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Introduction

by Martin Perschler, Editor

The May 2008 press release announcing the exhibit, “Afghanistan: Hidden Treasures from the National Museum, Kabul,” at the National Gallery of Art in Washington, DC, says it all: “Extraordinary artifacts uncovered in modern-day Afghanistan—once the heart of the Silk Road linking cultures from Asia to the Mediterranean—long thought stolen or destroyed during some 25 years of conflict until the dramatic announcement of their existence in 2003.” Exhibits like this one, where the gripping story of the cultural objects’ discovery, disappearance, and amazing rediscovery shares center stage with the objects themselves, are very rare.

This exhibit, which travels to San Francisco, Houston, and New York before leaving the United States, relates extraordinary stories about the people associated with the objects—people like Alexander the Great, the tradesmen who traversed the Silk Road, and nomadic conquerors. It also includes stories of modern discoverers of many sites and objects featured in the exhibit, from the farmers whose activities in northern Afghanistan led to the discovery of the Bronze Age site of Tepe Fullol, to the archeologist Victor Sarianidi, whose Soviet-Afghan team uncovered the graves of six nomads bedecked in gold jewelry and ornaments—the so-called Bactrian Hoard—at the site of Tillya Tepe in 1978.

The heroic stories of the brave protectors of many cultural objects during 25 years of turmoil began with the Soviet invasion in 1979—Afghans who, in the words of Terry Garcia, executive vice president for Mission Programs at exhibit co-sponsor National Geographic Society, “risked their own safety to hide and protect these treasures.” They did not take risks for personal gain but to preserve objects important to Afghans’ cultural heritage and identity.

Extreme events—from natural disasters to armed conflict—often bring out the best in people. In times of crisis, cultural heritage professionals the world over protect or rescue objects or sites in their care from fire and flood, theft, misuse, neglect, and wanton destruction. They are frequently joined by law enforcement officers, firemen, and soldiers who may not be experts in cultural heritage but recognize its value to society.

All too often we fail to think about those who risk their own lives for the safety of others and things we hold dear. The ICOMOS General Assembly convened

recently in Quebec City, Canada, to contemplate the *genius loci*, or spirit of the place. What would become of the spirit of the place—or the spirit of a culture—if there were no one to look after it in times of crisis?

When elements of our cultural identity are lost, the feelings of despair for both the past and the future can be indescribable. The euphoria that comes with the discovery that all is not lost, that someone cared enough to protect the irreplaceable, can be equally indescribable. The world needs more of the latter.

As editor of *CRM: The Journal of Heritage Stewardship* since 2006, I have derived great satisfaction from knowing that *CRM Journal* reaches a wide audience in the United States and overseas. Whether in paper or electronic format, the journal is now and will, I hope, continue to be available at no cost anywhere in the world. Although some barriers to universal access stubbornly persist (the journal is printed in English only, for instance, and access to the electronic edition presupposes a live and reliable Internet connection), the growing number of essays submitted for publication by cultural research professionals living and working outside the U.S. is a solid indication that the business model is working, that the journal is reaching people on all continents.

As I relinquish the editor's chair and move from the National Park Service to the Cultural Heritage Center in the Bureau of Educational and Cultural Affairs, U.S. Department of State, I leave *CRM Journal* in the capable hands of Barbara Little. Dr. Little, an archeologist with the National Park Service since 1992, has worked in the National Capital Regional Office, the National Register of Historic Places and National Historic Landmarks Program, and is currently in the Washington office Archeology Program. Her commitment to cultural heritage and her experience as a scholar and federal employee will serve the journal well. Readers are invited to send inquiries about publication to Dr. Little at NPS_CRMJournal@nps.gov.

Changeable Degrees of Authenticity¹

by David G. DeLong

Authenticity can be a troubling term, and the quest to identify the real thing is always difficult. Some even question whether the cause itself is valid. For example, the scholarly author of a recent article in the *New York Times Magazine* claimed that aspects of “modernity” and “contamination” could better support social values than “preservation” and “authenticity.” He argued that an ideal of a single, definable “authenticity” limits the cosmopolitanism of choice, that any absolute decree of authenticity is a kind of cultural totalitarianism limiting choice and suppressing pluralism.²

At best, determining what is authentic can be troubling, even when dealing with the deceptively simple issue of original fabric in historic buildings. Folklorist Regina Bendix may have come closest to exposing this problem when she wrote that “the search for authenticity is fundamentally an emotional and moral quest.”³ Lionel Trilling, in considering aspects of literary and artistic authenticity more than 30 years ago, similarly called authenticity a “strenuous moral experience.” Trilling added that authenticity is one of those words, like irony or love, “which are best not talked about if they are to retain any force of meaning.”⁴

This, of course, has had no effect. People seem to be talking about authenticity more than ever. Has the term “authenticity,” like the terms “style” and “heritage,” become so widespread and so loosely applied that it is debased and no longer of use? Probably not, but it desperately needs scrutiny because, with the proper focus, the determination of authenticity can provide a needed lens for the evaluation of preservation efforts.

Literal versus Conceptual Authenticity

This essay identifies several degrees of authenticity in the preservation of buildings that this author has found personally helpful in sorting out the problem.⁵ Literal authenticity—what many would consider the most traditional and authoritative form of building authenticity—can be illustrated by an International Center for Conservation in Rome (ICCROM) project consolidating a 16th-century scrafito façade in Rome. This technique of a dark undercoat with overlapping whitewash, which is scratched back to create patterns, is a lost tradition. It was thus critical to retain the original material wherever possible, although missing areas of scrafito disrupted the perception of the wall as a totality. A grouting of lime and brick dust was injected behind to consolidate the surface, which

was then cleaned to remove the dirt. Small *lacunae* were recreated through re-touching. In areas with large *lacunae*, a neutral render was applied (even though the repeating pattern was known). In this way, as in paintings, the disturbance is left, but made less obvious. The residue of old window frames was also left, treated with a neutral render. Thus, in a time-honored approach, changes over time are allowed to read but are not intrusive. In accord with theories developed by Cesare Brandi, the aesthetic unity has been regained without falsification. As Brandi has written, “restoration must aim to reestablish the potential unity of the work of art, as long as this is possible without producing an artistic or historical forgery and without erasing every trace of the passage of time left on the work of art.”⁶

Conceptual authenticity can be illustrated by another ICCROM example dealing with a 1732 theater façade on the island of Malta. In 1928, it had been converted to a movie theater, then after World War II converted back to a theater. During these changes the façade had weathered badly and disruptive elements, including light sconces and pipes, had been added. Unlike the Roman scrafito example the limestone façade represented a local building tradition that had continued unbroken into the present. It was decided to use local materials and masons to replace or patch damaged stones. To unify the façade, a colored lime wash, also part of the Maltese building tradition, was applied. Thus this theater is an example of conceptual authenticity in that the material is not all original, but the original concept has been regained and aesthetic unity has been reestablished.

Degrees of Authenticity at Fallingwater

How might these approaches be reflected in more current American examples, and what other variations complicate the picture? Considering several buildings by Frank Lloyd Wright serves to further explain the degrees of authenticity within a limited set of variables. Fallingwater, Wright’s masterpiece near Pittsburgh, Pennsylvania (built 1935-1937), provides a complex example of literal authenticity. As a work of modern architecture its elements parallel attributes used to authenticate paintings: Wright was fully in charge of its design and gave it his full attention; it was realized without compromise, honoring Wright’s concept; through visits, Wright’s hand documented the object itself; its provenance is clear; and it was continuously maintained by its original owners with no significant changes.⁷

The Kaufmanns regarded themselves as stewards of a major work of art. Edgar Kaufmann, Jr., gave Fallingwater to the Western Pennsylvania Conservancy with the clear understanding that it was to be preserved as a great work of modern architecture. The Kaufmann family was not to be a feature of the interpretative program, and traces of family occupation were not to be sentimentally retained. Kaufmann also hoped that it could be perceived as a house rather than as a museum, with people able to walk on the rugs and sit on the sofas.

The structural daring of Fallingwater has complicated its preservation. From the beginning, workers were afraid to remove the scaffolding until Wright himself offered to join them beneath the cantilevered slab. Indeed, it deflected almost instantly, and a little more than Wright had predicted. The suspended stair was less problematic, but during annual spring floods floating branches tended to catch behind it and twist it out of shape. In the end, ties were added at the base to hold the stair in place. There have been structural collapses, most notably when a tree fell against the cantilevered trellis. During repairs, it was noted that some of the concrete had been so poorly mixed that it had reverted to sand and gravel.

A far more serious and overly sensationalized problem became apparent a few years ago. The major slabs had deflected further; inspection revealed that steel reinforcement had been wrongly placed by local workers unfamiliar with such daring construction. Also, more steel probably should have been used from the beginning. After studying the problem, structural engineer Robert Sillman reported the grim news that, according to the most advanced structural calculations, Fallingwater could not stand. Wright's intuitional sense of structure defied logic. Sillman said it might survive forever, or it might collapse at any moment. The cantilevered terraces were immediately closed until a solution could be found.

One member of the Fallingwater advisory committee suggested tearing it down and rebuilding it, thus sacrificing all literal authenticity. Another committee member suggested that temporary supports propping up the slab be left forever as a record of the problem. This second suggestion, of course, would have seriously compromised the aesthetic unity of the building.⁸

In the end, the committee supported Sillman's recommendation to thread steel cables through hollow tubes connected to the sides of the beams; these were then post-tensioned to stabilize the slab, much in the manner of a splint along a broken bone. No attempt was made to lift the sagging terraces as their deflection was a visible manifestation of the building's age and an indication of technological limits encountered in its building. More pragmatically, if the slabs had been lifted most of the windows probably would have cracked.

Literal authenticity was compromised, but without sacrifice of original material and with full retention of aesthetic unity. Exterior and interior finishes remained as originally applied; nothing of the original structure was removed or replaced. The new cables can be clearly identified as added reinforcement by anyone who inspects the interior workings of the building. Modestly contrasting plaster plugs along the front of the building identify their location and also provide, at close range, a visible record of modification without compromising artistic integrity.

Conceptual Authenticity at Auldbrass Plantation

Conceptual authenticity presents problems of a different sort: It is a more perilous route of preservation, yet one gaining acceptance particularly when dealing with buildings of the recent past. Some have suggested that given the largely conceptual nature of much modern architecture, authenticity of design might well receive priority over authenticity of material.⁹ One might argue that modern architecture is no more conceptual than Italian Renaissance or Neo-Palladianism, to name only two highly conceptual periods in architecture. But such conceptual authenticity can work best for those modern buildings where the original designer's intentions are clearly and fully documented, and original materials and building technologies are available to realize those intentions fully.

Wright's Auldbrass Plantation near Charleston, South Carolina, provides a compelling case study in conceptual authenticity. It was commissioned in 1938 by Leigh Stevens, an industrial consultant who wanted Wright to envision a southern plantation appropriate for the 20th century. Wright's design eliminated all references to formal symmetry that had been traditional in plantations, instead conceiving a continuous, screen-like enclosure about multiple axes. He envisioned two interconnected lines of low, angled buildings with the main house and guest house along the edge of a lake, and farm buildings and related structures arranged opposite. The main house was relatively small in scale and low in profile, subservient to its supporting buildings. Workers' cottages were located a distance away. Wright invented a unique, angled wall system that he used throughout. The result was a light, permeable enclosure without exact parallel. Construction began in 1940, but work was far from smooth or continuous, complicating evaluations of authenticity. By December 1941, construction was sufficiently advanced to excite local interest. An article in the *Charleston News and Courier* ridiculed the place as an "angled crazy house." Stevens forbade any further visitation, and for many years the plantation was never published.

There were many problems with construction such as angles and roof heights that did not quite meet and insufficiently cured cypress that twisted out of shape. Wright did not visit the site until several years after construction had begun, thus construction was not documented by the architect. On-site supervision by one of his inexperienced apprentices was weak. Insensitive changes by the client—such as reconfiguring the toilets and reassigning rooms—further compromised Wright's vision. Soon after the outbreak of World War II, construction halted, leaving the plantation unfinished.

When construction resumed after the war, Stevens's new wife made disfiguring changes like painting the exposed brick surfaces, adding drapes and heavily upholstered furniture, and enclosing a covered portico to create a kitchen more to her liking. Her desire for a house of pastel, genteel charm was totally at

FIGURE 1

This view, taken about 1979, shows Auldbrass Plantation in South Carolina in a deteriorated state. (Courtesy of Joe Silver)



odds with the rustic lodge Stevens and Wright envisioned. Stevens hated what she did and eventually divorced her, but the changes remained. In March 1952, the barn, chicken coops, and cattle barns burned, and Stevens could not afford to replace them.

By 1987, Auldbrass Plantation had fallen into a ruinous, abandoned state. (Figure 1) It would not have survived more than a couple of years without drastic intervention, and it had little, if any, meaning as an abandoned shell. Around this time the property was bought by the Hollywood producer Joel Silver, who embarked upon an ambitious and thorough research campaign with the goal of realizing Wright's original concept. Buildings destroyed by the 1952 fire were rebuilt by following the original working drawings. To record their more recent date, a slightly different species of cypress was used, with a different grain, achieving something in the manner of a stippled infill.

Other buildings were restored, retaining original materials where possible, so parts of the complex reflect a literal authenticity. But the dominating impression is one of conceptual authenticity, for certain significant elements that Wright had envisioned but that had never been built were now realized. Thus, the driveways were at last lined with the defining edges that Wright wanted; they were essential to his vision of unified components. The pool, never realized, was built as originally designed.

Copper roofs that Wright had originally planned were installed, replacing a shapeless mass of substitute roofing material. With the correct roofs in place, the crisp linearity of Wright's design emerged. The original copper designs for leaders at the tips of the broad overhangs were fabricated for the first time and replaced the wood substitutes and conventional downspouts that had marred the structural clarity of the house. Furniture and air conditioning units added by

FIGURE 2
This view, taken around 2001, shows Auldbrass Plantation as restored. (Anthony Peres, photographer)



Stevens's wife were removed and original furniture refurbished, or new furniture rebuilt, according to Wright's original drawings and specifications. A dining room designed by Wright in 1953 was at last added within the breeze way linking the main house and original kitchen.

The plantation was thus restored to a state of completion that had never existed before—somewhat in the manner famously advocated by the 19th-century French architect and restorer Viollet-le-Duc. (Figure 2) The design as a work of art was captured, taking us to the very edge of, and perhaps just over, the ethical limits of conceptual authenticity. By no means is this preservation in the conventional sense. But in this particular instance, with Wright's design fully documented, with original materials and building technologies still part of an ongoing tradition, and with eye-witnesses to the original buildings, it seems justifiable.

Authenticity at Other Frank Lloyd Wright Sites

One very real risk is that in the name of such conceptual authenticity, serious mistakes will be rationalized. Work on the Solomon R. Guggenheim Museum in New York City provides one possible example. There is no question that Wright's original concept called for a seamless continuity of exterior surfaces. Given the technological limitations of the 1950s, this was not possible. Under Wright's direction, a vinyl plastic paint was applied to the exterior surface. This exterior coating helped conceal underlying cracks and flaws but did not totally hide them. The building as completed thus reflects a noble struggle and brings into sharper focus Wright's structural daring.

Some people at the museum would like to get rid of these surface imperfections and achieve the complete continuity Wright first imagined. Synthetic, shell-like encasements that would achieve this are now available and would

produce the desired result. At first, this possibility seems very attractive but on further thought reveals a major flaw. Conceptual authenticity—when it is risked—should be framed within the technological limits of the building’s original era. Unlike Fallingwater, where a clearly differentiated structural bracing was placed within the building and had no visible effect, here the retrofit would significantly change the appearance of the building itself. Had such a coating been available when Wright designed the building, his concept might well have been different. Arguably the most appropriate option would be re-treating the original surface with a similar paint, leaving the original’s patina of flaws as a record of the fallibility of its concrete and a demonstration of Wright’s refusal to be bound by conventional limits of technology.

Resolving issues of literal versus conceptual authenticity can often lead to conflicts, as in the restoration of the Darwin D. Martin House in Buffalo, New York, one of Wright’s early masterpieces. Disfiguring changes made to accommodate Mrs. Martin’s special needs in her later years had compromised the building’s integrity. One group of advisors argued that the literal authenticity of these changes should be retained as the record of a design error. But surely the artistic integrity of the design is of greater significance than the physical challenges Martin encountered in her later years. Indeed, the alterations have been removed, and conceptual authenticity recaptured.

Another degree of authenticity is surface authenticity, a drastic approach that sometimes can be justified to save great structures. For example, the temples at Abu Simbel were relocated to escape the waters of the Aswan Dam, and Borobudur, the great Buddhist temple in Indonesia, was restabilized with an inner concrete frame of considerable girth to keep it from sliding down the hill.

Wright’s Freeman House in Los Angeles shows the often problematic nature of a restoration conducted according to principles of surface authenticity. Wright’s California block houses of the early 1920s were ravishing as designs, but failures in terms of their experimental technology. The blocks have leaked and disintegrated, and the structural underpinnings have in some cases worn away. At the Freeman House a complicated, massive concrete frame will replace the original wall-bearing structure. This is deemed necessary to preserve the exterior appearance of the original design. The blocks themselves will need to be removed and reattached or replaced if damaged beyond repair. What will be lost is the fragility of Wright’s original structure. In the case of so simple and small a house, the new and mighty structural retrofit might be an instance of overkill. The house will be saved, but what was once structural will have been transformed into decorative sheathing.

Another degree of authenticity—fragmented authenticity—can be illustrated by Wright’s Little House in Minnesota, which was dismantled and its parts shipped off to various museums. The Metropolitan Museum of Art received the

main living room and reinstalled it, but with necessarily compromised results. Experiencing the totality of his designs is essential to understanding Wright. That is not possible with such a fragment, however expert its re-installation, and however original its component parts.

Such fragmentary authenticity could be said to work in certain very restricted situations, such as with the office Wright designed for Edgar Kaufmann, Sr. Here the concept itself was of a fragment, a series of screen-like elements installed within the Kaufmann department store. As with Fallingwater, Wright gave the design full attention: It was realized as he envisioned, and the provenance remained clear. When the store was sold, the office was carefully recorded, dismantled, and put in storage until an appropriate setting could be found. In this case, it has made a more believable transition to a museum setting at the Victoria and Albert Museum in London.

Conceptual Authenticity?

