator for the Alexander Architecture Archive. Despite the broad collections policy, collection level appraisal, series level appraisal, and even item level appraisal, is applied during acquisition. Decisions not reflected in the collections policy are much more narrow, despite being unpublished.

¹⁷ Mark A. Greene, “MPLP: It’s Not Just for Processing Anymore,” *American Archivist* 73, no. 1 (2010): 179.

¹⁸ Greene, “MPLP.”

Appraising Physical Records:

Working with donors is one primary way that Beth Dodd carries out her appraisal mandate. Architectural records encompass an enormous corpus, and architectural drawings are often quite large and fragile. Thus, materiality is a concern with architectural records. Accordingly, traditional archival theories play out in the appraisal practices at the Alexander Architectural Archive. Theodore Schellenberg's assertion that the uniqueness of form and the historical importance of the record in making appraisal decisions is reflected in the collections that the Alexander Architectural Archive has ingested.¹⁹ Intrinsic value appraisal is closely tied to architectural records because of the emphasis on physical form in architecture.

Drawing on the guidelines NARA issues regarding retention based on intrinsic value, archivist Nancy Schrock goes as far as to map out how each recommendation is applied to architectural drawings. She does so because she asserts that, "Any discussion of the intellectual appraisal of architectural records requires an understanding of the physical nature of the materials that constitute them."²⁰ Schrock further justifies basing appraisal of architectural records on intrinsic value, claiming that the aesthetic properties of architectural drawings require carefully considering the material affordances of the records. She writes, "The link between preservation and appraisal is accepted in archival practice, and its application to architectural records is critical."²¹ Despite the wide array of architectural documentary history, Schrock focuses on aesthetic qualities, material condition, and value by association. These are all distinctly Schellenbergian principles. Specifically, historical value coupled with intrinsic value is easily mapped onto the architectural record, which in many cases poses the quality of artworks.

¹⁹ Theodore R. Schellenberg, *The Appraisal of Modern Public Records*, 8 (US Govt. Print. Off., 1956).

²⁰ Nancy Schrock, "Preservation Factors in the Appraisal of Architectural Records," *American Archivist* 59, no. 2 (April 1, 1996): 207.

²¹ *Ibid.*

These values are evident when examining the collections that the Alexander Architectural Archive has ingested over the years. Published finding aids, available through the database Texas Archival Resources Online (TARO), demonstrate appraisal decisions based on widely known architect, firms and manufacturers. The finding aids are also illustrative of the attention given to the architectural drawings themselves.²² Moreover, there is extreme detail provided about the creative works, and in several cases the finding aids are exhaustive and provide an inventory of the drawings. There is even a large artificial collection, with a finding aid and inventory list, that is entirely comprised of architectural drawings. This collection, the Texas Architectural Collection, is an ongoing acquisition, started by Blake Alexander in 1958.²³ Although not within the scope of the official collections policy, the intrinsic value of these records warrant ongoing preservation.

Evaluating historical relevance is also ingrained in the appraisal practices at the Alexander Architectural Archive. The most pertinent example is the active solicitation of materials associated with architect Frank Lloyd Wright, widely considered one of the most prophetic figures in modern American design. His 1935 design, *Falling Water*, is one of the most widely known and well-regarded structures in the American modernist tradition. As early as 1925, the European art magazine *Wendigen* published a serialized compilation of his life works. By the mid-nineteenth century, students were studying his drawings, plans, designs and

²² University of Texas Libraries, "Texas Archival Resources Online (TARO)," Database, n.d., http://www.lib.utexas.edu/taro/browse/browse_aaa1.html.

²³ Attention to the aesthetic and artistic qualities of architectural records can be evidenced through examining the extensive inventory lists and collections revolving around architectural drawings. See: Ibid; Texas Architectural Collection, "Texas Architectural Collection: An Inventory of Drawings, 1897-1999 and Ongoing," <http://www.lib.utexas.edu/taro/utaaa/00049/aaa-00049.html>; LaRoche Greene, "Greene LaRoche and Dahl: An Inventory of Their Collection, 1902-1953," <http://www.lib.utexas.edu/taro/utaaa/00002/aaa-00002.html>; Robert Leon White, "Robert Leon White: An Inventory of His Drawings, 1920-1928," <http://www.lib.utexas.edu/taro/utaaa/00011/aaa-00011.html>.

theoretical concepts in architecture schools across America.²⁴ By all accounts, Frank Lloyd Wright was a world-famous pillar of modern architectural traditions.²⁵ In accordance with SAA and NARA guidelines for determining archival value, the Alexander Architectural Archive has actively sought collections that have associated value through their connections with Wright.

Two of the most visible representations of appraisal based on historical significance in the context of Wright's work are the William A. Storrer Papers and the Charles W. Moore Papers. William A. Storrer is an adjunct/visiting professor at the University of Texas School of Architecture, and a preeminent Frank Lloyd Wright Scholar. The Alexander Architectural Archive actively sought out his papers after he began his affiliation with the School of Architecture. The Archive made an intrinsic value appraisal based on the historical significance of Frank Lloyd Wright and acquired an enormous corpus of his work. Nearly ten years later, students and staff are still processing the collection and adding to its description. The finding aid is immense and detailed, pointing to the significance placed on this collection.²⁶

Charles W. Moore began his career in the mid-nineteenth century, and Frank Lloyd Wright is one of his most documented influences. Moore's culminating work as an architectural student, a dissertation entitled *Water and Architecture*, evidences this influence; this work published posthumously as a book. In his own right, Moore is widely regarded as one of the fathers of postmodern American Architecture, building off of the modernist ideas Wright first introduced.²⁷ In 1985, Moore took up residency at the University of Texas School of

²⁴ The magazine serials were reproduced and bound in 1965, six years after his death. Mrs. Frank Lloyd Wright provides the introduction to this volume, and several architectural masters weigh in on his contributions. Frank Lloyd Wright, *The Work of Frank Lloyd Wright. The Life-Work of the American Architect* (New York: Horizon Press, 1965).

²⁵ Finis Farr, *Frank Lloyd Wright, a Biography* (New York: Scribner, 1961).

²⁶ William Allin Storrer, "William A. Storrer Papers, 1949-2002," accessed April 20, 2014, <http://www.lib.utexas.edu/taro/utaaa/00098/aaa-00098.html>.

²⁷ Charles Moore's life, work, professional accomplishments, teaching ethos, and influences are well documented in several published works. See: Gerald Allen, *Charles Moore*, Monographs on Contemporary Architecture (New

Architecture. Following his death in 1993, the Alexander Architectural Archive endeavored to acquire his work. This collection is one of Beth Dodd's earlier acquisitions; processing started two years after her instatement as Curator and Head Librarian. Despite the fact that the records are incredibly fragmented, divided between his personal archive and library, and archives across the United States ranging from Maine to California, and a significant amount of material ingested is outside of his tenure and role at the School of Architecture, historical significance created enough intrinsic value to retain the entire accessioned. Processing is still ongoing, and began in 1997; the attention to detail on the finding aid further elucidates the appraisal value placed on this collection.²⁸

NARA standards for determining intrinsic value state that "The qualities or characteristics that determine intrinsic value may be physical or intellectual; that is, they may relate to the physical base of the record and the means by which information is recorded on it or they may relate to the information contained in the record. Records with intrinsic value may be retained for either their evidential or informational value."²⁹ Even more directly, NARA guidelines state that one of the determining factors when assessing intrinsic value is the "General and substantial public interest because of direct association with famous or historically significant people, places, things, issues, or events."³⁰ Another factor dictating appraisal decisions is the "value for use in exhibits."³¹ The SAA similarly stresses appraisal based on

York: Whitney Library of Design, 1980); Charles Willard Moore, *Charles W. Moore* (Paris: L'Architecture d'aujourd'hui, 1976).

²⁸ The collection is broken up into three distinct finding aids. Dozens of processors have worked on processing and describing the collection. See: Charles Willard Moore, "The Charles W. Moore Archives, 1950-1992, Undated," accessed April 20, 2014, <http://www.lib.utexas.edu/taro/utaaa/00132/aaa-00132.html>; Charles Willard Moore, "The Charles W. Moore Archives: Project Records, 1965-1992," accessed April 20, 2014, <http://www.lib.utexas.edu/taro/utaaa/00045/aaa-00045.html>; Charles Willard Moore, "The Charles W. Moore Archives: Faculty Papers, 1950-1993," <http://www.lib.utexas.edu/taro/utaaa/00122/aaa-00122.html>.

²⁹ National Archives and Records Administration, "Intrinsic Value in Archival Material."