Different degrees of authenticity at one site can be illustrated at Sardis, an archeological site in Turkey on which I worked in the late 1960s. The Hellenistic temple of Artemis reflects literal authenticity, as one would expect at an archeological site. It was excavated, with most stones left where they had fallen. Nearby, at an early-3rd-century marble court, a grand forecourt to a vast Roman bath, fragments were fitted together in the field like a giant puzzle. When new column capitals were needed to complete the aedicular, they were hand carved in a traditional manner but with the acanthus leaves left unveined as an architectural stipple. Column bases had been found in situ, and the location of each piece of the fallen frieze could be determined by the dedicatory inscription. The reconstruction of the lower story was a matter of surface authenticity, as a new reinforced concrete frame had been built behind the pavilions to provide needed support.

One of my roles at the site was to create a conjectural restoration of the second story. Plenty of parts existed, but many of them failed to match. There was a mixture of square and round column shafts, for example, that had been excavated from the site. I was asked to use them all, although it seemed that some might have been dragged there from other locations in preparation for feeding them to an adjacent lime kiln that was set up after the city had been abandoned. The resulting solution was highly speculative but managed to use all the pieces. I expected the actual restoration to stop with the first floor.

Upon returning to the site several years later, I was astounded to see the second story built. The result could be termed conjecturally authentic, as it was based on carefully studied archeological evidence but without firm knowledge of the actual details. It serves a valid didactic purpose but should not be considered authentic in any conventional sense. Some would simply call it inauthentic,

but even that term raises troubling issues, such as the claim that everything is authentic in some way.

Is it necessary to be so accommodating in historic preservation? Hopefully not, otherwise we are left with what Alexander Pope (1688-1744) wrote in 1733: “one truth is clear, whatever is, is right.”¹⁰

David G. DeLong is emeritus professor of architecture at the University of Pennsylvania where he was chair of the graduate program in historic preservation from 1984 to 1997.

Notes

- 1 This essay is based on an address presented at the Fifth National Forum on Historic Preservation Practice, “A Critical Look at Authenticity and Historic Preservation,” March 23-25, 2006, at Goucher College, Baltimore, Maryland.
- 2 Kwame Anthony Appiah, “Toward a New Cosmopolitanism,” *New York Times Magazine* (January 1, 2006): 30-37, 52. Appiah is a native of Ghana who teaches at Princeton University.
- 3 Regina Bendix, *In Search of Authenticity: The Formation of Folklore Studies* (Madison: The University of Wisconsin Press, 1997), 7.
- 4 Lionel Trilling, *Sincerity and Authenticity* (Cambridge, MA: Harvard University Press, 1971), 11, 120.
- 5 I will not attempt to deal with cultural landscapes or historic districts. I am grateful to Jeanne Marie Teutonico—now the associate director of the Getty Conservation Institute—for sharing her earlier work at ICCROM with me.
- 6 Cesare Brandi, “Theory of Restoration I,” in *Historical and Philosophical Issues in the Conservation of Cultural Heritage*, ed. Nicholas Stanley Price, M. Kirby Talley, Jr., and Alessandra Melucco Vaccaro (Los Angeles, CA: The Getty Conservation Institute, 1996), 230-235, 231.
- 7 These attributes of authenticity, which I have adapted from those applied to painting, have been outlined by Charles Rhyne, a professor at Reed College who has authenticated paintings for major museums. See Charles S. Rhyne, “Deaccessioning John Constable: The Complexity of Authenticity,” paper presented in the session *Authenticity in Art History* at the Annual Meeting of the College Art Association, New York City, February 17, 1994; available online at <http://www.reed.edu/~crhyne/papers/deaccessioning.html>, accessed on May 2, 2008. I am grateful to Professor Rhyne for bringing this paper to my attention.
- 8 Edgar Kaufmann, Jr., asked that after his death the Western Pennsylvania Conservancy establish an advisory committee to help oversee the preservation and interpretation of Fallingwater. He named those he wished to serve as charter members, including the author.
- 9 For example see Alan Powers, “Style or Substance: What are We Trying to Conserve?” in *Architecture*, ed. Susan Macdonald (Shaftesbury, Dorset, England: Donhead, 2001), 3-11.
- 10 Alexander Pope, *An Essay on Man* (1733), Epistle I, Stanza X.

An Interview with Weiming Lu



(Courtesy of Weiming Lu)

Weiming Lu is an internationally recognized urban planner and designer. He recently retired as president of Lowertown Redevelopment Corporation in St. Paul, Minnesota, which became a national model of successful central city revitalization through public-private partnerships. Lu received his Master's degree in Regional Planning in 1957 from the Department of City and Regional Planning at the University of North Carolina-Chapel Hill. His career took him to planning positions in Minneapolis, Dallas, and St. Paul. Lu is known for his expertise in blending old and new design. He has served as a consultant and advisor on numerous public and private projects in the United States and abroad, including the reconstruction of South Central Los Angeles following the 1992 riots and the establishment of the Chattanooga Riverfront Corporation in Tennessee, the CentreVenture Development Corporation to revitalize downtown Winnipeg, Manitoba, and the United Nations Planning Team in Taiwan. Lu also served as member of the jury for the international design competition for the Beijing 2008 Olympic Games. Currently, Lu is a planning advisor to the Mayor of Beijing; a trustee of the Minneapolis Foundation; and a member of the Committee of 100, the organization of American citizens of Chinese descent; and as a panelist for the National Trust for Historic Preservation's Favrot Family grants.

Antoinette J. Lee (AJL), former CRM Journal editor, interviewed Lu on November 19, 2007.

AJL: Tell us about your childhood and early education. How did they influence your interest in architecture and planning?

WL: I grew up in an architect's family in China. My father was educated in China and France and was influenced by the Modernists. He translated Le Corbusier's book, *Urbanisme*, into Chinese. He also had a strong interest in classic Chinese literature and the revival of classic Chinese architecture. He followed the principles of Taoism, which emphasizes the harmonious relationship of man to nature and the universe. For this reason, he admired the work of Frank Lloyd Wright, who combined Western and Eastern aesthetics, as is seen most beautifully in Fallingwater. He taught me the importance of city design. It was not enough to design good buildings; architects should seek a proper relationship between buildings and their surroundings.

My father was a civil service high commissioner at the Examination Yuan under

the Nationalist government. He practiced architecture and taught planning and architecture all his life. He enjoyed a close and warm relationship with his students beyond classes. When they visited our home, my mother often served food after their gatherings late at night. His teaching had a lasting influence on his students.

I was very impressed by his model of teaching and mentoring. When I had opportunities to lecture or to mentor students at the Massachusetts Institute of Technology (MIT), Harvard University, Tsinghua University, Tokyo University, and the University of Minnesota, I tried to emulate his model.

AJL: Where did you study architecture and planning? Which professors were especially influential in your studies and steered you towards a career in planning and preservation?

WL: When I was growing up in Shanghai and Nanjing, I studied engineering in Jiao Tong University, which was the MIT of China. When the school closed in 1949 as fighting approached Shanghai, we moved to Taiwan, where I finished college. In 1953, I came to the United States to study engineering at the University of Minnesota. After I finished my degree in engineering a year later, I enrolled at the University of North Carolina-Chapel Hill (UNC) in its graduate planning program. I received an assistantship to support my studies.

John A. Parker founded the Department of City and Regional Planning at UNC in 1946, which was one of the first planning programs in the U.S. based on broad interdisciplinary training rather than merely physical design. The faculty included Stuart Chapin, the model social science scholar and original author of the influential book, *Urban Land Use Planning*; Jim Webb, a skillful urban designer and practitioner, who contributed to the original plan for the Research Triangle Park; plus political scientists and legal experts.

At that time, the school was small—only about five students in each class. Not only did we receive a great deal of personal attention from leading figures in the planning field, we benefited from a broad planning education. I completed my course work in 1956 and received my M.R.P. degree in 1957.

Throughout my life, I benefited and learned from many other outstanding thinkers and academics. They included Kevin Lynch, who taught at MIT and wrote the influential books, *The Image of the City* [1960], *What Time is This Place?* [1972], and *Managing the Sense of a Region* [1972]. Lynch became a valued teacher and a good friend. I invited him to participate in planning projects later in my career. Other teachers and friends included Adlene Harrison, mayor pro-tem of Dallas, Texas; Bryghte Godbold, director, Goals for Dallas program; Phil Nason, a St. Paul banker; George Latimer, mayor of St. Paul; Norma Olson, a neighborhood leader; and Bishop David Preus of the Evangelical Lutheran

Church of America. I learned a great deal from all of these people, especially the art of rebuilding cities.

AJL: Where did you travel during this early period and what influence did these travels have on your outlook on planning?

WL: After working as a planner in Kansas City for two years, I saved enough money to go to Europe to look at planning and housing.

In England, I studied the work of the London County Council, the Greater London plan, and the new towns. On the Continent, I traveled to 10 different countries and studied the reconstruction that had taken place after the destruction of World War II as well as the many new towns being developed in Sweden and Denmark. Later, when invited to participate in a Polish and American preservation conference, I saw the reconstruction of Warsaw and the conservation of Krakow. They were especially inspiring and made a lasting impression on me. Serving as visiting professor at the Tokyo University gave me the opportunity to travel through different parts of Japan and experience both the intensity of urban life in a world metropolis and the tranquility of Zen gardens in Kyoto.

AJL: What was the status of planning in the United States in the late 1950s and early 1960s, when you began your career as a planner?

WL: During the 1950s, the Federal Government was providing massive amounts of funding for urban renewal projects and interstate highway construction. These programs had a great impact on cities. Little attention was given to preserving the older fabric or to the significant displacement of the poorer residents. Political leaders were attracted to these federal programs and had a hard time resisting them. Many enlightened planners questioned the programs, as physical renewal did not bring social regeneration, but they could not stop them.

AJL: Tell us about your work in Minneapolis. What was happening in the city during this period and what did you do to establish historic preservation as part of city planning there?

WL: When I returned to the United States from Europe, I thought I might go to the West Coast for a job. Instead, while visiting Minneapolis, I was offered a job, where I worked for 12 years on a variety of planning efforts, including neighborhood conservation, downtown development, and the first metropolitan plan.

When I was in Minneapolis, I admired the elegant Richardsonian-inspired Metropolitan Building, which had a beautiful atrium. Unfortunately, it was demolished in 1961 as part of a major urban renewal effort that saw about 60 acres of

the downtown area razed and replaced. Seeing the destruction of the Metropolitan Building, I was saddened and determined to do something about it.

As I was working on the downtown plan and the citywide urban design study, I soon initiated and engaged architectural historian Donald Tolbert of the University of Minnesota to do a historical survey, and I retained noted legal expert Richard Babcock of Chicago to recommend critical provisions for state historic preservation legislation. Working with the Minneapolis Committee on Urban Environment, I was able to get the Minnesota state legislature's attention, and a bill based upon our recommendations was introduced in 1971. I testified at the capitol and recommended two additional provisions. One was for parking variances for historic rehabilitation, and the second was a stay of demolition. Both provisions passed with the Minnesota Historic District Act that year. The renovation of Butler Square occurred soon afterwards. That was the beginning of preservation in Minnesota cities and the rest is history. Many recognize that this act, plus the Tax Increment Financing Act, were introduced in Minneapolis but actually benefited the whole state. Our downtown plan also brought about Nicollet Mall, the skyways, the fringe parking system, and the recovery of downtown. Our work around the University the Minnesota also brought collaboration between town and gown and the conservation of neighborhoods close to the university.

AJL: Tell about your subsequent work in Dallas, Texas. What was the status of historic preservation in that city and what did you accomplish there?

WL: I joined the Dallas Planning Department as its deputy planning director for urban design in July 1971. The city asked me to head an active urban design program as an expansion of the planning department. I initiated a broad range of activities, from historic preservation to downtown development, from arts district to escarpment protection. I recruited a number of talented staff members from different parts of the country.

Soon after I joined the city government, I was invited by former mayor Wallace Savage to help save the Swiss Avenue area from deterioration and destruction. After study, I recommended a historic district designation as a way to save the neighborhood. The result was the Swiss Avenue Historic District, the beginning of the Dallas preservation movement. Later, preservation spread to other sections of the city.

The Texas School Book Depository that played such a key role in the assassination of President John F. Kennedy in 1963 was about to be converted to a commercial museum. We first went to the State Historic Commission to seek state historical designation, but were stalled by residents who wanted to have the building torn down altogether to erase that awful memory. Of course, we could not just stop there. After several years of work and hundreds of meetings,

we succeeded under home rule to bring about local designation for 55 acres, including the Book Depository, and substantial down zoning of the area.

Later, we persuaded Dallas County to acquire the building for its administrative offices, and saved the sixth floor for a historical museum. These successes grew out of our sense of historic responsibility, sensitive preservation guidelines, and realistic economic studies to prove that the area could be viable and provide developers and property owners with a reasonable return. And above all, our success in gathering political support helped us prevent demolition and achieve that important preservation mission. Many believe that the explosive development in the 1970s and 1980s would have otherwise wiped out the downtown district, including the Book Depository.

Among our other initiatives was the protection of the sensitive escarpment, which was a bluff along the southwest side of Dallas. Without protection, the bluff could have become severely eroded. We limited the intrusion of roadways, developed a number of ecological guidelines for development, and had the city acquire 300 acres of the sensitive zone as open space.

This was a critical period in the development of Dallas. I was also lucky to work with a number of wonderful leaders to envision an arts district. Many enlightened people from the city government and the private sector committed themselves to the arts district, which brought together the Dallas Museum of Fine Arts, the symphony, ballet, opera, and theater. However, this period did not last and the working environment changed drastically when a developer was elected as mayor. Support for urban design and preservation soon disappeared, and I regrettably believed it was time for me to move on.

AJL: Much of your career was focused on the Lowertown area of St. Paul. Would you tell us what Lowertown was like in the late 1970s? What was the plan for the area?



FIGURE 1
This photograph shows the Lowertown area of St. Paul, MN, before revitalization. The area was characterized by empty lots and underutilized older buildings. (Courtesy of Weiming Lu)

WL: In 1979, I began work with the Lowertown Redevelopment Corporation as director of design and became the organization's president in 1981. This opportunity allowed me to be my own boss and to exert my own skills on the area. I remained there 26 years. Seeing that our mission had essentially been accomplished, I decided to step down in 2006. The corporation decided to shut down after a strategic review. I am pleased that we have set up a Lowertown Future Fund with the remaining resources to support the community we have built.

One must understand how Lowertown developed historically. The area grew up during the steamboat days along the Lower Levee and then further expanded during the railroad era. Between 1880 and 1920, the area filled in with monuments to the early transportation era. As the transportation systems changed to highways and automobiles, the area fell into disuse. In the late 1970s, Lowertown was a deteriorated warehouse district. (Figure 1)

From the beginning, we hoped to transform the place so that people would come back to the city. Even with abandonment and deterioration, the area had a number of strong assets, including its downtown location, its Mississippi riverfront, and many fine historic buildings, and we believed we needed to create a new vision to rejuvenate the area.

Former St. Paul mayor George Latimer laid the foundation for the Lowertown Redevelopment Corporation, a private organization with a public purpose. An enlightened and dedicated eight-member board of directors was made up of business leaders, pastors, and others who represented a good cross section of the community. The corporation undertook the daunting challenge of renovating the Lowertown district, which covers 12 blocks of historic buildings, abandoned rail yards, and riverfront, making up one-third of downtown St. Paul.

To accomplish our mission, the corporation focused on three types of activities: first as a *design center* to create a new vision for the area; second as a *marketing office* to make people believe in our vision and the market potential for the area and willing to invest; and, third, as a *development bank* to fill the gap in financing.

At the beginning, our former mayor promised to our funder, the McKnight Foundation, that \$10 million would result in \$100 million in investment. For an area that suffered from decades of disinvestment, that was quite an ambitious goal. Between 1969 and 1978, there was \$22 million in investment in this 180-acre area, of which \$16 million was for an industrial plant and only \$6 million for the rest of the area. Nevertheless, the foundation shared our broad social objectives in renewing the historic district, building affordable housing, and adding jobs, and thus boldly set aside funds and supported our mission.

Through persistent efforts and many successes and failures, our corporation actually generated \$750 million in investment, or seven-and-a-half times the original goal. Through discipline and successful negotiations, the corporation attracted \$5 to \$35 dollars in public and private money for every dollar it invested in a project. The tax base increased six-fold from \$850,000 in 1979 to \$5 million in 2005. The project resulted in 2,600 housing units and added and retained 12,000 jobs. The leveraging or multiplying effect was incredible. The social goals achieved were most satisfying.

With the concentration of old warehouses and factories, we saw the potential for fostering a sense of place. We believed that new development should harmonize with the existing fabric of the community. The corporation's unique partnership with the City of St. Paul and the private sector resulted in a successful development strategy for the district.

The goal of Lowertown was to "create an environment where creativity is cherished and entrepreneurship is supported; where one can fill the needs for com-

munity and provide an outlet for a civic spirit.” From the beginning, we aimed to build a community, rather than just do projects, and promoted a vision for a new urban village. This vision called for a place with thriving businesses and plentiful jobs.

Throughout the process, we provided housing for people of all ages and economic backgrounds. We were committed to avoiding displacement. Each project was different with different types of housing, different financing, and different project sponsors, particularly nonprofit groups. We also worked with Section 8 projects and senior citizen housing. We retained and expanded the single room occupancy facilities. We used city financing and foundation grants to subsidize some of the projects. Sweat equity was an important part of the artist housing project. Today, 25 percent of Lowertown’s housing is dedicated to people with low and moderate incomes. It also boasts one of the highest concentrations of working artists in cities across the nation—500 and growing at last count. Of course, the area also includes both rehabilitated and new housing for a range of income groups, including some expensive housing as well.

AJL: Please summarize the evolution of Lowertown over the next two to three decades. What tools were available for the revitalization of the area? How did you proceed? What did you expect would happen? Did the redevelopment of the area turn out as you envisioned it would?

WL: The Lowertown Development Corporation played a number of important roles. Sometimes, we sought the support of our political leaders in the design and development process. Other times, they asked for our advice on specific projects. Sometimes, the corporation mediated disputes between developers and city agencies. When a suitable compromise was unattainable with developers, the corporation took its case to public forums. We also cultivated media coverage to influence public opinion and rally public support. We worked closely with neighborhoods and established trust and credibility with them.

We implemented design guidelines for new and rehabilitated projects. We preferred to rely on creative dialogue rather than regulatory power in our design process. We strove to preserve the historic context through a few selective guidelines, while giving architects maximum room for creativity.

One of the first steps we took was the survey of historic properties in the area and the nomination of a 12-block area of Lowertown to the National Register of Historic Places. With the listing in place in 1983, we marketed the area’s potential for generating millions of dollars in historic rehabilitation tax credits. We attracted investors from near and far, including developers from Philadelphia, Boston, Chicago, and Montreal, as well as the Twin Cities. In the end, all but 4 of the area’s 46 buildings were successfully rehabilitated. One was lost to fire,



FIGURE 2
 Today, the Lowertown area of St. Paul boasts many historic buildings that have been rehabilitated and used for commercial and residential functions. (Courtesy of Weiming Lu)

another to demolition after failure to persuade the owner to rehabilitate, and the other two are to be rehabilitated in the future.

We also used funding from a number of public and other sources, including Urban Development Action Grants (UDAG) from the U.S. Department of Housing and Urban Development, tax-exempt financing, and loans and loan guarantees from the Lowertown Redevelopment Corporation. Our financing also included foundation grants, developers' equity, and tapping the fundraising capacity of nonprofit organizations. For example, the \$20 million public television station was built debt free. Minnesota is a generous community.

Today, Lowertown features apartments, condominiums, townhomes, a YMCA facility, retail space, restaurants, galleries, office space, and underground parking. The area also has multiple high speed Internet networks and satellite uplinks, enabling us to create a cyber village for the creative community. (Figure 2)

Reflecting on the past, I am pleased we have saved many fine buildings, built a diverse neighborhood and a creative community, and established many amenities in the district and on the river bend. We have overcome significant obstacles and set the stage for riverfront development. However, some of the projects were much larger than we would have liked. Some of the projects could have been better designed, if there had been opportunity for creative dialogue.

AJL: How did the Bruce Vento Nature Sanctuary emerge as a key factor in the revitalization of the area?

WL: Experience tells us that urban development is most successful when there are natural areas nearby, where people can escape the city for a quiet walk or a moment of reflection. The Bruce Vento Nature Sanctuary serves as this green amenity for the Lowertown and adjacent East Side neighborhoods of the city.

The land that became the sanctuary was taken over by rail operations, including maintenance facilities, by the early 20th century. In the 1970s, the area was largely abandoned and contaminated. Community leaders hoped that the land could be reclaimed and restored to a natural area and form a connection between the Mississippi River and the Lowertown area.

This dream became reinvigorated in the 1990s. At the invitation of the McKnight Foundation and the East Side neighborhood, the Lowertown Redevelopment Corporation joined in the effort to transform this floodplain. Our consultants showed us a way to capture water from the natural springs in the area that lay just below the surface of the land. We also developed a plan to create a trail hub in the area that would allow people to walk or bicycle between the East Side, Lowertown, and the Mississippi River. (Figure 3)

FIGURE 3

In the establishment of the Bruce Vento Nature Sanctuary, plans were made for the development of a trail hub that would allow people to walk or bicycle between the East Side, Lowertown, and the Mississippi River. (Courtesy of Weiming Lu)



The late Congressman Bruce Vento was an early supporter of the project, and his death in 2000 inspired others to secure Federal Government funding to purchase the land. This was accomplished in 2002. Over the succeeding years, we sponsored cleanup events to remove tons of debris. The Environmental Protection Agency's Brownfields Cleanup Grant Program and other sources provided funds to remove the contamination and cover the area with four feet of clean soil.

The sanctuary was opened to the public in May 2005 and has attracted many residents, artists, and visitors. It is a beautiful park that offers a true natural experience in the heart of St. Paul. Not only does it offer a beautiful creek, wetlands, and views of the downtown skyline, it also provides glimpses of bald eagles, hawks, songbirds, and other wildlife.

AJL: Now that the redevelopment of Lowertown is basically complete, what lessons did you learn from the efforts that are applicable to other revitalization projects in the United States?

WL: No urban rejuvenation is ever totally complete. As one phase is complete, another phase will begin. I am pleased that the foundation we established for Lowertown will carry the development to the rest of the area and the Mississippi riverfront. Congress has provided \$50 million for the restoration of the Union Depot and Ramsey County has spent another \$50 million for the acquisition of the Depot Concourse and the riverfront land. The State of Minnesota has appropriated \$70 million as match for federal support of a light rail system. The depot restoration will be completed by 2012, and the light rail will connect the area to downtown Minneapolis two years after that. New housing, an arts center, and marina and park on the riverfront will help us build the River Garden as we have envisioned, thus doubling or even tripling the investments in Lowertown. They will help us build the next urban village in Lowertown.

From my experience working in three American cities—Minneapolis, Dallas, and St. Paul—and from my work as an advisor on dozens of other cities, I have learned the following lessons:

First, successful city design must begin with strategic vision and incremental action. Strategic vision helps us set general direction and builds public support for a project. This vision must be carried out incrementally and patiently with concrete steps.

Second, successful city design is an institutionalized process. Planners must develop expertise in the full range of city design activities, including urban form and image, behavioral science, market research, legal instruments, administrative processes, and financing. Only then can planners help political leaders carry out plans and programs.

Third, successful city design requires specific guidelines and creative alternatives. The preparation of design guidelines requires design sensitivity, understanding of economic reality, and familiarity with the legal framework for design. Alternative designs may be used to stimulate dialogue and encourage better solutions.

Fourth, successful city design must respond to the market. Market forces should never dictate decisions affecting city design, but planners need to understand the market and meet its demands.

Fifth, successful city design must respond to people's needs. By engaging people in the design of the public realm and private spaces, we increase the chances of success.

Sixth, successful city design depends on creative talent. Once designers are engaged, they need to be put in a creative environment where they can do their best work.

Last, successful city design requires effective communication and political savvy. It is people, not bricks and mortar, that have the most influence on city design. People are my best teachers. Learning from them is a lifelong privilege. Marshaling needed political support for selected designs requires political savvy and a network of partners in the public and private sectors.

AJL: Tell us about your work in other cities in the United States, in China, and in other countries abroad. What are the universal approaches to revitalization? What approaches are unique to their countries?

WL: Each country has its own culture, so there is no universal approach. However, every country could learn from the others. When I travel to China, I am reminded of China's long history, which had the tradition of relying on the rule of men rather than the rule of law. While there I try to share with their planners how to construct effective legal instruments, how to make their decision process more transparent, and how to work in a market economy. However, to be effective, I also must find ways to influence the top leadership.

As China is going through such rapid development, equivalent to going through industrial and information revolutions simultaneously, Chinese leaders and planners have tremendous opportunities and challenges to preserve and develop their cities. Besides serving as advisor to Beijing, Taipei, and Singapore, I have helped sponsor Chinese mayors and planners to visit the Twin Cities and the United States. I hope these exchanges will help them find useful solutions to their many challenges.

While China is suffering from unsustainable development, other countries, too, have had their own experiences and learned from them. For examples, the Yokohama MM21 project in Japan suffered from overbuilding and the London Dockyards in the U.K. was troubled from the outset from an inadequate infrastructure. The important thing is that all cultures learn from themselves and others, make proper adjustments, and find recovery.

AJL: Looking back on your career, what were the most important observations that you would like to pass on to the next generation of preservation planners?

WL: The importance of historic preservation is that it will help preserve each country's unique culture and history. Today, there are so many mega projects around the world that look alike, regardless of the country. Each country and each city has its own character that should be valued and preserved. Because globalization is making cities look more alike, I believe we must face this challenge and reverse this trend. Thus, whenever I am in China, I give lectures

on the Shan Shui city concept, tracing the mountain and water spirit, which for centuries formed an important foundation for Chinese landscape design and city planning. I hope the Chinese will rediscover their glorious heritage.

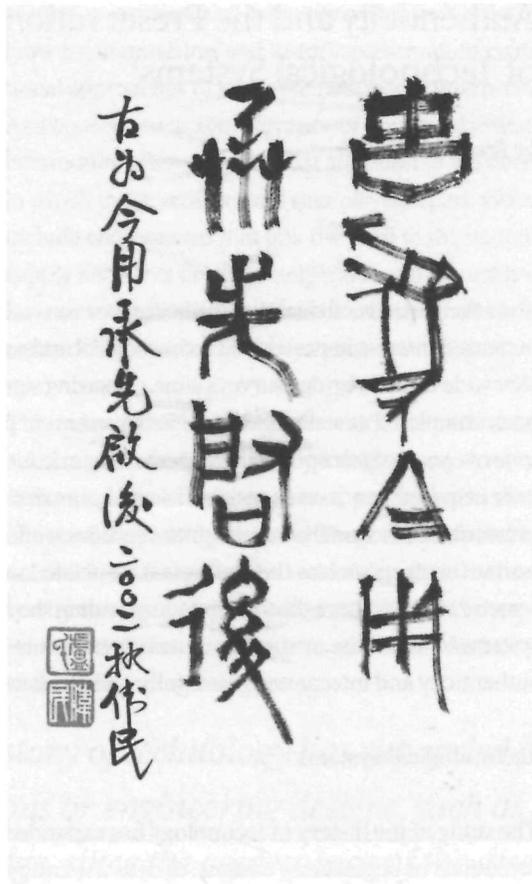
In order to achieve the preservation of cultural heritage, we need the interdisciplinary skills of planning and preservation so that we can make promises and deliver on them. We must be open to new ideas where visioning and re-envisioning are continual processes. Nothing significant can be done overnight; it requires vision and persistence. The authentic city must be built on real architectural heritage rather than on a set formula and current fashion. Some of the best ideas come from the people and their aspirations and voices. Working from the bottom up and empowering people always are most meaningful and rewarding to me.

As a person who has spent nearly one third of my life in China and two thirds in the United States, I am a product of two cultures that do not always dwell together harmoniously. Generally speaking, Chinese culture stresses continuity, while American culture values change. As one who has had to straddle both cultures, I often struggle with these competing ideals. (Figure 4)

Over the years, I have come to the conclusion that continuity without change brings stagnation and deterioration, and change without continuity brings instability and uncertainty. The challenge for me is to strike a sensitive balance between the two in my work and my life.

FIGURE 4

This calligraphy work by Weiming Lu says, "Let the past serve the present, learning from the preceding generations and inspiring the future ones." (Courtesy of Weiming Lu)



Authenticity and the Preservation of Technological Systems¹

by Fredric L. Quivik

Over the past several decades, the historic preservation community has shown increased interest in preserving technological and engineering sites. Extensive statewide historic bridge surveys aimed at saving significant structures have been completed as states and the U.S. Government plan for the expansion and improvement of transportation systems. Historic factories and warehouses have acquired new uses as residential and commercial complexes. Important industrial landscapes have been preserved. Such efforts also aim to preserve important artifacts such as the equipment associated with the buildings and other structures. Now more than ever, understanding the large-scale technological systems in which the artifacts and sites played a role is critical to preserving their authenticity and interpreting them fully and accurately to the public.

Technological Systems

The study of the history of technology has expanded far beyond individual inventions or engineering designs, such as the cotton gin or the suspension bridge, since the coalescence of the discipline in the 1980s. Most historians of technology now recognize the importance of entire systems in understanding the development and evolution of modern technology. Thomas Parke Hughes's book, *Networks of Power*, was seminal in this regard.² In it, Hughes showed that the incandescent light bulb would have been useless had its inventor, Thomas Edison, not also developed a technological system of generators and other component parts, a distribution network, and a customer base to support and use it.

In the 20th century, technological systems grew even larger and more complex, and system builders in the United States became especially adept at developing, analyzing, and managing them. Although it may be easy to preserve a component of an historic system, it is difficult to preserve an entire system. If a component loses some significance in the absence of its system, how can a preserved component communicate authenticity in relation to its larger system?

In 2000, Tom Leary and Libby Sholes articulated a number of concerns about authenticity in an industrial preservation context.³ Chief among them were concerns for an authenticity that places an industrial artifact in its social and economic context and for "recovering industrial experiences" out of which those artifacts arose. Such concerns have led curators and interpreters to focus on such things as workplace environments and relationships of mutual support

among co-workers and authority within industrial hierarchies. Professionals have urged museums and historic preservation professionals to set aside traditional approaches to the presentation and interpretation of industrial heritage. As a consequence, the relevance of preserved artifacts and sites to the local community often gets the most attention to the detriment of the larger systems in which those artifacts and sites played a part. Good interpretation may also include components that link the local to the national or global context through supply networks or marketing, much as a natural history museum might explain how a particular plant, animal, or site is part of a larger ecosystem. No single entity controls those larger systems.

This essay considers systems in which the parts are not only interrelated but also controlled or managed by a single entity. A technological system, as Hughes defines it, has parts, components, and networks that are under the control of the manager of the system.⁴ There are likely also components or networks on which the technological system depends that are beyond the control of the system manager. Hughes called attention to the ways system builders brought ever more of those components and networks into the expanding embrace of their technological systems.

The study of the history of technology has expanded far beyond individual inventions or engineering designs, such as the cotton gin or the suspension bridge, since the coalescence of the discipline in the 1980s. Most historians of technology now recognize the importance of entire systems in understanding the development and evolution of modern technology.

The very idea that such complex, large-scale technological systems could be managed entered the public consciousness after World War II with the advent of the Atlas and Polaris missile programs in the United States, the celebrated effort by the National Aeronautics and Space Administration (NASA) to put a man on the moon, the emergence of think tanks like the RAND Corporation that were organized to perform complex systems analyses, the use of computers in support of those projects and programs, and the widespread application of a systems approach to solving social problems by businesses and all levels of government.⁵

Earlier in the 20th century, complex technological systems were typically developed within the context of the business firm.⁶ During the 1930s and 1940s, corporate and government system builders extended the embrace of technological systems beyond the boundaries of the firm. The scientists, engineers, and management specialists who devised the techniques for designing and managing such large and complex projects like Atlas and Polaris acquired critical

experience during World War II. The Manhattan Project developed and built the atomic bomb in an amazingly short period of time, yet the seeds of the systems approach actually sprouted in the wartime effort to coordinate the procurement, production, shipment, and distribution of an unprecedented volume of ordnance and other military supplies and to build the facilities to accommodate those interrelated tasks. Participants in the ordnance production programs in the United States in turn credited their successes to their experiences working on the large federal dam construction projects of the 1930s, which involved several companies all working towards a common, ambitious goal.⁷

Looking at a large industrial object, cultural resource professionals may be tempted to limit their attention to the object's own mechanics and the skills necessary to operate it. What can the professionals do to ensure that they are presenting an authentic picture of that object's place in its technological system? When looking at an industrial building owned and operated by a company, it might seem reasonable to limit the scope of the research to the corporate biography of that particular company. What can be done to ensure an authentic interpretation of that company's place within the larger technological system that may have been controlled by some distant system manager?

Challenges to Authenticity

The new Rosie the Riveter/World War II Home Front National Historical Park in Richmond, California, established by Congress in 2000 and under development by the National Park Service, raises important questions about authenticity and the preservation of technological systems.⁸ (Figure 1) Those questions touch upon aspects of the sites that are essential to understanding them, from their physical scale (both then and now), to their role in global technological systems, to the central role of a single part—in this case a whirley crane—in

FIGURE 1
Kaiser's Richmond Shipyards maximized the pre-assembly process to build ships for the U.S. Maritime Commission during World War II. (Courtesy of the author)



FIGURE 2

Today, the absence of the plate shop and multiple whirley cranes at shipyard no. 3 changes the viewer's perception of the historic scale of this industrial operation. (Jet Lowe, HAER photographer. Courtesy of the Library of Congress)



FIGURE 3

Whirley cranes, such as this single crane preserved at Rosie the Riveter/World War II Home Front National Historical Park in Richmond, California, were essential tools in the ship pre-assembly process and dominant visual features on the Richmond waterfront. (Courtesy of the author)

accomplishing one of the key elements of the astounding wartime mass production method employed in Richmond and elsewhere in the United States.

The National Park Service favored this location on San Francisco Bay for a new park because Richmond was drastically altered by wartime mobilization and retains significant physical resources that embody many facets of the community's and the nation's mobilization and homefront experiences. Primary among those resources are the Ford Motor Company's Richmond assembly plant and Richmond shipyard no. 3, the last remaining yard of the four giant shipyards built and operated on the Richmond waterfront by Henry J. Kaiser's organization for the U.S. Maritime Commission. (Figures 2 and 3) The Kaiser shipyards produced Liberty ships, troop ships, and other ocean-going vessels needed by the U.S. and its allies to fight the Axis powers in the European and Pacific theaters of the war. The home-front experience marked a threshold in U.S. history for women, African Americans, and many others who gained their first entry into the nation's industrial workplaces. Many of them and their families still live in or near Richmond.

Scale

The U.S. mobilized its industrial infrastructure during wartime by converting existing industrial plants to production for the war effort and by building new industrial facilities. The two big industrial facilities at Richmond represent each of these endeavors. The Ford plant was 10 years old when the U.S. entered the war, and the plant was converted to assemble and process military vehicles. The Richmond shipyards emerged mostly from mud flats on the city's waterfront where, in less than two years, Kaiser built shipbuilding facilities that would employ nearly 100,000 workers and build 747 ocean-going ships during the war.

Today, the two sites and their surviving resources pose major challenges to the authentic interpretation of scale. The Ford plant presents itself as an impressive industrial structure. (Figure 4) It covers eight acres under its roof, but it employed fewer than 3,000 workers both before and during the war. On the other hand, shipyard no. 3 employed 26,000 workers at its peak in 1943.⁹ Yet the surviving basins and buildings at shipyard no. 3 suggest a considerably smaller

FIGURE 4
 Because of its large size,
 the Ford Assembly Plant
 now gives the impression
 that the plant was the
 largest industrial site on the
 Richmond waterfront. (Jet
 Lowe, HAER photographer.
 Courtesy of the Library of
 Congress)



operation than the Ford plant. The absence of an imposing sense of scale is due to several factors: the loss of the plate shop, which gave spatial meaning to the large open area north of the basins, where most of the pre-assembly work for yard no. 3 took place; the absence of ships and scaffolding in the basins, where the ships were actually erected; and the absence of the array of whirley cranes that functionally integrated the plate shop, the pre-assembly area, and the basins where hulls were erected.¹⁰

*Parts versus the Whole: The Role of a Large Local Complex
 in a Global Technological System*

The Ford plant presents a second obstacle to interpreting and understanding scale. Its impressive size suggests that it was a complete facility for the manufacture of automobiles or military vehicles. As a stand-alone plant, however, the Ford plant was functionally useless. It was merely one component of the Ford Motor Company's global system of processing raw materials into industrial materials, manufacturing car parts out of those materials, shipping parts to assembly plants located throughout the U.S. and abroad, and assembling those parts into finished vehicles for delivery to regional markets.