³⁰ *Ibid.*

³¹ *Ibid.*

historical significance, intrinsic value, exhibit value and informational value.³² Lowell states that architectural archives should “pursue the records of significant firms or individuals, projects, typologies, geographical areas, or chronological periods.”³³

Nevertheless, over time, the Alexander Architectural Archive has had to adjust appraisal practices to accommodate space limitations and funding. Space limitations at the Archive are notable, especially given the nature the architectural records. Schrock observations can be appropriately applied to the Archive: “The sheer volume of material, the dimensions of oversize drawings, and the complexity of the processes that produce both originals and copies can be overwhelming [and] decisions to accept collections may commit an institution to a large investment of funds.”³⁴

An added cost is the staff required to arrange and describe large physical collections with convoluted provenance. Applying cost-analysis to archival appraisal is documented in Paul Erickson and Richard Schuster’s study rooted in practices at the Billy Graham Center Archives. The authors address Frank Boles and Julia Marks Young’s theory that archivists do not apply cost-related decisions, even though cost is an appropriate consideration.³⁵ Erickson and Schuster found that applying a cost-benefit analysis was helpful to inform the selection process. They state “The level of processing and professional attention can vary widely from collection to collection and within different components of a single collection.”³⁶ We see the evidence of this in the amount of staff and work-time devoted to processing large collections at the Alexander

³² For a thorough definition of informational value, see: Schellenberg, *The Appraisal of Modern Public Records*.

³³ Waverly B. Lowell, *Architectural Records: Managing Design and Construction Records* (Chicago, IL: Society of American Archivists, 2006), 72.

³⁴ Schrock, “Preservation Factors in the Appraisal of Architectural Records,” 207.

³⁵ For a full overview of Boles’ observations and assertions regarding appraisal theory and practice it is helpful to read summative text. Although listed as author, he credits Young for her significant contribution; Frank Boles, *Archival Appraisal* (New York: Neal-Schuman Publishers, 1991).

³⁶ Paul Ericksen and Robert Shuster, “Beneficial Shocks: The Place of Processing-Cost Analysis in Archival Administration,” *The American Archivist* 58, no. 1 (January 1, 1995): 36.

Architectural Archive. Beth Dodd, who is the principle appraiser, is astutely aware of storage and processing costs, and actively applies a cost-benefit methodology in appraising. In order to do so, all staff, student assistants, and volunteers, are required to keep a detailed work report, documenting the hours spent on processing.

Dodd takes meticulous notes on storage costs, as well as the expenditures associated with conservation and preservation. Since the Alexander Architectural Archive operates with limited resources, having only two full-time archival staff members and a finite portion of the Architecture and Planning Library allocated for storage, it is essential to factor in a cost-benefit analysis. As these concerns mount over time, appraisal decisions are likely to adapt in order to continue operations. In the case of the Michigan Architecture Project, Nelb observes how resources factor into appraisal decisions:

The appraisal decisions of a large, well-endowed museum that can not only care for its holdings properly but can organize exhibitions and purchase research documents will be quite different than those of an archives with inadequate storage space, no money for proper housing, and barely enough staff to answer reference questions, much less process and arrange a huge group of architectural records. (239)³⁷

In order to address cost limitations and storage concerns, Dodd works with donors in order to acquire a more limited selection of material, rather than an entire body of work.³⁸ In doing so, Dodd is following the appraisal suggestions laid forth in the SAA guidelines for design record management. Lowell proposes that, “working with a donor to acquire a selection of their records is a solution to this [cost] dilemma.”³⁹ This methodology has its roots in Sir Hillary Jenkinson’s original works. In *A Manual of Archival Administration*, Jenkinson claims that donor self-

³⁷ Nelb, “Architectural Records Appraisal.”

³⁸ This appraisal practice was noted through interviews with staff member Donna Coates and through examining the physical materials that outline suggestions for appraisal and acquisition. The physical materials are in a binder in the Alexander Architectural Archive, specifically in Coates’ office.

³⁹ Lowell, *Architectural Records*, 71.

selection is the only justifiable form of appraisal. He writes, “Here then...we have [a place] where destruction may be possible; and in the action of...the actual body which produces the Archives, upon its own documents *before they reach the Archive stage.*”⁴⁰ Dodd’s Jenkinsonian approach is effective when dealing with a documentary universe as extensive as the vast body of work comprising architectural records.

However, applying intrinsic value judgments, historical value, and informational value is not easily translated into the digital world. Kathryn Pierce, PhD Candidate at the School of Information and MA in Architectural History, has been evaluating the changing nature of architectural record creating practices for the last several years. In her 2011 publication on the subject, Pierce notes that despite the fact that architectural archives have only just begun considering appraising and preserving computer-aided design, the architectural community has been using CAD software for the last thirty to forty years.⁴¹ As the archival community continues to adopt CAD software across a multitude of platforms, traditional archivists like Nancy Schrock are understandably concerned with how architectural archives can appraise these born-digital records. She voices the inability of archivists to apply conventional values to records produced through CAD, asking, “Does a drawing generated by computer have aesthetic or artifactual value? Or are we dealing only with information?”⁴²

Her anxiety justifies Kelly Rylance’s observations regarding appraisal. Rylance is sympathetic to the concerns traditional archivists have, and sensitive to the obstacles faced when appraising digital records, noting that “With such an enduring and passionate relationship with

⁴⁰ Hilary Jenkinson, *A Manual of Archive Administration*, A reissue of the rev. 2d ed (London: P. Lund, Humphries, 1965), 150.

⁴¹ Kathryn Pierce, “Collaborative Efforts to Preserve Born-Digital Architectural Records: A Case Study Documenting Present-Day Practice,” *Art Documentation: Bulletin of the Art Libraries Society of North America* 30, no. 2 (Fall 2011): 43.

⁴² Schrock, “Preservation Factors in the Appraisal of Architectural Records,” 212.

the textual object as the primary mode of establishing meaning, it is no wonder that contemporary archival institutions have been struggling with new media formats that are inherently more ephemeral.”⁴³ This observation is particularly evident in architectural archives, where such an emphasis has been placed on intrinsic and informational value. At the Alexander Architectural Archive, appraisal practices are evolving; over the last year, the Archive has embarked on an effort preserve born-digital records using an entirely different set of appraisal methodologies.

Digital Appraisal Opportunities and Challenges:

As German theorist Hans Booms asserted, “Whether or not archivists will be able to develop value concepts to guide them in the formation of the documentary heritage depends largely on how firmly they keep their feet on the ground of reality.”⁴⁴ At the Alexander Architectural Archive, Beth Dodd has her feet firmly on the ground. And, the reality is that the ground is comprised of born-digital records. Rather than rely on professionally issued traditional guidelines for appraisal, the Archive has adopted mixed-method approaches for born-digital records. Drawing on Terry Cook’s macroappraisal methodologies⁴⁵, Helena Samuel’s documentation strategy approach⁴⁶, and Kathryn Pierce’s research⁴⁷, the Archive is endeavoring preserve born-digital architectural records before they become obsolete.

⁴³ Keli Rylance, “Archives and the Intangible,” *Archivaria* 62, no. 62 (2007): 109, <http://journals.sfu.ca/archivar/index.php/archivaria/article/viewArticle/12890>.

⁴⁴ Hans Booms, Hermina Joldersma, and Richard Klumpenhauer, “Society and the Formation of a Documentary Heritage: Issues in the Appraisal of Archival Sources,” *Archivaria* 1, no. 24 (1987): 82, <http://journals.sfu.ca/archivar/index.php/archivaria/article/viewArticle/11415>.

⁴⁵ Terry Cook, “Macroappraisal in Theory and Practice: Origins, Characteristics, and Implementation in Canada, 1950–2000,” *Archival Science* 5, no. 2–4 (December 2005): 101–61, doi:10.1007/s10502-005-9010-2.

⁴⁶ Helen Willa Samuels, “Improving Our Disposition: Documentation Strategy,” *Archivaria* 1, no. 33 (1991), <http://journals.sfu.ca/archivar/index.php/archivaria/article/viewArticle/11804>.

⁴⁷ Pierce, “Collaborative Efforts to Preserve Born-Digital Architectural Records.”

Cook's methodologies detail an analytical approach whereby the functions of an institution are documented and the value is assessed. Rather than relying on the record itself, macroappraisal relies on the institutional functions resulting in the record's creation. Cook provides a terse definition of his approach:

In a single-sentence summary, macroappraisal assesses the societal value of both the functional-structural context and work-place culture in which the records are created and used by their creator(s), and this interrelationship of citizens, groups, organizations – “the public” –with that functional-structural context.⁴⁸

In the context of the Alexander Architectural Archive, macroappraisal translates into a functional analysis of activities in the School of Architecture. In this same text, Cook outlines why it is so essential to understand the functions that the Archive is trying to document: “technological transience of [paper's] computer counterparts, appraisal now has to occur before, at, or shortly after the creation of the records, not some decades later.”⁴⁹ In order understand the practices of record creators and their functions within the School of Architecture; Dodd has increased her outreach efforts by fostering relationships with faculty.⁵⁰

Collaboration in applying macroappraisal methodologies reaches beyond simply developing faculty relationships. The Alexander Architectural Archive works closely with the Graduate School of Information at the University of Texas, partnering with faculty members and students. One example is the student-generated business case management plan for acquiring born-digital records created for the Archive through collaboration with the School of Information's Dr. Patricia Galloway. As part of Dr. Galloway's *Introduction to Electronic and*

⁴⁸ Cook, “Macroappraisal in Theory and Practice,” 101.