Built in 1931, Ford's Richmond plant served an integral function in the large Ford system until the nation's full-scale industrial mobilization for the war. At that time, the Richmond plant became one unit in a much larger and more complex system that spanned corporate boundaries and fell under the control of an alphabet soup of federal war production agencies, most directly the U.S. Army's Ordnance Department. During the war, the Richmond plant, renamed the Richmond Tank Depot, had two functions: to assemble jeeps and process tanks and other combat vehicles before they were shipped off to war. In assembling jeeps, the Richmond plant worked much as it had before the war, only now it was taking delivery of some parts made by other companies. In process-

ing tanks, the Richmond Tank Depot played a crucial role in the Ordnance Department's scheme for manufacturing thousands of combat vehicles and delivering them to U.S. and Allied forces overseas.

During the war, several companies and factories built combat vehicles. The Ordnance Department's original plan called for each company to complete its contracted number of combat vehicles so that they were all fully outfitted with armaments and communications equipment and ready for battle. Due to delays in the delivery of some components from suppliers, factories began stockpiling large numbers of unfinished vehicles on their lots. When the lots filled up, the on-going assembly of more vehicles slowed down or stopped completely, lowering the morale among workers who were trying to maximize production for the war effort.¹¹ The Ordnance Department addressed the logjam by establishing several tank depots around the country, each with ample capacity to stockpile vehicles, which meant that each factory could immediately ship fully-assembled but incompletely outfitted combat vehicles as soon as they came off the line. The tank depots received the assembled vehicles, supplies for final outfitting, orders for each vehicle's final destination, and then outfitted and prepared each vehicle for shipment. The Richmond Tank Depot was one such facility.¹²

The additional organizational layer of the tank depots might seem like a subtle modification in the system, but Ordnance Department accounts indicate that it greatly increased the speed at which the nation's mobilized industry was able to manufacture combat vehicles and deliver them to the front. But, how important is this nuanced role to the authentic interpretation of the Rosies and the World War II home front experience? Alternatively, how will the personal and local experiences of the Rosies and the men who worked at the Richmond site influence the interpretation of the vast technological systems in which the plant and, later, the depot played supporting roles?

Parts versus the Whole: Whirley Cranes and Large-Scale Mass Production

The whirley crane at Rosie the Riveter/World War II Home Front National Historical Park is of the type that virtually all of the World War II shipyards used for moving heavy objects during the production process. The crane squarely fits John Bowditch's criteria for selecting one or more large industrial objects to collect for preservation and interpretation at a museum: It is instantly recognizable for what it is; it will draw visitors' attention; and it represents the scale of the process employed at the Richmond shipyards.¹³ Or does it? It depends on whether a single whirley crane can authentically represent the scale and complexity of the system employed at shipyard no. 3 and other World War II emergency shipyards.

In the years leading up to World War II, the U.S. Maritime Commission began contracting with companies to build shipyards for the mass production of merchant ships. These companies exploited several advanced methods, most

notably welding of hulls instead of riveting, pre-assembly of large hull sections at locations other than the shipways or graving basins, and the design of shipyards for the efficient mass production of a single model of ship rather than an assortment of ships. These methods in turn enabled shipyards to hire minimally or unskilled workers whom they then trained in a limited array of specialized tasks. Henry Kaiser's company did not have experience building ships, but it did have experience with big government contracts for the construction of dams during the New Deal. The Maritime Commission signed contracts with a variety of companies, some old-line shipbuilders and some without shipbuilding experience, like Kaiser, to construct emergency shipyards on the East, Gulf, and Pacific Coasts.¹⁴

One of Kaiser's first contracts was for a new shipyard at Richmond to build 30 new merchant ships for Great Britain. In December 1940, the Kaiser organization began assembling a team of managers and engineers from the Grand Coulee Dam and other projects to design the new Richmond shipyard and supervise its construction. The next month, the U.S. Maritime Commission accelerated its emergency shipbuilding program with plans for many new yards dedicated to building a "Liberty Fleet." The new wave of contracts included one to Kaiser for a second yard at Richmond (shipyard no. 2). Eventually, Kaiser contracted with the Maritime Commission to build two more yards at Richmond, one for the production of troop ships (shipyard no. 3), and the other for the production of landing ships, or LSTs (shipyard no. 4).¹⁵ Each of the four shipyards had a strategy for pre-assembly of large components away from the shipways or basins and its own array of large cranes for moving the heavy and bulky pre-assembled components into position.

One of the significant differences between yard no. 3 and the other Richmond yards was that the platens, or pre-assembly platforms at the heads of the basins, were much longer, with nearly twice the distance (about 500 feet) between the plate shop and the basins than at the other yards. The larger area allowed more pre-assembly activities to take place on the assembly platforms, which was especially important in the construction of C-4 troop ships.¹⁶ The plate shop sat at the north end of the pre-assembly area and housed equipment for cutting and shaping steel plates for use on the assembly platforms, where teams of welders and other workers pre-assembled the large pieces of steel into hull and deck components. North and west of the plate shop were large open areas for steel storage.¹⁷ Because the plate shop is now gone, the large pre-assembly and storage areas lack spatial definition. In fact, the impressive Art Moderne warehouse that graces yard no. 3 now seems to be the facility's most important structure even though it served a function that was by no means unique to shipbuilding or integral to pre-assembly.

Erection of a C-4 troop ship at yard no. 3 followed a routine sequence. Workers first laid the keel plates on supports along the bottom of a basin. At the same

time, riggers erected the scaffolding around the perimeter of the basin. Then, crews attached bottom shell panels and the stern frame to the keel plates. Next, whirley cranes hoisted pre-assembled double-bottom units and lower portions of the fore and aft peak units into position, and the components were welded into place. From that point onward, the hull began to take shape with the placement of pre-assembled shell panels. Meanwhile, whirleys lowered internal components into position, including pre-assembled decks, foundations for the machinery of the propulsion system, the engine room and the propulsion system, and tanks and a distiller for the potable water system. After the upper deck was placed and welded into position, on-deck equipment and then pre-assembled components of the deck houses and the superstructure decks were hoisted into place. Finally, items like masts, the stack, and gun tubs were lifted into position. As the hull neared completion, crews disassembled the scaffolding and then filled the basin with water. Once the ship was afloat in the basin, the gates to the basin were removed and the yard was readied for the launching ceremony, after which a tug towed the ship out of the basin to one of the outfitting docks.¹⁸

When yard no. 3 was fully operational, the basins had 12 whirley cranes, 8 of which had 60-ton capacities; the outfitting dock had 4 whirley cranes, and the plate storage area had 3. In addition, the yard had 15 truck-mounted cranes for moving materials and machinery about the yard. The plate shop had 13 traveling bridge cranes and 19 jib cranes.¹⁹

The crane operators are said to have had one of the most envied jobs in the shipyards. Operating engineers had to have two to four years of experience with smaller equipment before they could begin to practice on whirley cranes, and then only under close supervision. Crane operators sat in the cabs of whirley cranes and operated them, but they could not do their work without the riggers who worked with the loads on the ground. These key shipyard workers estimated how much the loads weighed; worked with the chain, cable, and rope used in hoisting loads; attached and unattached slings to the loads; used hooks and other devices to secure cables to loads; and signaled to the crane operators the kinds of crane and load movements that were required.²⁰

Because every yard had so many whirley cranes, they formed the striking visual character of the Richmond shipyards' skylines. Whirleys were of such note in the Richmond yards that the character Shirley the Whirley appeared occasionally in the Kaiser company's weekly Richmond periodical, *Fore'n'Aft*.²¹ (Figure 5) According to a 1943 article, "Whirley crane work is the most spectacular in the shipyards and always is one of the things visitors find most fascinating to watch, especially when two cranes get together for a big double lift."²²

Pre-assembly was key to the rapid mass production of ships during World War II. Whirley cranes provided the means to exploit all that the pre-assembly



FIGURE 5
This Shirley the Whirley cartoon character appeared in the March 16, 1945, and other issues of the Richmond Shipyard newsletter, *Fore'n'Aft*. (Courtesy of the author)

process offered in terms of speed of production, productivity of labor, and efficient land-use by moving large and heavy pre-assembled components from the platens to the shipways or basins. Often, teams of cranes worked together to lift, flip, and transport pre-assembled units. A single crane, in the absence of the plate shop, which helped give meaning to the large, open pre-assembly area, and in the absence of other whirley cranes, which worked in teams to lift the large pre-assembled components into position, is unlikely to give visitors a genuine impression of the complexity of the shipbuilding operation.

Conclusion

Although a great addition to Richmond shipyard no. 3, one crane by itself will fall short of conveying an authentic sense of the scale and complexity of what Kaiser and the Richmond shipyard workers accomplished during World War II. The Ford plant is a huge building—so huge that visitors may assume it was a free-standing site of production during the war. The challenge in interpreting the Ford plant authentically ultimately lies in conveying the integral role the plant played in the Ordnance Department's global technological system for manufacturing and delivering combat vehicles. Today, the Ford plant dwarfs Richmond shipyard no. 3, but during the war, and taking into account the shipyard's workforce and operations, the situation was the reverse.

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Notes

- 1 This essay is based on a paper, "The Question of Authenticity When Applied to the Preservation of Components of Complex, Large-Scale Technological Systems," presented at the Fifth National Forum on Historic Preservation Practice, "A Critical Look at Authenticity and Historic Preservation," March 23-25, 2006, at Goucher College, Baltimore, Maryland.
- 2 Thomas P. Hughes, *Networks of Power: Electrification in Western Society, 1880-1930* (Baltimore, MD: Johns Hopkins University Press, 1983).
- 3 Thomas E. Leary and Elizabeth C. Sholes, "Authenticity of Place and Voice: Examples of Industrial Heritage Preservation and Interpretation in the U.S. and Europe," *The Public Historian* 22 (Summer 2000): 49-66.
- 4 Hughes, *Networks of Power*, 5-6.
- 5 On the application of the systems approach (systems engineering, systems management, systems analysis, etc.) to military and aerospace projects, see Thomas P. Hughes, *Rescuing Prometheus* (New York, NY: Pantheon, 1998); and Agatha C. Hughes and Thomas P. Hughes, eds., *Systems, Experts, and Computers: The Systems Approach in Management and Engineering, World War II and After* (Cambridge, MA: MIT Press, 2000). On the application of the systems approach to social problems, see Marvin Berkowitz, *The Conversion of Military-Oriented Research and Development to Civilian Uses* (New York, NY: Praeger, 1970); and Robert H. Haveman, *Poverty*

Policy and Poverty Research: The Great Society and the Social Sciences (Madison: University of Wisconsin Press, 1987).

Several historians have explored the history of the development of corporate systematic approaches to the design and management of large-scale technological systems in the 19th and early 20th centuries. See, in addition to Hughes's *Networks of Power*, James R. Beniger, *The Control Revolution: Technological and Economic Origins of the Information Society* (Cambridge, MA: Harvard University Press, 1986); Alfred D. Chandler, Jr., *The Visible Hand: The Management Revolution in American Business* (Cambridge, MA: Belknap Press, Harvard University Press, 1977); and David A. Hounshell, *From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States* (Baltimore, MD: Johns Hopkins University Press, 1984).

- 6 Several historians have explored the history of the development of corporate systematic approaches to the design and management of large-scale technological systems in the 19th and early 20th centuries. See, in addition to Hughes' *Networks of Power*, James R. Beniger, *The Control Revolution: Technological and Economic Origins of the Information Society* (Cambridge, MA: Harvard University Press, 1986); Alfred D. Chandler, Jr., *The Visible Hand: The Management Revolution in American Business* (Cambridge, MA: Belknap Press, Harvard University Press, 1977); and David A. Hounshell, *From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States* (Baltimore, MD: Johns Hopkins University Press, 1984).
- 7 Allen Schick, "The Road to PPB: The States of Budget Reform," *Public Administration* 26 (December 1966): 243-258; Dean S. Warren, "Human vs. Hardware—A Critical Look at Aerospace as an Urban Problem Solver," *Aviation Week & Space Technology* 94 (June 7, 1971): 62; John E. Bokel and Rolf Clark, "Acquisition in World War II," in *The Big L: American Logistics in World War II*, Alan Gropman, ed. (Washington, DC: National Defense University Press, 1997), 102.
- 8 The author researched and wrote histories of both the Ford Motor Company's Richmond assembly plant and Kaiser's Richmond shipyard no. 3 for the Historic American Engineering Record (HAER) in support of the NPS's Rosie the Riveter development. The author's thoughts on authenticity at Rosie the Riveter are his own and do not represent the views or opinions of the National Park Service. Fredric L. Quivik, "Ford Assembly Plant," HAER No. CA-326-H (Washington, DC: National Park Service, 2003); Quivik, "Richmond Shipyard No. 3," HAER No. CA-326-M (Washington, DC: National Park Service, 2004). See http://memory.loc.gov/amem/collections/habs_haer/index.html for the HAER documentation produced as part of the recording project.
- 9 "Richmond Tank Depot, Vol. I, 1 January to 30 September 1944," RG 156, Records of the San Francisco Ordnance District, National Archives and Records Administration (hereafter cited as NARA), San Bruno, CA; "Total Payroll & Percent Women on Payroll [as of last day of month]," a collection of unpublished graphs in folder 1, box 289, Henry J. Kaiser Records (hereafter cited as HJK 83/42c), manuscript collection 83/42c, Bancroft Library, University of California at Berkeley.
- 10 Quivik, "Richmond Shipyard No. 3."
- 11 Complicating the matter, the Army did not always know the final destination of each tank as it came off the line, which further delayed the outfitting of vehicles.
- 12 Quivik, "Ford Assembly Plant."
- 13 John Bowditch, "The Big, the Bad, and the Ugly: Collecting Industrial Artifacts for History Museums," *Pittsburgh History* 72 (Summer 1989): 91-92.
- 14 On the development of the Kaiser shipbuilding organization and its relationships to the U.S. Maritime Commission, Todd Shipyards Corporation, and Bechtel and the other six companies, see Frederic C. Lane et. al., *Ships for Victory: A History of Shipbuilding Under the U.S. Maritime Commission in World War II* (1951; Baltimore, MD: Johns Hopkins University Press, 2001), 53-54.

- 138-146, 220-222 “Biggest Splash,” *Fortune* 24 (July 1941): 47, 121-122, 124, 126, 128, 130; “The Earth Movers,” three-part series in *Fortune* 28 (August 1943): 99-107, 210, 212, 214, (September 1943): 119-123, 219-220, 222, 225-226, and (October 1943): 139-144, 193-194, 196, 199.
- 15 LSTs are landing ships capable of delivering tanks to beachheads.
- 16 Because they had to accommodate people and not bulk cargo, the C-4s had many more bulkheads below decks, which meant they had many more pieces of steel that could be pre-assembled.
- 17 “Richmond Yard No. 3, General Yard Plan,” n.d., in D.D. Dick, “Shipyard Facilities Index: West Coast Yards,” unpublished report dated July 1, 1945, RG 178, NARA, College Park, MD; Kaiser Company, Inc., “Proposed Extensions to Craneways,” drawing no. C4-M-98, dated May 28, 1943, in the collection of Donald L. Hardison, El Cerrito, CA (hereafter cited as DLH); Kaiser Company, Inc., “Shell To Shell Assembly Units,” drawing nos. C4-M-133 and C4-M-134, dated June 15, 1943, in DLH; “Chronological History of Kaiser Company, Inc., Shipyard Number Three,” 3-4, unpublished, undated report in file 1, box 289, HJK 83/42c; Lane, *Ships for Victory*, 220-222.
- 18 The erection sequence for a C-4 hull is depicted in a series of 31 Kaiser Company, Inc., drawings, nos. ES-C4-0-1 through ES-C4-0-31, dating from August 26, 1942, through May 7, 1943, in DLH. Sequential photographs of a C-4 taking shape at yard no. 3 appear in Kaiser Company, Inc., *Hull 50* (Richmond, CA: Kaiser Company, Inc., 1945), commemorative book, DLH.
- 19 “Richmond Shipyard No. 3, Schedule of Shipyard Facilities as of July 1, 1944,” unpublished report in “West Coast Yards, Shipyards Facilities Index,” RG 178, NARA.
- 20 “Richmond Weight Lifters,” *Fore’n’Aft* 3 (January 8, 1943): 2-3; Commonwealth of Pennsylvania, Department of Public Instruction, Division of Industrial Education, *Shipyard Rigging: A Manual of Instruction for Beginning and Advance Training* (Harrisburg: Commonwealth of Pennsylvania, Department of Public Instruction, 1943), 2-3; “Diagram for Shipping Deck House Section with One Crane,” drawing dated May 9, 1942, and “Perspective Drawing of Inner Bottom Lifting Tackle,” both in RG 178, Photo Album series, NARA.
- 21 “Shirley the Whirley,” cartoon, *Fore’n’Aft* 5 (March 16, 1945): 3.
- 22 “Richmond Weight Lifters,” 2.

Women's Contributions to the Historic American Buildings Survey, 1933-1941

by Amy Gilley

A New Deal era program, the Historic American Buildings Survey (HABS) was a curious marriage of the American historic preservation movement originated in large part by women and the “gentleman’s profession” of architecture. Whereas one helped raise public awareness of the nation’s architectural heritage, the other adhered to traditional gender roles in the architectural and landscape architecture professions. In its early years—1933-1941—HABS thus presented a unique opportunity for women to step into the public realm both informally and professionally as cultural stewards, specifically as historians and architects.

The role of cultural historian and steward as exemplified by preservation groups like the Mount Vernon Ladies Association was in alignment with traditional roles for women in the late 19th and early 20th centuries; the woman architect faced greater challenges, starting with access to education.¹ Both groups, however, faced the similar challenge of being taken seriously as professionals in these male-dominated fields. Many of the women who served as architectural historians or who provided critical information to the HABS architectural survey team have been unrecognized in the official reports and history. Likewise, the correspondence and other records generated by the survey between 1933 and 1941 confirm that the employment practices of this federal project, a work relief project for out-of-work professional architects and photographers, mirrored the experiences of working women within the architectural profession in the early 20th century.²

For a woman, establishing oneself in the male-dominated field of architecture required tremendous initiative.³ The HABS supervisors were men; the majority of the draftsmen were men, as were the historians; and yet, women’s participation in these projects contributed to their success.

Most women employed by HABS during the survey’s initial run worked as stenographers or secretaries. The records from this period suggest that women delineators were likely to be hired if the male architect in charge of the HABS district office had a connection (usually through teaching) with a school that trained women in architecture or landscape architecture. Women holding the title of HABS historian were equally rare. Many secretaries unofficially took on that role without the benefit of the increase in pay. The criteria used to appoint the district officer for each survey office all but assured that women would not

be assigned that leadership role.⁴ However, the records show that a number of women had, in fact, assumed this level of authority, albeit unofficially, in district offices across the country.