⁴⁹ *Ibid.*, 120.

⁵⁰ Having worked at the Alexander Architectural Archive I have seen first hand the emphasis placed on developing relationships with faculty members. For information on the importance of institutional collaboration, see: Doris Malkmus, “Documentation Strategy: Mastodon or Retro-Success?,” *American Archivist* 71, no. 2 (September 1, 2008): 384–409.

Digital Records class⁵¹, a team was assembled and tasked with generating a report documenting practices in the School of Architecture. Titled the *ADAPT Project: The Architectural Design Archival Process of the University of Texas*, the business management plan was truly an exercise in documentation strategy with a goal of providing a way to macroappraise born-digital records.⁵²

Over the course of several weeks, the student team studied record creation practices and tools for digital records in the School of Architecture's advanced studio class, *The Theatre of War*. The resulting *ADAPT Project* was generated through on site documentation and interviews with students and professors at the School of Architecture. The report delivered valuable information about functions resulting in record creation, and demonstrates how born-digital documentation strategies are being developed at the Alexander Architectural Archive. Helena Samuels provides us with this overview of documentation strategy:

The key elements of documentation strategies are an analysis of the universe to be documented, an understanding of the inherent documentary problems, and the formulation of a plan to ensure the adequate documentation of an ongoing issue or activity or geographic area. (126)⁵³

As noted in Samuels' seminal work, while functional analysis and documentation strategies are separate methodologies, used in conjunction, they are mutually supportive.⁵⁴

The documentation provided through the *ADAPT Project* had wide reaching implications. Alan Ball's previously stated observations about CAD drawings were extremely useful. Several different types of CAD software were documented in the

⁵¹ Galloway, Patricia, "INF 389G - Introduction to Electronic and Digital Records," *Class Details*, Fall 2013, https://www.ischool.utexas.edu/courses/class_details?ClassID=3107.

⁵² Jaelyn Georges et al., "ADAPT Project: The Architectural Design Archival Process of the University of Texas," December 10, 2013, <http://marisamendezbrady.files.wordpress.com/2014/04/adapt-business-case.pdf>.

⁵³ Samuels, "Improving Our Disposition."

⁵⁴ *Ibid.*, 127.

advance studio classes, and they quickly become obsolete. What's more, architects and their students are seemingly unconcerned with this fact. However, final products turned into the professors were exclusively portable digital files (PDF). Indeed, the sheer amount of formats used is so problematic that professors at the School of Architecture demand that students submit their computer-aided designs in an open-source and standardized format.⁵⁵ This project provided “an understanding of the context in which records are created: a knowledge of what is to be documented, and the problems of gathering the desired documentation.”⁵⁶

Although the NARA and SAA guidelines for appraising architectural records focus on documenting the processes involved with creating designs, to do so in a digital environment would require more technological capabilities and infrastructure than the Alexander Architectural Archive has access to. Alan Ball notes:

The issue of poor interoperability between CAD systems and between versions is exacerbated by the rate of software development. In order to maintain a competitive edge, there is constant pressure on CAD vendors to release new versions of their software with increased functionality or fewer limitations. Not only does this create instability regarding file formats, it also means that individual versions of CAD packages can become obsolete rather quickly, especially when compared to the required lifespan of the CAD models they create.⁵⁷

In order to preserve the contextual information gleaned from preserving all of the phases of design projects in a CAD environment, an emulation environment is required. The definition of emulation is the use of one computer system to reproduce the functions and capabilities of a different system. There would be no way to simply migrate the files to

⁵⁵ Georges et al., “ADAPT Project: The Architectural Design Archival Process of the University of Texas,” 14–15.

⁵⁶ Samuels, “Improving Our Disposition,” 128.

⁵⁷ Ball, *Preserving Computer-Aided Design (CAD)*, 10.

updated versions and also ensure that all of the file format interpretations remained machine-readable.

Jeff Rothenberg is one of the most vocal proponents of using emulation in order to preserve the context and functionality of born-digital records. He accurately perceives that, “The only way to recreate the behavior of a digital document is to run its original software.”⁵⁸ Representing born-digital records in their native environment is an ideal that should be worked towards in the archival community. Creating emulation environments would allow the CAD process to be documented in architectural archives. Still, citing Margaret Hedstrom’s early work in digital archiving, Roy Rosenzweig notes, “the search for the Holy Grail of digital archiving is premature, unrealistic, and possibly counter-productive.”⁵⁹ The Alexander Architectural Archive operates under the institutional infrastructure provided through the University of Texas. They do not have emulation capabilities, and rely on migrations to preserve digital objects through a campus wide digital repository operating on DSpace software.⁶⁰

Given institutional limitations, appraisal of born-digital objects must work with the resources available. Drawing on documentation strategies and functional analysis, the Alexander Architectural Archive has taken Hedstrom suggestion by “developing solutions that are appropriate, effective, affordable and acceptable to different classes of digital objects that live in different technological and organizational contexts.”⁶¹ Many of the appraisal strategies adopted call into question traditional appraisal practices.

⁵⁸ Jeff Rothenberg, “Avoiding Technological Quicksand,” *The Council on Library and Information Resources*, 1999, 22, http://cours.ebsi.umontreal.ca/sci6116/Ressources_files/%5BCLIR%5Dpub77.pdf.

⁵⁹ Rosenzweig, “Scarcity or Abundance?” 747.

⁶⁰ University of Texas Libraries, “University of Texas Digital Repository,” *UTDR*, n.d., <http://repositories.lib.utexas.edu/>.

⁶¹ Hedstrom, Margaret, “Digital Preservation: Matching Problems, Requirements and Solutions,” July 25, 2001, <https://web.archive.org/web/20010725045334/http://cecssrv1.cecs.missouri.edu/NSFWorkshop/hedpp.html>.

Archivists can no longer afford to passively wait for the record to enter an archival stage of the information lifecycle. Decisions must be made soon after creation because “digital items very quickly become unreadable, or recoverable only at great expense.”⁶² The pragmatic decision made at the Alexander Architectural Archive is to solicit final student designs from the School of Architecture faculty members.

Armed with the knowledge that faculty members demand submissions to be in a relatively stable PDF format, and that these faculty members play a functionally key role, in gathering student work, The Archive is addressing born-digital records within the scope of collecting policy by actively soliciting student submissions from the professors. As Terry Cook observes, archivists must “move from passively gathering available architectural archival collections into their buildings to using macroappraisal tools to build virtual architectural archives.”⁶³ Beth Dodd is endeavoring to do exactly this while also taking a pragmatic approach in deciding which record creators to approach. As Mark Greene points out, appraising archivists must exercise their authority in determining how the collection policy established is implemented. Within this context, Greene points out the obvious: “if no archival theory or practice were allowed unless it was perfect, none would exist.”⁶⁴ In this case, the complexities of architectural renderings call for practical approaches to digital preservation. Without such strategies, a vast body of digital material produced in the School of Architecture would be absent from archive’s holdings.

Digital appraisal approaches described at the Alexander Architectural Archive were implemented in the course of several months, from January 2014-April 2014. Dodd approached

⁶² Rosenzweig, “Scarcity or Abundance?,” 741.

⁶³ Cook, “Building an Archives,” 143.

⁶⁴ Mark Greene, “‘The Surest Proof:’ A Utilitarian Approach to Appraisal,” *Archivaria* 1, no. 45 (1998): 157, <http://journals.sfu.ca/archivar/index.php/archivaria/article/viewArticle/12229>.

associate professor Uli Dangel to solicit the student work in his holdings, acquired through final submissions. Informed by the *ADAPT Project*, Dodd accurately anticipated that the majority of his holdings would capture the records created at the School of Architecture, and also be preservable through institutional means. Dangel was excited about the interest shown in digital preservation and agreed to donate student work, along with his syllabi and related documentation. The collection-level appraisal was well defined before the acquisition took place. Dodd decided to ingest only the student work and related materials pertaining to the courses in which the records were produced. On March 26th 2014, Dodd, along with the Architecture and Digital Projects Librarian, UT Libraries Preservation and Digitization Specialist and a graduate student at the School of Information, travelled to Dangel's office and conducted further appraisal on site. With a goal of preserving the contextual and evidential information, the group acquired Dangel's external hard-drive, numerous optical disks, and transferred the recently created digital records still on Dangel's laptop hard-drive to an external hard-drive.⁶⁵