HABS also benefited tremendously from a vast social network of influential women who voluntarily supplied contact information, historical data, architectural drawings, and old photographs of historic buildings and sites. These women volunteers, many of them “imbued with the cult of domesticity, which appointed them guardians of society’s culture and morals,” took their cultural stewardship responsibilities very seriously and actively supported the survey in their communities.⁵ The architect John P. O’Neill, head of the national HABS office in Washington, DC, said of the Daughters of the American Revolution, a national patriotic women’s organization for descendants of people who helped bring about American independence, that it was “one of the most active organizations in calling attention to the need for marking historic sites and monuments or for actually providing funds for the work.”⁶ He advised Northeastern Pennsylvania HABS district officer Thomas H. Atherton that “you would do well to contact your local D.A.R. [*sic*] chapter, at least as a first step in working out your plans for Wyoming Battlefield,” an American Revolutionary War site in Luzerne County, Pennsylvania. The Daughters of the American Revolution organization was among a number of women-led historical organizations upon which HABS depended for leads and other information on suitable candidates for documentation.



FIGURE 1
This WPA poster advertised traditional household employment opportunities for girls and women in Illinois at the same time other women sought to redefine “women’s work” by working for HABS and other WPA programs. (Courtesy of the Works Progress Administration Collection, Library of Congress)

Women’s Work

Although the work relief projects established under the New Deal beginning in 1933 varied in focus, their purpose was the same: to relieve unemployment. These early programs generally involved construction jobs for men, offering few, if any, opportunities for women. When the Works Progress Administration was established in May 1935, it included a single division for women and white-collar professionals.⁷ Due to the pressure to employ people quickly, women were also restricted to certain types of jobs: “work already generally accepted as women’s work: sewing, housework, and care for the sick and young.”⁸ (Figure 1)

Although Ellen Sullivan Woodward, the first director of women’s and professional projects at the WPA, believed that it was her division’s responsibility “to see that employable women on relief rolls who are eligible for work receive equal consideration with men in this program,”⁹ the WPA’s employment quotas as well as general cultural biases¹⁰ limited women’s participation. Until the 1940s, WPA policies restricted the number of women participants to a maximum of one sixth of all WPA enrollees. Even though the numbers of unemployed women on relief equaled that of men, the WPA steered professional opportunities first to “heads of household,” who were typically men. “As a general rule, a woman with an employable husband is not eligible for referral, as her husband is the logical head of the family,” regardless of her qualifications.¹¹



FIGURE 2
Fannie Krick, photographed in 1936 with the male staff of the HABS team in Baltimore, Maryland, worked as the office secretary, a job held by many women in HABS between 1934 and 1941. (Courtesy of the National Archives and Records Administration, Record Group 515)

The WPA rules made little sense to professional women who were definitely in need of work, but were made invisible by the stroke of a bureaucrat's pen in Washington, DC. Phyllis Hamblur of Seattle, Washington, spoke for many struggling professional women when she wrote to Harry Hopkins, the federal relief administrator in charge of the WPA, about her predicament. "I am a graduate librarian," she said, "and in the past four years [roughly 1931 to 1935] the only work I have been able to find is that which I have done under the government's supervision [prior to the WPA], so you see the 'white collar woman' has had no easier time than the manual laborer to find work."¹²

A preliminary review of HABS administrative records from the WPA phase of the survey has shown that HABS did not veer from this average. Women comprised less than one quarter of the staff and were employed in the lower paying positions of clerk, clerk typist, and senior clerk. (Figure 2) Occasionally, a woman was placed within the professional category as a historian but rarely as a draftsman.¹³ Some offices had no women on staff at all. One of the main reasons for the disparity may have had to do with the general attitude that "the work of H.A.B.S. [sic] requires extensive architectural training and experience, combined with technical drafting ability above the average," which few women—and, for that matter, few unemployed men—actually had unless they had trained or worked previously in a drafting room of an architectural office.¹⁴

The Delineator

The role of paid women HABS employees reflect the limited opportunities for women professionals, particularly in architecture, during the 1930s, as well as their persistent attempts to break through these professional barriers. As a federal project designed to employ out-of-work professionals, HABS offered architects a chance to survey existing structures, demonstrating their knowledge of historical construction. This opportunity was an exciting one for women who had been hindered by a belief that women were incapable of such work. Henry Frost, the founder of the Cambridge School of Architecture and Landscape Architecture pointed out that—

*design, while still of importance, is more dependent upon those who excel in construction, in writing of specifications, in the ability to estimate costs and returns and other practical matters. . . there seemed to be a consensus of opinion that they [women] were not as able to do work in engineering and construction as men.*¹⁵

Historian Dorothy May Anderson has noted that, prior to the 1920s, people objected to women in architectural and other professional offices on the grounds that “women in a drafting room with men would disrupt the office morale” and that “women could not be used as superintendents on a job and could not run various necessary errands connected with construction.”¹⁶ Women also had a difficult time acquiring educational training.¹⁷ Few architectural or design programs admitted women, and social and familial pressures discouraged them from entering degree programs and professions long dominated by men. Anderson recounts that Martha Brown Brookes Hutchenson’s family told her that “she would be socially ostracized and dishonor her family if she persisted in entering M.I.T. to study landscape architecture.”¹⁸ Anderson summarized this cultural mindset succinctly—

*The average girl, however serious she was in her work. . . regarded it as more or less a temporary vocation which would cease with marriage. She accepted an entirely realistic attitude that since she was training in preparation for a probably limited period of professional activity, she need not go as far in her training as her brothers. Primarily, she [wanted to learn] in the quickest possible time how to design and construct, and above all how to draft.*¹⁹

As a mirror of the larger professional world, only when women had access to drafting classes and influential and sympathetic male professors, did they appear on the HABS work roles. In only a handful of states—Alabama, Massachusetts, New Hampshire, New Jersey, and Oregon—are women listed as delineators on any measured drawings. With the exception of New Jersey, the district offices in those states had ties with schools that trained women. The Alabama district office, under the leadership of architect E. Walter Burkhardt, a professor at Alabama Polytechnic Institute (now Auburn University), had the

FIGURE 3

The unidentified women in this 1935 photograph of a covered bridge in Talladega County, Alabama, may have studied with architect E. Walter Burkhardt at Alabama Polytechnic Institute and worked as delineators for HABS. (W.N. Manning, HABS photographer. Courtesy of the Library of Congress)



largest number of women delineators because the design program at that school admitted women. (Figure 3) The Historic American Landscape and Garden Project (HALGP), a subgroup within the HABS district office in Massachusetts, consisted mostly of women, many of them former or current students at the Lowthorpe School of Landscape Architecture, Gardening, and Horticulture for Women. This school, in particular, was a leader in providing an avenue for women seriously interested in careers in landscape architecture.

Located in Groton, Massachusetts, the Lowthorpe School opened in 1901 following the elimination of the landscape architecture department at the Massachusetts Institute of Technology (MIT).²⁰ The first school of its kind for women, Lowthorpe offered practical training in the gardening arts. R. Newton Mayall provided the critical link between HABS and the Lowthorpe School, working

FIGURE 4
Maude D. Parlin, a delineator in the HABS district office in Massachusetts, took measurements of the Nathan Dean House in East Taunton, Massachusetts, for the survey. (Courtesy of the Library of Congress)

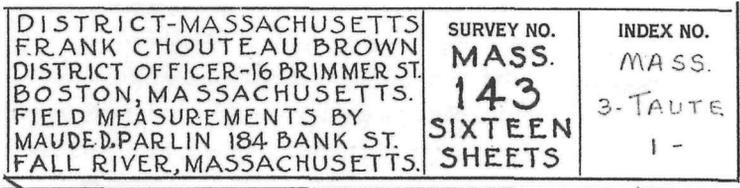


FIGURE 5
Rylla B. Saunier helped with field measurements and drew the final sheet showing the evolution of the landscape of the Lindens in Danvers, Massachusetts, over time, including the changes in street names and planting designs. (Courtesy of the Library of Congress)

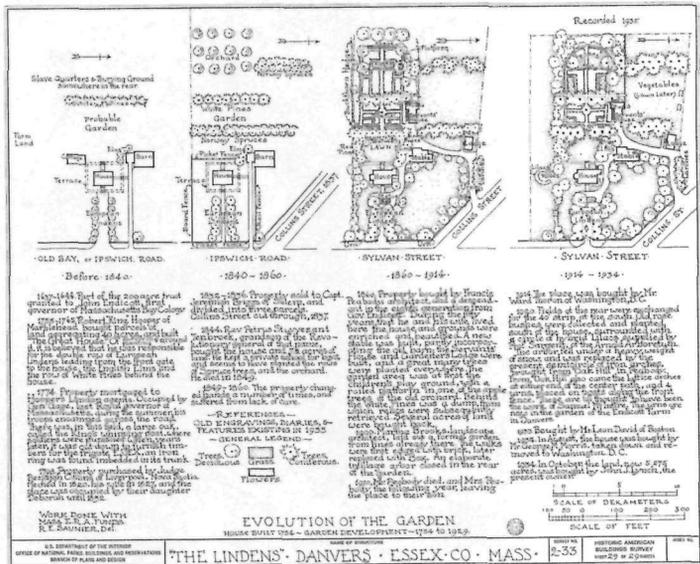


FIGURE 6
Louise Rowell co-produced this detailed planting list for the Vale in Waltham, Massachusetts. (Courtesy of the Library of Congress)



simultaneously as HABS project supervisor and instructor at the school until dismissed from the survey in 1937 for unknown reasons. While with HABS, he had recruited at least one of his Lowthorpe students, Margaret Webster, a 1931 graduate, as a landscape architect. The large number of delineators and project managers on his teams suggests in part that he viewed the survey as an exceptional educational and employment opportunity for his students.²¹

Overall, women delineators employed by HABS accomplished the same amounts and types of work as their male counterparts. Maude D. Parlin, a delineator in the Massachusetts district office, noted that she not only checked the measurements at the Rueben Fish house (later delineated by Carmen di Stefano) and measured the Nathan Dean House, but also researched Assonet, spending a total of 22 hours working Monday through Thursday, and she multiplied her hours by 90 cents for a total wage of \$19.80. (Figure 4) She added that “100 miles a week for travel for research and for measuring is a fair average.”²² Her experiences matched those recorded by the male delineators. This work was unusual for a woman and contradicted the prior claims that women architects were unable to do the physical work involved in architectural construction.

Three other women involved in the Massachusetts survey—Webster, Louise Rowell, and Rylla B. Saunier—documented more than 30 gardens as part of HALGP. A study of the drawing sheets from these projects suggests that Webster, Rowell, and their supervisor, Mayall, took turns as field worker, delineator, and project manager, shifting their roles depending on their workloads, expertise, and the requirements of a project.²³ Most HABS project teams operated in this fashion, which suggests that in those rare cases where women worked on field and drawing teams, they performed at levels comparable to the best trained male delineators then employed by HABS.

Saunier first worked with Mayall in 1935 on the measurements for the Lindens, one of the early projects of HALGP.²⁴ On that project, she helped with field measurements and drew the final sheet showing the evolution of the site over time, including the changes in street names and planting designs.²⁵ (Figure 5) Webster drew architectural details of the Squire William Sever House but focused primarily on the planting design for that site.²⁶ She also worked with Mayall on detailed plant lists and grading plan drawings for the Vale. (Figure 6)

Rowell appears to have been the team's architectural expert, completing the majority of the fence details and other garden structures for HALGP. She was also proficient in planting design and historical research. Rowell and Webster worked together on several projects, both checking measurements and producing drawings. Their proficiencies at drafting details were, to an extent, a reflection of the training women received at Lowthorpe and other schools, where knowledge of architectural details and landscape construction was an important part of the curriculum.

For all their extraordinary work on the HALGP, the women nevertheless remained invisible to many within the HABS bureaucracy. Their names were not the first to come to mind for promotion from within the ranks. When Mayall was dismissed from the project in 1937, Frank Chouteau Brown, the northeast regional officer for HABS, recounted to Washington that “When they asked me, first, to get some one to head up the work, and ‘take his place’ over night; I laughed at them; as there is no one else about here who knows anything about Garden historic research.”²⁷ In separate correspondence, Brown elaborated that “several people on the (HALGP) project are not specially trained to be conversant with the material;” yet, he promised to “see that such simple things as gates, fences, and garden houses are correctly measured and presented.” Although the details are a mystery, Webster was given the title of landscape architect shortly after Mayall’s departure.

For all their extraordinary work on the Historic American Landscapes and Gardens Project, the women nevertheless remained invisible to many within the HABS bureaucracy. Their names were not the first to come to mind for promotion from within the ranks.

This experience is not unlike that of many women in landscape architecture. Many women architects found success through a marriage to an architect, for “marrying an architect increased the likelihood of having a husband who understood and had sympathy for one’s work. Marriage to an architect also solved the need of finding a job, working part-time, and coordinating vacations, work schedules, and care of children.”²⁸ Architecture remained a dominantly male profession, with a few women such as Frost’s partner Eleanor Raymond, breaking the barriers.

The Secretary

A secretary in the Albany, New York, district office of the Survey, Helena Mayer’s experience was probably more typical of a female HABS employee than that of the delineators Webster, Saunier, or Rowell. Mayer’s name first appears in the historical record in a September 1936 letter to Brown from Albany district officer Andrew L. Delehanty, in which Delehanty informs Brown that “Miss Mayer will be able to take you to the offices in Schenectady, Troy, and Amsterdam if there is time. She is a very competent driver and has a splendid knowledge of the work.”²⁹ Delehanty frequently commented favorably on Mayer’s knowledge and abilities in his letters, and the record of their correspondence reveals the extent to which the Albany office relied on her to keep the office going.

On at least one occasion, Delehanty hinted at his frustration with the rigid hierarchy of the federal system that prevented him from giving more administrative

responsibilities to Mayer, who in addition to general secretarial work prepared HABS historical reports and other documentation.³⁰ He complained to Brown that—

*I have been greatly hampered in my fieldwork by spending a week at a time chasing a payroll from one department to another. I have a most competent secretary who could do this for me but they will not honor her presence in most of the departments because she is not authorized to do it and is not the 'Head' of the department.*³¹

Proof of Mayer's central role in the Albany office survives, not in the form of documented salary increases or letters of promotion or commendation, but in Delehanty's request on Mayer's behalf for an exemption from the WPA rules pertaining to the employment of non-relief workers of which she was one—

*The fourth non-relief case is my Secretary and is one of the four who simply cannot be replaced. She handled this work two years ago for Mr. Norman Sturgis, is thoroughly acquainted with all sides of architectural work, understands all the routine of the WPA and because of her knowledge, intelligence, and capacity for work, I am relieved of all office routine and can devote my entire time to the field and offices in my district. If I were forced to drop her the project might just as well close in the Albany office. . . Miss Mayer is able to assist in the checking of the drawings, and understands just how to provide the men with the proper materials required by them.*³²

Brown echoed Delehanty's sentiments a year later: "Miss Mayer is perfectly capable of running the routine of the office and WPA contracts for the whole state, if necessary or desirable. . . ." ³³

Brown later wrote that "Miss Mayer would make a very good 'coordinator,' as she had a certain amount of experience. . . ." ³⁴ In another letter, he recognized Mayer's administrative ability as critical for maintaining the Albany office: "Mr. Delehanty is particularly muddle-headed in regard to procedure—but this matter, Miss Mayer got to understand quite well and he was content to leave it within her hands; so between them, a fairly effective progress seemed to be possible." ³⁵

Unofficially, Mayer was Delehanty's equal in the operation of the Albany office. She communicated directly with the central HABS office in Washington, DC, requesting help with the reinstatement of the survey at Albany in 1937, for instance, and people relied on her for information on projects and personnel. She knew the desperate personal financial circumstances of many on the Albany staff. "Many of them [the unemployed]," she wrote, "are from Ludlum Steel Company and I understand there are some good draftsmen amongst them." ³⁶ Her boss also trusted her to make decisions. She told Washington that "Mr. Delehanty thinks you better write to me in care of Dr. Adams, for quick action

at this time as he is out with some of the men in the field. . . calls me each night on his return to the city.”³⁷

Mayer, it seems, was also an astute reader of bureaucratic politics and understood when to contact Washington indirectly and when to follow protocol. For example, when conflict arose in 1938 between the New York State Museum—the state sponsor of the survey after June 1937—and the HABS central office over the direction of the survey and ownership of the drawings, she unofficially disseminated information: “I am not writing this to Mr. O’Neill as of course I have no right to pass this information on officially, but I am sending it to you along with a carbon copy and if you feel it advisable you can pass it on to Mr. O’Neill.”³⁸ Brown, in turn, forwarded the information to O’Neill in Washington. “I do not understand the entire details of this as I only got occasional letters from Miss Mayer and Mr. Delehanty during that time,” he wrote, “but I am sure Miss Mayer would be glad to give us the facts which might help you in making your decision.”³⁹

Like many women in the WPA, Mayer faced an uphill battle to remain on the HABS payroll after the WPA program ended in the summer of 1937. “I know that Mr. Delehanty has written to you that I was dismissed from the project because I am single and orphan, having no dependents,” she wrote O’Neill in 1938, “but then we have to live too you know. . . I am over the 30 mark in age and it is impossible to get work.”⁴⁰ Correspondence between her and Brown from April 1938 indicates that she was working on a voluntary basis to complete projects.⁴¹

According to Brown, Mayer was still involved in the survey as of January 1941, although working through Rensselaer Polytechnic Institute. “The last word I had from Miss Mayer,” he noted, “she seemed to be very much worried because she said the [New York State] Museum was lining up and adding to their report of *work accomplished*, all the material left over from the HABS.”⁴²

The Historian

Women brought on as HABS historians generally enjoyed greater independence and, at times, more respect than their secretarial counterparts, but they nevertheless had to work within a male-dominated environment that put gender ahead of professional qualifications, experience, and other considerations. Annie Scott Baxter, a historian in the Northwestern (Erie) Pennsylvania district office—an office plagued by poor management—wrote candidly about the managerial style of her supervisors, William Mann and Karl Morrison, and the dim prospects for her re-employment in the Erie office once the WPA funding for HABS had dried up in the summer of 1937—

I am still on “relief” and there seems to be no prospect of getting any work so long as Bill Mann and Carl [sic] Morrison control the situation up here. . . the same

*drinking, loafing and other conditions still flourish... Just today I learned from an ex-actor (and a mighty poor one at that) that he is on the job at the Custom House and Library. He has only been a resident of this city for two years, is single, and yet a position is handed to him, while I have been (personally) in the past thirty or more years a tax-paying citizen, a resident of this city for sixty-five years; I am a recognized genealogist and research historian, have been a teacher, business executive, etc etc on newspapers as "free lance" and as advertising manager. Have a knowledge of art, architecture (four years in H.S.) about two years study under MaCrum and all the W.P.A. can assign me is "sewing"...*⁴³

While employed as a historian in the Erie office, Baxter completed more than 30 historical reports on buildings spread over several counties, and she produced a lengthy outline history of the development of the architecture of the region that highlighted its Greek revival architectural heritage. (Figure 7) She also took evening classes in architectural drafting and blue print reading "to gain more knowledge than I had," she wrote, "so as to reconcile whatever deficiency might develop in the work."⁴⁴

For all her accomplishments in the Erie office, her experience there was bittersweet, and correspondence from the period of her employment suggest that matters of a personal nature might have played a role in her dismissal. Erie district officer Howard Hicks told Washington that Baxter had "a very disagreeable disposition and if she does not have her own way, she is ready to fight. She is very quarrelsome and does not seem to be able to get along with anyone in the office nor with whom she comes in contact throughout the WPA organization."⁴⁵ Baxter, however, saw things differently—

*Since Mr. Hicks came to work, I have tried by every effort to give him assistance in every part of the work I am familiar with. I found that while he was what might be termed a contracting architect, that he knew absolutely nothing about this class of architecture. In fact, he assured me time after time that he did not. On the "outline" which was requested, I did the entire work without any assistance, and he did not even read it. I doubt he has read it yet. . . My connection with this work has been a pleasure[.] I have acquired some architectural knowledge, and am able to give more accurate descriptions.*⁴⁶

Baxter—like many HABS and WPA employees, both male and female—took pride in her personal accomplishments and in the knowledge and skills gained even though the office experience left much to be desired. Indeed, the opportunity to gain experience and work skills was part of the WPA agenda. As J.T. Tubby, the district officer for Maine, noted—

Employment in the H.A.B.S. [sic] has meant. . . the development of a fair draftsman from inexperienced; in another case the bringing of an inexperienced draftsman to a large measure of responsibility and the maturing of high degree in draftsman-



FIGURE 7
Historian Annie Scott Baxter produced several historical reports for the HABS district office in Erie, Pennsylvania, including this one for the Moorehead House in Erie County. (Courtesy of the Library of Congress)

*ship. . . . The men in general have acquired or perfected a far more orderly system of measuring buildings. They are more observant and have gained an intimate knowledge of examples of Maine architecture.*⁴⁷

From what is known of Virginia Thompson's experience as historian for the Virginia district office of HABS in Richmond, the independence that came with the position was also its own reward. Like Baxter, Thompson completed a large number of historical reports during her tenure, and she earned a reputation beyond HABS as a conscientious and thorough researcher. She corresponded frequently with other women and men outside HABS for original source material and other information on houses in Hanover, New Kent, King William, King and Queen, and other counties, including the house Scotchtown, the home of former First Lady Dolley Madison.⁴⁸ She also initiated several research trips on her own to museums, libraries, private homes, and historic sites.