Workflows are still being developed to address how the collection will be processed, but it is clear that addressing digital appraisal has resulted in a re-evaluation of appraisal practices at large. Rosenzweig's elucidates, "One of the most vexing and interesting features of the digital era is the way that it unsettles traditional arrangements and forces us to ask basic questions that have been there all along."⁶⁶ Another outcome is that implementing Helena Samuels' theories on documentation strategy as a way to create functional analyses for the macroappraisal of digital

⁶⁵ Sources for the evidence provided in relation to appraising Uli Dangel's records was gleaned through observations and interviews conducted from January 2014 – April 2014. All of the information gathered was through my own master's level practicum as part of my "Professional Experience and Project (PEP)" collaboration with the Alexander Architectural Archive. For more information see: School of Information at the University of Texas, "Master's Capstone Requirement," *Capstone*, accessed April 21, 2014, <https://www.ischool.utexas.edu/programs/masters/capstone>; Mendez-Brady, Marisa and Hixon, Austin, "Documenting the PEP: Marisa Mendez-Brady's Digital Asset Management Capstone," University of Texas Wiki, *Grassroots CMS and DAMS*, 2014, <https://wikis.utexas.edu/display/apl/Grassroots+CMS+and+DAMS>.

⁶⁶ Rosenzweig, "Scarcity or Abundance?," 760.

records was a definite success. In the case of the Archive, Doris Malkmus outlines their achievements: “[documentation strategies] promise ongoing stewardship of historical documentation to potential donors, and it signaled this commitment to project funders.”⁶⁷ It is yet to be seen if documentation strategies will be adopted more widely in the archive. If the Alexander Architectural Archives wishes to expand their documentation strategy efforts, Richard Cox provides clear approaches, along with benefits for doing so in his study of architectural record appraisal.⁶⁸

Findings and Conclusions:

Using the Alexander Architectural Archive as a case study demonstrates how various theories are applied with differing degrees across record mediums. However, Gerald Ham bluntly describes commonalities in appraisal across digital and physical records:

[The] diversity of opinion regarding the archivist’s professional duty has created tension between the concept of the archivist as keeper of the institutional record and the archivist as advocate, within the institutional context, for a broader cultural documentation (9).⁶⁹

There is no lack of opinions regarding this conundrum, as demonstrated in the wealth of literature referenced. The schism in professional opinions between soliciting records soon after creation and passively waiting for records to enter the non-active archival phase of their lifecycle has been brewing for the last thirty years.

Proliferation of digital technologies is no doubt intertwined with professional factionalism, as is the unmanageable amount of records produced through governmental and

⁶⁷ Malkmus, “Documentation Strategy,” 407.

⁶⁸ Richard Cox, “The Archival Documentation Strategy and Its Implications for the Appraisal of Architectural Records,” *American Archivist* 59, no. 2 (April 1, 1996): 144–54.

⁶⁹ F. Gerald Ham, *Selecting and Appraising Archives and Manuscripts*, Archival Fundamentals Series (Chicago, Ill: Society of American Archivists, 1993).

business activities in bureaucracies. Archival theorist Hans Booms vocalized the first inklings of modern appraisal challenges decades ago:

We must be serious in our efforts to overcome decisively the most widespread challenge of our profession: to reduce the growing quantity of documentation to the form of a documentary heritage that is of a useable and storable quality. We should no longer seek to derive necessary and useful principles for appraisal from analyses of function; we should strive, rather, to take them directly from the social process to which we are responsible (144).⁷⁰

Documentation strategy, functional analysis, use-based appraisal, macroappraisal, and other appraisal theories and methodologies, attempt to account for Booms visionary reflections. But, it has become clear that striving towards objectivity, as Booms proposed, is a fruitless endeavor. Mark Greene is eager to point this out throughout his publications, truthfully stating that “it is subjective human choice, rather than some objective scientific law, that determines that the recorded evidence of actions performed by juridical entities constitutes "records" and that, by light of further decisions, certain of these "records" are archival.”⁷¹

Many other archivists have also made similar conclusions, although humanists have been musing on objectivity for a century. Michael Foucault’s theories are just as pertinent today as they were when conceived. Noting that archives are only a small representation of past documents and human experience, he writes:

The archive cannot be described in totality; and in its presence it is unavoidable. It emerges in fragments, regions and levels, more fully, no doubt, with greater sharpness, the greater the time that separates us... grouped together in distinct figures, composed together in accordance with multiple relations, maintained or blurred in accordance with specific regularities.”⁷²

Rather than viewing the subjectivity of archival retention as a challenge to be overcome, Foucault argues that this very subjectivity is valuable in and of itself. Striving for objectivity

⁷⁰ Booms, Joldersma, and Klumpenhouwer, “Society and the Formation of a Documentary Heritage,” 101.