One such trip—a reconnaissance visit to Fort Egypt and other extant defensive houses in western Page County built during the French and Indian War—resulted in kind words back to Virginia district officer Major Eugene Bradbury. “We are glad to cooperate with Miss Virginia Thompson,” wrote Page county supervisor A.V. Moon, “for we feel that she is doing very good work.”⁴⁹ Thompson was able to raise awareness of these structures back in the Richmond office, which eventually dispatched a field team to record three examples of this building type in the area.

The Secretary as Historian

Bettie Toal Morrissey served as stenographer-secretary in the Northeastern (Wilkes-Barre) Pennsylvania office from 1936 to 1938.⁵⁰ She notified Washington that the office had “three draftsmen, one photographer, and myself, as stenographer,” but she also maintained records, compiled weekly project status reports, wrote at least six historical reports, and became a project head for the Wilkes-Barre office in November 1938.⁵¹ (Figure 8) A “non-relief case” like most women in the eyes of the WPA, Morrissey eventually took care of all the paperwork and history writing for the office, tasks of such great value to Ralph W. Lear, the deputy district officer and WPA supervisor, that he requested a non-relief exemption for Morrissey in 1937 to keep her on the payroll.⁵² Most HABS district offices only requested exemptions to retain skilled architects and draftsmen.

Morrissey also helped prioritize local buildings for survey and demonstrated a working knowledge of the architectural history of the region. She described the Kintner Mill, for instance, as one that “seems to be a good example of typical mill construction and design.”⁵³ Unlike many of the secretaries who worked for HABS, she participated in recording projects, notifying Washington in the case of the Kintner Mill that “we are leaving Monday to begin measuring and

FIGURE 8

Officially a secretary, Bettie Toal Morrissey in the Wilkes-Barre, Pennsylvania, district office of HABS conducted historical research and typed up index cards like this one for the Shoemaker House in Luzerne County, Pennsylvania. (Courtesy of the Library of Congress)

STATE	COUNTY	TOWN OR VICINITY	155 7p 4d
Pennsylvania	Luzerne	Forty-Fort	
INDEX NUMBER	MONUMENT	991 WYOMING AVE	
PA 40. FORD 4.	Father Snowden House		
REPRESENTED IN NEGATIVE FILE	H.A.B.S. SURVEY NO.	History-Built in 1839.	
	Pa.-227	Present Owner: Fred M. Keeler, Forty-Fort.	
PUBLISHED PHOTOGRAPHS	Description- One and one-half story frame building. Good detail. Good exterior. References-"Hist. of Luz. County" "Hist. of Certified Twp. of Kingston", Court House Records, Dr. Von Krug.		
PUBLISHED DRAWINGS			
*** 6-3249		HISTORIC AMERICAN BUILDINGS SURVEY	

photographing the building and I shall let you know, from time to time how the work is progressing.”⁵⁴

Few women are known to have worked as HABS project heads or assistant project heads in the 1930s. An assistant project head working in Morrissey’s district in 1936 would have drawn a salary of \$140 per month, whereas a skilled worker, which is generally how Morrissey and other stenographer-secretaries were classified, would have earned \$85 per month. A professional historian would have earned \$94 per month.⁵⁵

The Volunteer

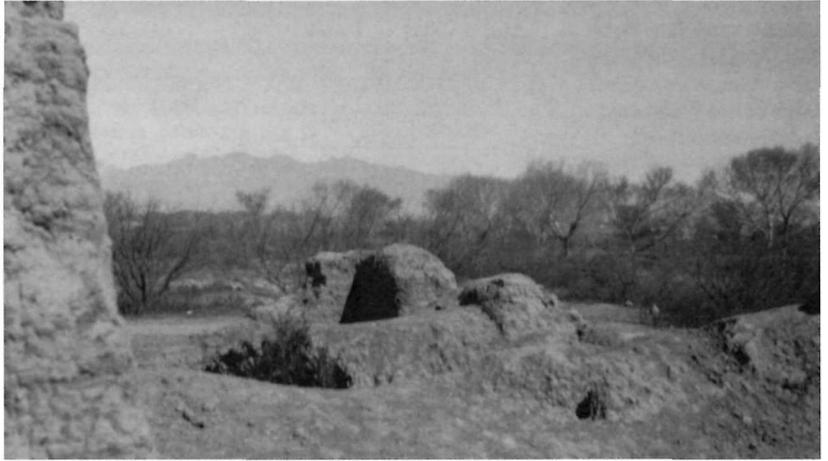
A stronger case may be made for the bridge between the amateur historic preservationists and volunteers in the HABS survey, those whose presence has precedent in the female-dominated historical preservation groups such as the Mount Vernon Ladies Association. Both groups, HABS and the volunteer preservation groups, were able to use their partnership to mutual advantage. The presence of HABS architects no doubt helped many such groups find funding as well as strengthened their push for preservation of historic architecture.

Most of the women associated with HABS during the 1930s served in an informal capacity as information providers and facilitators. This group included librarians, executive committee members of preservation societies, members of patriotic organizations and social networks, and history, genealogy, and architecture enthusiasts. Edith Stratton Kitt, the secretary of the Arizona Pioneers Society and a supporter of HABS in her state, later remarked in her autobiography that “clubwork”—

*gives some women their only chance to develop themselves as individuals and to express themselves—through art, literature, service to others, etc. To women who do not need this outlet, it gives the chance to help others to get what they themselves have. And to both classes it gives an opportunity to make their concerted influence in the community.*⁵⁶

FIGURE 9

This 1937 photograph shows a part of the pillaged San Cosme del Tucson Mission in Pima County, Arizona, that volunteer Edith Stratton Kitt had called to HABS's attention. (John P. O'Neill, HABS photographer. Courtesy of the Library of Congress)



Kitt admitted that she had often tailored her comments on history and nature conservation to fit the gender of her audience—

If I were speaking before a men's organization I tried to impress on them that it was not only patriotic but also good business to preserve Arizona scenic wonders and historic sites. . . . To the women's clubs I explained my ambitions for preservation of history in these words: "If we can ever so little get a great centralized collection of Arizonana established in Arizona, we will have done a great thing."⁵⁷

She tailored her communication with HABS men accordingly.

Kitt worked closely with the HABS team in Arizona, helping them establish contacts and identify recording projects. In 1937, she helped arrange a last-minute survey of the pillaged ruins of the San Cosme del Tucson Mission, which had fallen into the hands of "brick manufacture concerns" determined to recycle what remained of the buildings. (Figure 9) In a memo to Washington, Thomas Vint reported that—

Mrs. George H. Kitt, secretary of the Historical Society has obtained permission from the owners to do excavation work in and about the ruins for the sake of information that might be found. Mrs. Kitt is willing (I might say anxious) to turn this privilege over to the park service.⁵⁸

They succeeded only in producing a sketch plan and a photograph of the site for the survey.⁵⁹

Kitt's work with the Arizona Pioneer Society and her contacts with the HABS team involved far more than the title "secretary" might imply. One of the most influential early 20th-century preservationists and historians of the West, she remarked that the "title 'secretary' was erroneous, for I had to be not only the corresponding secretary but also the librarian, researcher, entertainer, welfare worker and father confessor all in one."⁶⁰ She inherited a—

*society housed in a large room on the ground floor of the Tucsonian Hotel building (with) a book case with glass doors. In it were a few books on the west, some old school books, an illustrated edition of Dante's Inferno, the complete works of Sir Thomas More, and other classics.*⁶¹

But quickly she was “dreaming of what the Arizona Pioneer Historical Society might become. . .the great central repository of regional history of the State of Arizona.”⁶² Although she earned only a nominal amount, Kitt worked hard to raise the society's profile, improve its collection of written and oral histories, and eventually find a permanent home for the society at the University of Arizona in 1928.

In the spirit of that informal network of women that drove most preservation and historical societies, Kitt noted that—

*the most effective helper I ever had was Mrs. Harold H. Royaltey, who for many years worked beside me as a volunteer. She always did whatever was necessary but took special delight in writing letters. She wrote hundreds of bright friendly letters to people all over the state—and in fact all over the country asking them for their historical treasures.*⁶³

One of Kitt and Royaltey's correspondents was Frederick D. Nichols of HABS, to whom Kitt promised free access to the Pioneer Society's and her own “photographs and other data on the historic buildings of southern Arizona.”⁶⁴ Kitt also led HABS through the society's elaborate social network of property owners and history enthusiasts, even arranging visits with her friends and associates.⁶⁵

HABS district offices across the country relied on dedicated and influential women like Kitt for local contacts and news and information on the owners, locations, and conditions of historic buildings and sites. Many of them spoke out in support of the survey when its future seemed uncertain. Among those allies was Mrs. Arthur Wilmer, president of the Association for the Preservation of Virginia Antiquities. She told John P. O'Neill in January 1936 that—

*The excellent work which the American Historic Building [sic] Survey has done makes the curtailment of this work seem a disaster to the nation. For the Survey not only preserves a record of the past but also gives a foundation upon which future architects can build. . . . At the next Board meeting of the Association of the Preservation of Virginia Antiquities, of which I am president, I will ask the Association for an endorsement of a permanent Survey. Will you advise me to whom to address such resolutions?*⁶⁶

The number of women who informally helped identify buildings in their communities or occasionally supplied genealogical and other historical information

for HABS in the 1930s is impressive.⁶⁷ Many of them held jobs as librarians, though a number had mostly a personal or social interest in local heritage or a connection to historic buildings. This latter group of women had access to not only their family histories but also those of their husbands if they had married. Over time, many of them had acquired serious reputations as authorities on the history of their community's architecture. HABS architects were frequently directed to them as the first source for plans and information. North Carolina resident Elma Hairston gave HABS critical information and a copy of the floor plan of her mid-19th-century house, Cooleemee Plantation, near Mocksville.⁶⁸

Librarians helped survey teams by providing information and access to historic documents and other records. They, too, had access to extensive networks and were interested in having local architecture documented for posterity. A librarian at the College of William and Mary in Williamsburg, Virginia, told one HABS architect that he "might get some information from Miss I.E. Jerome, Providence Forge, Virginia. She is a descendant of the family that lived in the Providence Forge section for one hundred and fifty years."⁶⁹ Miss Shattuck of the Billings Library at the University of Vermont helped track down information on a place called "Grassmount" and referred HABS to H.F. Perkins, the director of the Fleming Museum, who was conducting an architectural survey in the area.⁷⁰ Mellie B. Pipes, the librarian for the Oregon Historical Society, proofread Jamieson Parker's manuscript for the outline of early Oregon architecture, providing both professional advice and informal information. "Only last week," she informed him, "I was told that the heavy snow of this winter had caused it (the Cray House) to collapse."⁷¹

Conclusion

Daniel Bluestone has claimed that "the professionalization of historic preservation in the 20th century brought with it the marginalization of women. The shift from women to men, from amateur to professional, paralleled a broader shift from patriotism to aesthetics as the basis for preservation."⁷² This was not the case in the Historic American Buildings Survey, where women, despite cultural and governmental restrictions on employment, had rare opportunities to employ their administrative and creative skills.

The wide-ranging influence of women in HABS belied the conventional wisdom of the 1930s that women were best suited to do "domestic work."⁷³ The creativity and initiative of women preservationists like Kitt and Green, for instance, helped move the survey significantly forward since they frequently set the stage for what needed to be done. Historian Barbara Howe noted that women involved in the historic preservation movement in the United States actively "generated publicity, raised money, and bought and restored properties to save some of the nation's most treasured landmarks."⁷⁴

The women who worked for and assisted the Historic American Buildings Survey during the 1930s proved that they could thrive in a male-dominated arena and make lasting contributions to society. Many of the female landscape architects associated with the Massachusetts Survey for example, went on to have solid careers in landscape architecture, while their survey drawings remain key documents in landscape architecture history. Indeed, there could be further work done concerning their unusual collaborative work model. Their influence is yet to be completely studied.

Though imperfect, the arrangements worked out between women and the Historic American Buildings Survey were mutually beneficial. Whereas women brought unique skills and sensibilities to the drafting and writing tables, HABS provided women professional opportunities that might have eluded them otherwise. A status report from the survey office in Oregon characterized the positive arrangement for one outnumbered woman succinctly—

*Three non-relief men, one relief man and one relief woman are completing the drawings and transferring of field notes to final working drawings. . . . The workers have at all times been deeply interested in the work, and are grateful for the opportunity to study early Oregon architecture and history.*⁷⁵

The women who worked for the Historic American Buildings Survey sought out new definitions for their work, covertly ignoring the restrictions and limitations. Women's suffrage had only been available for 13 years when HABS was established. Access to the public arena and access to professional male dominated professions were relatively new. These women were themselves pioneers, even if they may not have achieved startling breakthroughs in the male-dominated HABS.

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Appendix

The following is a compilation of names of women currently known to have participated in the Historic American Buildings Survey between 1933 and 1941. The names are as they appear in the records of the Historic American Buildings Survey (Record Group 515) at the National Archives in College Park, Maryland. The list includes names appearing on undated documents preserved among other records from the period.

<i>Alabama</i>	<i>Georgia</i>	<i>Massachusetts</i>
Broach, Glennita	Callaway, Mary	Blake, Miss
Burkhardt, Mrs. Varian C.	Jones, Mrs. Frank	Briggs, Mrs. George
Cooper, Margaret		Briggs, Rose
Floyd, Katherine	<i>Hawaii</i>	Bruce, Elizabeth St. John
Owen, Mrs. Marie Bankhead	Newan, Margaret E.	Dean, Mrs. Frances
Owen, Miss Tennie		Di Stefano, Carmen
Payne, Clarice	<i>Idaho</i>	Fitch, Edith
Sellers, Miss Helen	Nash, Mrs. Belknap	Fitzgerald, Anne
Thrasher, Marion		Franham, Anne Peterson
Toulmin, Miriam	<i>Illinois</i>	Gregory, Miss
	Crawford, Mary Ann	Huran, Marian
<i>Arizona</i>	Fleming, Miss Naomi	Mayall, Margaret Walton
Colton, Mrs. Harold	Jones, Mrs. E.E.	Newell, Nellie
Kitt, Mrs. George F.	Moon, Mrs. Mary G.	Nowell, Mary
Nusbaum, Mrs. Jesse	Norton, Margaret C.	Parlin, Maude
Reichert, Miss Gladys		Rowell, Louise
Royaltey, Mrs. Lotus M.	<i>Iowa</i>	Saunier, Rylla B.
	Martin, Miss Ethyl E.	Strickland, Mrs. Charles
<i>Arkansas</i>		Warren, Mabel
Eno, Clara	<i>Kansas</i>	Webster, Margaret
Gibbs, Mrs. Frank W.,	Guild, Ida B.	Williams, Ruth W.
Goolsby, Mrs. Lora		
Loughborough, Mrs. J.P.	<i>Kentucky</i>	<i>Michigan</i>
Parker, Miss Phebe	Allen, Edith I.	Roy, Mrs.
	Anderson, Mrs. Barbara T.	
<i>California</i>	Cannon, Mrs. Jovett-Taylor	<i>Minnesota</i>
Butler, Ruth E.	Watkins, Miss Ella	Clapesattle, Miss
Davidson, Mrs. Winifred		
Thayer, Mrs. S.J.	<i>Louisiana</i>	<i>Mississippi</i>
	Drennan, Miss Georgia	Foules, Laura B.
<i>Connecticut</i>	Lanscaster, Mrs. Sally Eps	Furbish, Mrs. Mary Ellen S.
Blake, Margaret M.	Peterson, Miss	Miller, Mrs. Balfour
	Reynick, Rita	
<i>District of Columbia</i>	Wallace, Mrs. William	<i>Montana</i>
Collins, Rebecca		Erikson, Mrs. John E.
Daiker, Barbara	<i>Maine</i>	
Haywood, Eleanor	Jannell, E. Eleanor	<i>Nebraska</i>
Hood, Ethel W.	Marshall, Frances	Anderson, Florence
Hunt, Edna	Stuart, Thersa C.	Gleason, Nellie
Landmeade, Beverly	Wright, Mrs. Peter C.	Pendelton, Mrs. E.P.
Leesnitle, Miss B.		Sheldon, Mrs. A.E.
Reaney, H. Marguerite	<i>Maryland</i>	
Roberts, Lilly M.	Clarke, Mrs. Ira (Betty)	<i>New Hampshire</i>
Story, F. Isabelle	Kane, Mrs. James	Hinkley, Dorinda
	Kennedy, Miss	Holt, Edith V.
	Krick, Fannie	
	Litsinger, Miss	
	Reeder, Mrs. Elizabeth	
	Scarborough, Katherine	
	Starr, Ida May Hill	
	Wolfe, Miss H.	

New Jersey

Andresi, Mrs.
 Askew, Miss Sarah B.
 De Brezeni, Elizabeth Joan
 Engler, Miss
 Shaw, Helen Louise
 Vann, Mrs. Elizabeth Denny

New Mexico

Ascarnate, Mrs. S.P.
 Ayres, Mary
 Dorman, Helen
 Grant, Blanche

New York

Chitij, Miss Marion E.
 Croughton, Amy
 Halloran, Miss Dorothy
 Lowry, Mrs. H.F.
 MacLean, Mrs. Charles F.
 Mayer, Helena

North Carolina

Brown, Mary
 Caraway, Miss Gertrude
 Edenton, Pruden
 Fries, Adelaide L.
 Hairston, Mrs. Elma
 Jackson, Mrs. Paul
 Johnston, Frances Benjamin
 McMullen, Mrs.
 Williamson, Mrs. J. Walter

Ohio

Barry, Adeline
 Burns, Marie A.
 Fuchs, Lillian
 Phillips, Mrs. Hazel Spencer

Oklahoma

Stewart, Dora D.R.
 Wright, Muriel

Oregon

Pipes, Nellie B.
 Wilson, Nellie E.

Pennsylvania

Baxter, Annie Scott
 Caum, Mrs. E. Arthur
 Detweiler, Mrs. Meade D.
 Dorrance, Miss Francis
 Fuller, Miss Gertrude B.
 Gulick, Mrs. Bessie D.
 Lanshaw, Mrs. Ella S.W.
 Miller, Mrs. Burr C.
 Miner, Mrs. Charles
 Morrissey, Bettie Toal
 Murray, Miss Louise
 Natis, Irma
 Raymond, Eleanor
 Renders, Mrs. Caroline
 Searfoss, Minne
 Thurston, Miss Helen
 Walden, Lillian

Rhode Island

Downing, Mrs. George E.

Tennessee

Caldwell, Mrs. Mary French
 Folk, Mrs. Reau
 Hardin, Hettie I.

Texas

Dresden, Marie
 Green, Rena Maverick
 O'Daniel, Emma Lee

Vermont

Greer, Mrs. Lois
 Shattuck, Miss
 Simpson, Mary Jean

Virginia

Agnew, Miss Ella
 Armes, Ethel
 Black, Mrs. Vivian
 Bullock, Helen
 Catterall, Mrs. Ralph
 Culter, Mrs. Hugh Mercer
 Fleet, Mrs. Rubenette Lee
 Garrett, Miss
 Gray, Mrs. A.P.
 Harris, Mrs. L.
 Harrison, Mrs. Lucy Gray Henry
 Hope, Mrs.
 Jerome, I.E.
 Lowry, Mrs. Retta G.H.
 Pierce, Mrs. Elizabeth Combs
 Rodwell, Mrs. Charles R.
 Rogerson, Mrs. Elizabeth A.
 Saunders, Mrs. Julia Edwards
 Smith, Mrs. Margaret P.C.
 Thompson, Virginia
 Williamson, Miss Martha White
 Wilmer, Mrs. Arthur

West Virginia

Mathes, Mrs. Thressa M.
 Stewood, Blanche

Wisconsin

Kellog, Miss Louise

Notes

- 1 A profile of historic preservation groups in Virginia, for instance, has shown that the leadership—mostly housewives or retired people—came from “the upper-middle-class white citizens with the wealth, education, and cultural background to devote time to historic preservation activities.” Alice M. Bowsher, William T. Frazier, and Jerome R. Saroff, “Virginia Historic Districts Study,” in *Readings in Historic Preservation*, eds. Norman Williams, Jr., Edmund H. Kellogg, and Frank Gilbert (New Brunswick, NJ: Center For Urban Policy Research, 1983), 46.

In the early 20th century, the only schools in the northeastern United States offering design degrees for women were the Lowthorpe School and the Cambridge School for architecture. The latter generally required the applicant to have a four-year degree. Doris Cole, “The Education of Women Architects: A History of the Cambridge School,” *Architecture Plus* (December 1973): 33. See also Marilyn Yalom, *A History of the Wife* (New York, NY: Harper Collins, 2001), 388. Yalom notes that “higher education for women is a relatively recent phenomenon. The American women’s colleges and most coed universities were a late-nineteenth century creation admitting only a very small percentage of females, mostly from the upper and middle classes.”

- 2 Primary research documents, including personal correspondence, are stored in the National Archives and Records Administration in College Park, MD (hereafter cited as NARA). These records are included in the WPA files as well as the HABS files, which are filed under each regional and state office.

- 3 Cole notes (p. 33) that—

Women, when educated, were educated with other women, and their contact was largely with their servants, children, and families; they did not have contact with the male hierarchies of corporations in a profession which depended largely upon personal contacts for commissions. . . . Women in independent practice usually had small offices and, as noted, had difficulty in attracting corporate clients; with the trend toward complexity, they were further pushed into the corner of domestic architecture.

- 4 HABS Circular No. 1, the first in a series of bulletins that set down the rules and procedures for the early survey, stated that “every district officer must be selected carefully with reference to both executive ability and knowledge of measuring work through actual experience. He is in each case being nominated by the appropriate American Institute of Architects chapter and appointed by the Secretary of the Interior.” HABS Circular No. 1, December 12, 1933, reproduced in William Claude Corkern, Jr., “Architects, Preservationists, and the New Deal: The Historic American Buildings Survey, 1933-42” (Ph.D. dissertation, George Washington University, 1984), vol. 2.
- 5 Barbara J. Howe, “Women in the Nineteenth-Century Preservation Movement,” in *Restoring Women’s History through Historic Preservation*, ed. Gail Lee Dubrow and Jennifer B. Goodman (Baltimore, MD: Johns Hopkins University Press, 2003), 17.
- 6 John P. O’Neill to Thomas H. Atherton, July 30, 1935, Records of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Division, Record Group 515 (RG 515), NARA.
- 7 Louise Rosenfield Noun, *Iowa Women in the WPA* (Ames: Iowa State University Press, 1999), x.
- 8 Noun, 7.
- 9 Ellen Woodward, “Address before the Democratic Women’s Regional Conference for South-eastern States,” March 19, 1936, Records of the Works Progress Administration (WPA), Record Group 69 (RG 69), NARA.
- 10 Frances Perkins, the Secretary of Labor in President Franklin Delano Roosevelt’s administration, and one of the most politically influential women of her generation, felt that some job-seeking women were “a menace to society [and] a selfish shortsighted creature who ought to be ashamed of herself.” Frances Perkins, as cited in Mimi Abramovitz, *Regulating the Lives*

of Women: Social Welfare Policy from Colonial Times to the Present (Cambridge, MA: South End Press, 1996), 224.

- 11 Nancy E. Rose, *Put to Work: Relief Programs in the Great Depression* (New York, NY: Monthly Review Press, 1994), 28, 30.
- 12 Phyllis Hamblur to Harry Hopkins, June 19, 1935, RG 69, NARA.
- 13 One exception was Annie Scott Baxter, a historian for the Erie, Pennsylvania, HABS office (see below), who appears in the rolls as a certified draftsman. According to her correspondence, she took a course in drafting to enhance her architectural research, but her unofficial status as "historian" might have been a way to hire her for less money. Annie Scott Baxter to John P. O'Neill, March 10, 1938, RG 515, NARA.
- 14 Irving Morrow, California district officer, to Roy W. Pilling, assistant administrator of the Emergency Relief Administration (ERA) in California, September 12, 1934, RG 515, NARA.
- 15 Henry Frost quoted in "The Education of Women Architects: A History of the Cambridge School," by Doris Cole, *Architecture Plus* (December 1973): 33.
- 16 Dorothy May Anderson, "Women's Breakthrough via the Cambridge School," *Landscape Architecture* 68 (March 1978): 147.
- 17 According to the *Almanac of Architecture and Design* (2004), only half the design schools in the United States in 1910 permitted women to enroll as architecture students. Although the percentage might have increased during the 1920s and early 1930s, it did not attain 100 percent by the mid-1930s. *Almanac of Architecture and Design* (Washington, DC: Greenway Communications, 2004).
- 18 Anderson, 148.
- 19 Anderson, 147. See also Jan Jennings, "Leila Ross Wilburn: Plan-Book Architect" (*Woman's Art Journal* 10 no. 1 [Spring-Summer 1989]: 12) in which Jennings notes that a "1912 builder's journal states that there seems no logical reason for the dearth of women architects because as 'draftsmen' they demonstrated 'exceptional artistic and constructive talents.'"
- 20 The Lowthorpe School's 1917 catalog notes that the school was dedicated to "the training of young women who desire to enter upon any of the many lines of work in life appropriate to women comprehended under the terms Landscape Architecture, landscape gardening and Horticulture." The curriculum focused on landscape design, with courses in drawing, botany, greenhouse work, surveying, and "engineering (such parts as have value to landscape work)," garden design, landscape design, and plant materials.

The rigorous coursework prepared students in the basic survey techniques used by HABS. A.F. Tripp noted—

In drafting. . . the study of local examples follows with measured drawings, sketch plans and reports, then the solution of original problems based on topographical surveys. . . . Survey and engineering include the principles of plain surveying, methods plotting to scale, use of the chain, tape, compass, level, staking out and setting grades.

See A.F. Tripp, "Lowthorpe School of Landscape Architecture, Gardening and Horticulture for Women," *Landscape Architecture* (October 1912): 15-16.

Other schools soon followed the Lowthorpe model. The Pennsylvania School of Horticulture for Women opened in the Philadelphia suburb of Ambler in 1910. The Cambridge School of Architecture and Landscape opened in 1915 in affiliation with Harvard University, which at the time did not admit women.

Lowthorpe changed its name to the Lowthorpe School of Landscape Architecture in 1929. The School merged with the Rhode Island School of Design in 1945, becoming a department within the Division of Planning.

- 21 Dorothy May Anderson, a graduate of the Lowthorpe School who went on to teach at the Cambridge School (see note above), wrote extensively about the Cambridge School, particularly its founding teacher, Harvard design professor Henry Frost. This author speculates that Frost's relationship with his students was similar to Mayall's relationship with his students at the Lowthorpe School. "Because they could not find offices to take them in," Anderson wrote, "our students got into the habit of accepting commissions as practitioners without the benefit of . . . invaluable office training. Whenever we could, those of us who had small offices used our own graduates as office assistants, but this took care of only a few of them." Dorothy May Anderson, *Women, Design, and the Cambridge School* (West Lafayette, IN: PDA Publishers, 1980), 18-19.
- 22 Maude D. Parlin to Frank Chouteau Brown, January 9, 1935, RG 515, NARA.
- 23 Webster and Rowell checked the measurements and drew four of the six sheets for the William Wheelwright Place project (Newburyport, MA; HABS No. MA-209), for example, while Mayall prepared the index card. In other cases, the roles were reversed. The documentation is available online at <http://hdl.loc.gov/loc.pnp/hhh.mao669>, accessed on April 4, 2008.
- 24 The documentation for the Lindens (HABS No. MA-2-33), Danvers, MA, is available online at <http://hdl.loc.gov/loc.pnp/hhh.mao610>, accessed on April 4, 2008. The Lindens has a strange history: The house itself was moved to Washington, DC, in 1934, severing it from its landscape and garden.
- 25 Despite this architectural expertise, Saunier appears on the employment rolls as "senior clerk."
- 26 The documentation of the Squire William Sever House (HABS No. MA-135) in Kingston, MA, is available online at <http://hdl.loc.gov/loc.pnp/hhh.mao872>, accessed on April 4, 2008.
- 27 Frank Chouteau Brown to John P. O'Neill, October 26, 1937, RG 515, NARA. As for Mayall's dismissal, Brown writes—
- Mayall was lecturing two afternoons a week at Lowthorpe School at Groton, and so obviously could not be in his office Tuesday afternoon, one of the days when the project was operating. His time sheet showed "7 Hours" that day which might have been given that evening, without doubt—as I know he worked many more days, as well as hours, than the minimum prescribed, just as I do!—but it had not been "explained" [sic] the time sheets, and so has been regarded as dereliction of duty, by the "higher ups" in WPA offices.*
- 28 Cole, "The Education of Women Architects: A History of the Cambridge School," 33.
- 29 Andrew L. Delehanty to Frank Chouteau Brown, September 10, 1936, RG 515, NARA.
- 30 Two historical reports written in 1937 bear Mayer's name: the Lansing-Pemberton House (HABS No. NY-3203; <http://hdl.loc.gov/loc.pnp/hhh.ny0009>) and the Old Homeopathic Hospital (Interiors) (HABS No. NY-6002; <http://hdl.loc.gov/loc.pnp/hhh.ny0444>). It is uncertain how many index cards and histories Mayer might have prepared because many of the documents produced by the Albany office are unsigned.
- 31 Andrew L. Delehanty to Frank Chouteau Brown, August 6, 1936, RG 515, NARA.
- 32 Andrew L. Delehanty to John P. O'Neill, September 19, 1936, RG 515, NARA.
- 33 Frank Chouteau Brown to John P. O'Neill, October 26, 1937, RG 515, NARA.
- 34 Frank Chouteau Brown to Andrew L. Delehanty, December 20, 1937, RG 515, NARA. Brown's inconsistencies raise interesting questions about his attitude towards women in HABS offices, not to mention his memory. He frequently signed his letters "Hastily yours."
- 35 Frank Chouteau Brown to John P. O'Neill, December 13, 1937, RG 515, NARA.
- 36 Helena Mayer to John P. O'Neill, December 6, 1936, RG 515, NARA.

- 37 Ibid.
- 38 Helena Mayer to Frank Chouteau Brown, March 8, 1938, RG 515, NARA. Mayer goes on to say—
- Mr. Delehanty is very busy working on some maps for Senator Corning to go with the reports and as usual is in a mess trying to get them out, having postponed the time of delivery three times. I finished my reports a week ago but he asked me to stay a little longer and try to line up some more buildings and historic spots in Albany County for him. I have found the research work very interesting.*
- 39 Frank Chouteau Brown to John P. O'Neill, March 11, 1938, RG 515, NARA.
- 40 Helena Mayer to John P. O'Neill, January 11, 1938, RG 515, NARA.
- 41 Frank Chouteau Brown to Helena Mayer, April 7, 1938, RG 515, NARA. Mayer was not alone in her commitment to HABS. Many people demonstrated a high level of commitment, working extra hours and days without pay and often spending money out of pocket for expenses just to complete the documentation.
- 42 Frank Chouteau Brown to [John P. O'Neill], January 28, 1941, RG 515, NARA. Emphasis in the original.
- 43 Annie Scott Baxter, to John P. O'Neill, March 10, 1938, RG 515, NARA. These sewing projects, although classified as unskilled labor, required demanding work, with projects often set up as pseudo-factories. In *Iowa Women of the WPA* (p. 18), Noun notes that "There were a few five minute rest periods during the day, but no talking was allowed while working."
- 44 Annie Scott Baxter to John P. O'Neill, February 5, 1937, RG 515, NARA.
- 45 Howard Hicks to John P. O'Neill, January 27, 1937, RG 515, NARA.
- 46 Annie Scott Baxter to John P. O'Neill, February 5, 1937, RG 515, NARA.
- 47 J.T. Tubby to Frank Chouteau Brown, n.d., RG 515, NARA.
- 48 In a letter dated September 5, 1936, Thompson asks Mrs. A. P. Gray of West Point, Virginia, for information on houses in New Kent, King William, and King and Queen Counties. Many data sheets from surveys in these counties bear her name. Thompson also corresponded with Mrs. Harris of Ashland, Virginia, about original source material for Scotchtown, the home of Dolley Madison. In July 13, 1936, she received copies of pages "torn from a book kept by Miss Sallie Taylor," the present owner of Scotchtown.
- 49 W.A. Moon to Major Eugene Bradbury, September 24, 1936, RG 515, NARA.
- 50 Morrissey's predecessor, Minnie Searfoss, wrote index cards for projects but did not prepare the histories.
- 51 Bettie Toal Morrissey to John P. O'Neill, November 12, 1938, RG 515, NARA.
- 52 Non-relief worker status did not indicate personal wealth; rather it indicated that a person—for whatever reason—did not qualify for relief under WPA rules. Many women—including married women—ended up in the "non-relief" category because the WPA did not recognize them as heads of household even though they might have been single and living alone or responsible for the welfare of their family (children, siblings, or parents).
- 53 Bettie Toal Morrissey to John P. O'Neill, July 6, 1938, RG 515, NARA.
- 54 Ibid.
- 55 Generally speaking, HABS hiring practices did not follow the WPA's or any other hiring rules. The fluctuations in WPA requirements for relief and non-relief workers, sudden changes in

budgets, and other factors meant that staff often got assigned to job categories that had little to do with the work they actually performed. In Erie, Pennsylvania, for instance, Annie Scott Baxter was listed as a certified draftsman on one form even though there is no evidence she produced a drawing; instead, she produced histories.

- 56 Emerson Oliver Stratton and Edith Stratton Kitt, *Pioneering in Arizona; the Reminiscences of Emerson Oliver Stratton & Edith Stratton Kitt*, ed. John Alexander Carroll (Tuscon, AZ: Arizona Pioneers' Historical Society, 1964), 149.

The Arizona Historical Society website gives a concise history of the organization—

The Arizona Society of Pioneers reincorporated in 1897 as the Arizona Pioneers' Historical Society (APHS). The restyled organization added two new membership categories: men who had resided in Arizona for thirty years and honorary members. For the first time, the Territorial Legislature appropriated funds--\$3,000--to operate the organization for two years.

Women slowly made their voices heard in the Society. Although an early invitation to form a "subordinate" women's auxiliary fell on deaf ears, a few women were accepted into the Society by 1913. In 1920 portraits of pioneer women were displayed at the Society's headquarters. Five years later APHS president Monte Mansfield asked Edith Stratton Kitt to serve as secretary, the Society's chief operating officer. Mrs. Kitt bridged the gap between social club and modern archive, organizing materials, recording reminiscences, and encouraging donations to the collections.