⁷¹ Greene, ““ The Surest Proof,” 144.

⁷² Michael Foucault, “The Historical a Priori and the Archive,” in *The Archive*, ed. Charles Merewether, Documents of Contemporary Art (London : Cambridge, Mass: Whitechapel ; MIT Press, 2006), 26–31; 29.

deprives society of a window into past and present identities, because our temporal identity in creating and describing archives is as important as that which we seek to preserve. Well before archivists entered into this discussion, Foucault asks, “Should [the archive] not illuminate, if only in an oblique way, the enunciative field of which it is itself a part?”⁷³

Documenting appraisal decisions is a way to preserve our temporal identity while also justifying the decisions made based on resources and pragmatism. By recording appraisal methodologies and decisions at the collection policy level, the *fonds*, and the archival series level we can future proof against changes in technology and archival practices. As we have seen, there is no perfect appraisal method. Appraisal must encompass theoretical constructs, understanding the functions that lead to record creation, and institutional resources. With both digital records and paper records, archivists can provide a window into the societal contexts governing attitudes towards and methodologies for appraising records. Building on Helena Samuels’ work, Tom Nesmith proposes the following:

Accounting for what the archivists know of [appraisal] process is thus essential to understanding the creation of the record, or the provenance of the record, and the evidence the record now bears, as well as gaps and silences in the record series or fonds (37).⁷⁴

There are many ways in which the Alexander Architectural Archive could document their own appraisal practices and follow Nesmith’s advice to provide “overview statements of what a researcher might need to know about how a function has been conceived and performed over time at an archives.”⁷⁵

⁷³ Ibid., 30.

⁷⁴ Tom Nesmith, “Documenting Appraisal as a Societal-Archival Process: Theory, Practice, and Ethics in the Wake of Helen Willa Samuels,” *Controlling the Past: Documenting Society and Institutions-Essays in Honor of Helen Willa Samuels*. Society of American Archivists, Chicago, 2011, 31–50.

⁷⁵ Ibid., 36.

Primarily, documenting the present role of the Archive as it relates to the School of Architecture. The relationship between institutions is bound to change over time, and providing context helps situate the records. Similarly, recording the key functions at the School of Architecture, as best as they can be ascertained, at the time of acquisition could add to the record creation's context. Additionally, recording current architectural design creating practices would be invaluable to both preserving the record's context. Documenting the technological functions of computer-aided design in architectural practice and instruction, the CAD formats available at the time of creation, and the infrastructure available to preserve born-digital records at the time of acquisition would situate the record within the Archive's own institutional limitations. The Archive could also document any changes in appraisal methodologies applied and what functions, creators, and institutions were considered important to record. The Archive could also document what gaps may exist in the documentary history it preserves and which staff members were involved with appraisal decisions.

At the Alexander Architectural Archive, different appraisal methods are applied to physical collections and digital collections. However, confronting the complexities in appraising and acquiring digital records has created the potential for the Archive to examine its own practices. Across all mediums, the overarching obstacle in appraising architectural records is the enormity of materials within their scope. Moving away from traditional approaches and intrinsic value judgments based on solely aesthetic quality and historical significance seems inevitable. According to Terry Cook, "If architectural archives are to be more than collections of prestigious architects' papers and pretty drawings of famous buildings, we need a theoretical consensus as to why we are appraising."⁷⁶ While a consensus on appraisal is most likely out of reach in the immediate future, archivists can take steps to situate themselves in the transitional times in which

⁷⁶ Cook, "Building an Archives," 137.

we live. Archives are tasked with preserving both paper and digital records, yet provided with very limited resources to fulfill the archival mission. Perhaps, the challenges facing archives will lead us even closer towards the “archivable concept of the archive” Jacques Derrida famously implanted in the minds of archivists and historians alike almost two decades ago.⁷⁷

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⁷⁷ Jacques Derrida, *Archive Fever, Trans. Eric Prenowitz* (Chicago: University of Chicago Press, 1996).

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