For more information on the Arizona Historical Society "A Brief History of the Arizona Society of Pioneers and the Arizona Historical Society," <http://www.arizonahistoricalsociety.org/>, accessed on March 12, 2008.

- 57 Ibid, 149.
- 58 Thomas Vint to John P. O'Neill, June 21, 1937, RG 515, NARA.
- 59 The documentation includes photocopies and a newspaper clipping describing the condition of the mission site.
- 60 Kitt, 50-1.
- 61 Kitt, 150.
- 62 Kitt, 155.
- 63 Kitt, 158.
- 64 Frederick D. Nichols to John P. O'Neill, August 14, 1937, RG 515, NARA.
- 65 See, for instance, Frederick D. Nichols to Edith Stratton Kitt, November 2, 1938 (RG 515, NARA), in which Nichols thanks Kitt for her help and asking if "Doctor Forbes or the other old gentleman that you and I called on has ever done anything about the prints that he was going to send us."
- 66 Mrs. Arthur Wilmer to John P. O'Neill, January 14, 1936, RG 515, NARA.
- 67 Other women who have been lost to history appear in this narrative. Blanche Chloe Grant, for example, an unofficial member of the Taos Artists Society, is mentioned by Helen Dorman, librarian of the Historical Society of Santa Fe, as one "who has written about Taos, may be able to help you. Her address is simply Taos, New Mexico." Grant was the author of *The Taos Indians* (1925), *Taos Today* (1925), and *When Old Trails Were New: The Story of Taos* (1934). An artist in the Taos art movement, Grant painted the murals on Taos Presbyterian Church in 1921.

Mayall's wife, Margaret Walker Mayall, who helped compile historical reports and take measurements for her husband's survey work, was an important astronomer, accomplished writer, and the president of American Association of Variable Stars Observers for 19 years.

- 68 The house was later measured and drawn for HABS in 1963 by students in the School of Design at North Carolina State College, now North Carolina State University. The house was situated on land that had been in the Hairston family since 1814. The documentation is available online at <http://hdl.loc.gov/loc.pnp/hhh.nco022>, accessed on April 4, 2008.
- 69 E.G. [Earl Gregg] Swem to Archie A. Biggs, May 3, 1937, RG 515, NARA.
- 70 No survey or history of Grassmount was ever produced.
- 71 Mellie B. Pipes to Jamieson Parker, April 9, 1937, RG 515, NARA.
- 72 Daniel Bluestone, "Academic In Tennis Shoes: Historic Preservation and the Academy," *The Journal of the Society of Architectural Historians*, 58 no. 3 (September 1999): 302.
- 73 Cole, "The Education of Women Architects: A History of the Cambridge School," 31.
- 74 Barbara J. Howe, "Women in the Nineteenth-Century Preservation Movement," in *Restoring Women's History Through Historic Preservation*, ed. Gail Lee Dubrow and Jennifer B. Goodman (Baltimore, MD: Johns Hopkins Press, 2003): 18.
- 75 HABS Oregon District Office, "Report," October 1936, RG 515, NARA.

Honoring James Hoban, Architect of the White House

by William B. Bushong

This year marks the 250th anniversary of the birth of James Hoban, the Irish-born architect best known on these shores for his design of the White House in Washington, DC. The commemoration—a collaborative effort among the White House Historical Association and the James Hoban Societies of Ireland and the United States—includes an exhibition, *James Hoban: Architect of the White House*, that opened at the White House Visitor Center on March 13, 2008, and a venue in Ireland; a special James Hoban issue of the journal, *White House History*; and a symposium cosponsored with the United States Capitol Historical Society, also in March, that examined Hoban as a federal architect, and local civic and church leader, plus Irish artisans in 19th-century Washington and residential architecture in the city from 1790 to 1830. The exhibition, publication, and symposium have brought new insights to a memorable Irish American success story.

Born in 1758 in a peasant cottage on the Desart Court estate of Lord Cuffe in County Kilkenny, Ireland, Hoban came to America with high ambitions. He designed and erected many buildings, but what keeps his name alive today is one special commission the executive mansion for the president of the United States, which most people know as the White House. Of the three architects who shaped the White House over the course of more than 200 years, Hoban was the most influential because he created the image of the house that has endured in the public consciousness to this day.¹

The details of Hoban's life and personality remain a mystery. Most of his personal and business papers were lost in a fire in the 1880s. What is known of the man has come mostly from scattered drawings, public documents, and newspaper notices.² A prominent Washingtonian and well-known builder, Hoban served as the U.S. Government's principal architect until President Thomas Jefferson replaced him with Benjamin Henry Latrobe in 1803.³

Hoban arrived in Philadelphia from Ireland around 1785. His time there was brief: Around 1787, he relocated to Charleston, South Carolina, where he set up a partnership with fellow Irishman Pierce Purcell, a master carpenter, and opened a drawing school.⁴ His influential references for work in Charleston attracted the attention of President George Washington, who invited Hoban to Washington, DC, to design a new executive mansion for the President of the United States.

Hoban arrived in Washington in 1792. He was instrumental in organizing Federal Lodge No. One of Freemasons in September 1793. One week later, President Washington laid the cornerstone for the Capitol, a ceremony in which the Masons participated.⁵ His marriage to Susana Sewell, a member of a prominent Maryland family, meant that the architect was in Washington to stay. The Hobans moved into a two-story brick house on the north side of F Street, between 14th and 16th, not far from the White House site.⁶

Besides the Masonic lodge, Hoban helped establish Saint Patrick's Catholic Church in 1794, convincing Father Anthony Caffrey to come to the United States from Ireland to head it up. He also formed the District's first militia company in 1796, which had a profound influence on the maintenance of law and order in the young capital. Sensitive to the needs of Washington residents, he served on the city council for 20 years.⁷

Proud of his Irish heritage, Hoban gave a voice in local politics to the great number of Irish immigrants in Washington who worked as skilled and unskilled laborers, draymen, tavern keepers, blacksmiths, grocers, and boarding house proprietors. He founded the Sons of Erin in 1802 to promote naturalization and help Irish-born workers with housing, food, and medical services.⁸



FIGURE 1
This wax bas-relief, attributed to the German-born artist John Christian Rauschner, is the only known image of James Hoban created from life. (Courtesy of the White House Historical Association)

James and Susana Sewell Hoban had 10 children. The best known of them was James Hoban, Jr., a powerful orator and respected Washington lawyer who completed his career as the District Attorney for the District of Columbia. Family tradition held that an 1844 daguerreotype showed that James, Jr., was the “spitting image” of his father. Like his father, James, Jr., was very proud of his Irish heritage, wrote and lectured on Irish eloquence and wit, and promoted Ireland's independence from Great Britain.⁹

What the elder James Hoban looked like is entirely transmitted in a wax image passed down through his family. He probably sat for the bas-relief portrait as a wedding gift to Susana in 1799. Curators attribute the color miniature to German-born John Christian Rauschner. (Figure 1) It shows a youthful profile, thick brown hair, rosy complexion, and broad shoulders and chest that suggest a hardy physique, just as one might expect of a builder accustomed to working with his hands.¹⁰

In 1932, the American illustrator N.C. Wyeth created a poster for the Pennsylvania Railroad promoting travel to the District of Columbia for the bicentennial of the birth of George Washington. Wyeth based the poster on Washington's personal interest in the design and construction of the White House, depicting a presidential visit to the site in the company of architect Hoban. (Figure 2) To the left are visitors or perhaps friends of the president and to the right are Hoban's assistants.¹¹

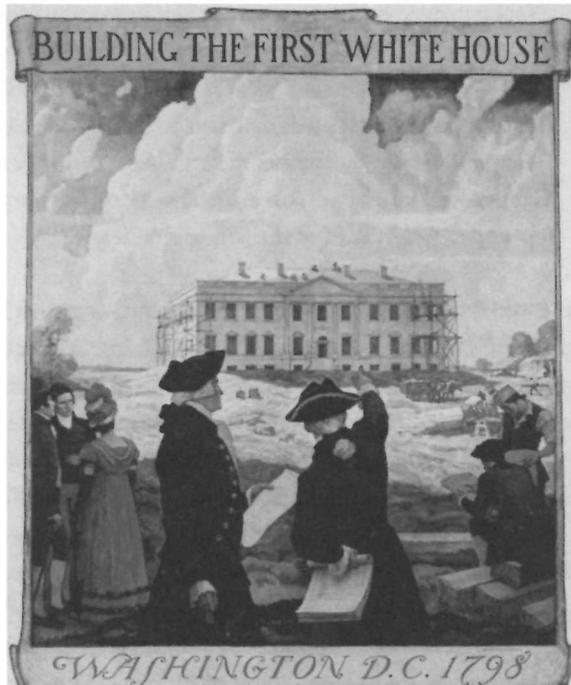


FIGURE 2
This travel poster, created in 1932 by the illustrator N.C. Wyeth for the Pennsylvania Railroad, depicts James Hoban showing President George Washington the progress on the White House. (Courtesy of the White House Historical Association)

The most prolific year of Hoban portraiture came with a 1981 commemorative Hoban stamp jointly designed and issued by the United States and Ireland. Irish artist Ron Mercer created the portrait of Hoban from his portrait and Walter D. Richards, an American stamp designer renowned for his work on the American Architecture Series.¹² With the stamp's issuance numerous commemorative covers produced new portraits of Hoban.

Hoban died in 1831, having completed the north portico—the enduring image of the White House. He left a large estate of more than \$60,000 (approximately \$1.4 million in 2006 dollars), with property in the city and farms in Maryland. His children shared most of the estate. The slaves were to be sold.¹³ He was buried beside Susana in the old graveyard at St. Patrick's Church. The graves were moved in 1863 to the new Mount Olivet Cemetery on Bladensburg Road near Washington, where they remain.¹⁴

Despite the efforts of the last several decades to create a profile of James Hoban, he remains a mystery. His thoughts and ideas, beyond what can be inferred from letters to government officials and activities reported in contemporary newspapers, remain missing pieces of a puzzle. Portraits and fragmentary records are informative but require the imagination to understand the man's character.

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Notes

- 1 William Seale, *The White House: The History of an American Idea* (Washington, DC: White House Historical Association, 2001), 2-35, 159-201, 237-77. Hoban was the first of three architects to leave his mark on the White House. The second was Charles F. McKim of the firm, McKim, Mead & White, who directed the 1902 Beaux Arts White House restoration for Theodore Roosevelt. The third was Lorenzo S. Winslow, who gutted and rebuilt the house's neoclassical interior for President Harry S. Truman between 1948 and 1952.
- 2 Martin I.J. Griffin, "James Hoban, the Architect and Builder of the White House," *American Catholic Historical Researches* 3 no. 1 (1907): 35-52; and Pamela Scott and Antoinette J. Lee, *Buildings of the District of Columbia* (New York, NY: Oxford University Press, 1993), 20.
- 3 President Thomas Jefferson replaced Hoban with the architect Benjamin Henry Latrobe.
- 4 One of Hoban's students in Charleston was Robert Mills, who would have an illustrious career as an American architect.
- 5 Gary Scott, "James Hoban, First Worshipful Master of Federal Lodge No. 1," speech presented September 13, 1998, Mount Olivet Cemetery, Washington, DC.
- 6 Griffin, 2.
- 7 William W. Warner, *At Peace With All Their Neighbors: Catholics and Catholicism in the National Capital, 1787-1860* (Washington, DC: Georgetown University Press, 1994), 153, 161-62.
- 8 Morris J. McGregor, *A Parish for the Federal City: St. Patrick's in Washington, 1794-1994*, Washington, DC: Catholic University Press, 1994: 42-44.
- 9 John E. Norris, *Eulogy on the Life and Character of James Hoban, Esq.* Washington, DC: W. Blanchard Printer, 1846.
- 10 William Kloss and Doreen Bolger, *Art in the White House: A Nation's Pride* (Washington, DC: White House Historical Association in cooperation with the National Geographic Society; New York: Distributed by H.N. Abrams, 1992), 339.
- 11 Christine B. Podmaniczky and Charles H. Wolfinger, "N.C. Wyeth's Pennsylvania Railroad Paintings," *The Keystone* (Spring 2001), 55-58.
- 12 James H. Bruns, "Stamps and Coins," *Washington Post*, October 25, 1981, G6.
- 13 Wesley E. Pippenger, comp., *District of Columbia Probate Records, Will Books 1 through 6, 1801-1852 and Estate Files, 1801-1852*, Arlington, VA, 2003: 169. Using the Consumer Price Index, Hoban's worth calculated by the Consumer Price Index, see Samuel H. Williamson, "Six Ways to Compute the Relative Value of a U.S. Dollar Amount, 1790 - 2006," *MeasuringWorth.Com*, 2007.
- 14 Griffin, "James Hoban, The Architect and Builder of the White House," 47.

Adaptive Re-Use of the Old Evangelical English Hospital in the Town of Salt

by *Jawdat S. Goussous*

Although the conservation of urban areas, buildings, and historic monuments of architectural value has been a major preoccupation of architects for many years, the field of architectural conservation is relatively new to the Hashemite Kingdom of Jordan. There is a growing awareness, however, of the need to protect cultural heritage and preserve the historic architectural and urban identity of this Middle Eastern nation. An example of this new focus is the ongoing stabilization and re-use of the Old Evangelical English Hospital nestled in a northern hillside of the Saaha above the Anglican Church in the town of Salt, 30 kilometers southwest of Amman, Jordan's capital and largest city. (Figure 1)



FIGURE 1
The Old English Hospital complex in the city of Salt is a prominent urban landmark. (Courtesy of the author)

Construction of the hospital began in the 1890s and continued up until 1926. It was damaged a year later in an earthquake, and hospital care eventually moved to the As-Salalem area of Salt in 1935. As built, the English Hospital has simple semi-circular and segmental openings in the facades. All rooms open onto a veranda overlooking the plaza.

The English Hospital was part of an extensive Anglican mission complex. Residents of Salt had asked the Anglican Church in Jerusalem for a church and school. Formal religious services took place for the first time in 1849, and the Bishops School gradually grew to include approximately 400 students. In 1866, Bishop Gobath acquired property in the center of Salt for a clinic and church in the town. Work on a mission house began around 1870 and on a church shortly thereafter. The Church Missionary Society (CMS) assumed responsibility for the project in 1873 and began providing medical services on-site in the 1880s. The term, "hospital," was attached to the site sometime afterwards.

This first hospital in Jordan began with simple facilities. In 1889, work began on the ground floor of the current structure and soon expanded to include a second floor and other buildings, notably a caretaker's house and mission dispensary. Records from the late 19th century show that patients included Bedouin from as far away as Morocco and Yemen. World War I and the Turkish occupation of the area temporarily disrupted the hospital's activities. His Majesty King Abdullah bin Hussein, King of Jordan, dedicated an enlarged and renovated hospital facility in 1922.

Certain features of the complex are of particular importance architecturally. The organization of the different spaces and functions around the open court-

yards and the solid–void relationship are both significant. Attractive landscape features survive on the upper terrace. The verandas of the English Hospital and the huge retaining wall that carries them are unique in Salt. The stonework, interior details, and the bell towers of the church combine to make this a distinguished building. Moreover, the building styles of the different stages of the complex reflect the characters of their respective periods.

Over time, dampness, mold, theft, vandalism, and misuse, along with the construction of larger and taller buildings in the Saaha, such as the great Mosque and the Quteishat building in front of Abu Jabber House compromised the integrity of the mission complex. In the case of the Anglican Church and Sunday School, an insensitive renovation compromised important features, notably the buildings' stone tiles.



FIGURES 2-3

The former doctor's residence, shown here before and after restoration, now serves as living quarters for STRIDE trainees. (Courtesy of the author)



Just as its material character has evolved over the years, the English Hospital complex's function has shifted in response to the community's changing needs. After the completion of the new hospital in Salalem in 1935, the English Hospital focused on out-patient care and dispensary work. Between 1948 and 1982 when it closed, the hospital served as a relief and social work center. When yet another hospital opened in 1954, the complex became a rest home for the elderly. The Synod of the Arab Evangelical Episcopal Church in Jerusalem and the Middle East took possession of the complex in 1956. Then, in 1964, the Holy Land Institute for the Deaf (HLID) opened on the site; it was the first school for children with disabilities. HLID became a "beacon" for Middle Eastern deaf education.

In 1996, HLID established the Salt Training and Resource Institute for Disability, Etc. (STRIDE).¹ All STRIDE activities were based at the HLID site in Salt, meaning that STRIDE lacked adequate facilities for its cross-disability training for rehabilitation workers and teachers. With permission from the Arab Evangelical Episcopal Church, HLID began the rehabilitation of the complex in 1998 for eventual re-use as STRIDE's training, resource, and respite care center. When complete, this building will provide STRIDE with a spacious location where it can carry out its goals in an environment designed expressly for people with disabilities.

The former hospital building will be the training center. One set of rooms has been designated for people with physical disabilities and another for those with visual impairment. A former doctor's residence adjacent to the hospital will become the administrative hub, and a number of flats above the old hospital will be converted into living quarters for trainees and others. (Figures 2-3) An integral part of the training center will be the service unit slated to be built on a vacant plot of land next to the hospital. This unit will include a kitchen and dining room, offices for outreach workers and administrative staff, a disabled living center, and sanitary facilities. The development will also include a number

of small shops and an elevator that will render the multilevel complex accessible to all.

Before the rehabilitation work, the buildings of the complex were in poor condition. All the stone façades were dirty, with many missing or inadequate fillings. The balconies had rotted, and the roof was leaking. Many of the stone arches over doors or windows had been damaged. All the inside walls had crumbling plaster or layers of oil-based paint. Most of the wooden doors and windows were broken, and the sanitary and electrical installations were damaged beyond repair.

The rehabilitation project began with work on the foundations and complex infrastructure in the fall of 1996. At the present time, the building houses the architect's and site office, and a small exhibition for visitors. Two flats near the site have also been renovated, and are now inhabited by short and longer-term volunteers working on the project. In 1999, work started on the three-floor, English Hospital building.

Thus far, HLID and STRIDE have received financial support for their multiphase project from the Embassies of Japan and the United Kingdom, British Overseas Aid, and other groups. The first and second phases, now complete, focused on the renovation of the offices and west terrace, the rehabilitation of the Old English Hospital for use as the training center, repairs to the retaining wall and structural reinforcement at different locations of the complex. Work is underway on tourist facilities and the renovation of various flats and shops.

STRIDE's new training center serves people with a range of disabilities, and the rehabilitated complex takes their requirements into consideration. Ramps have been installed in lieu of steps, door widths enlarged, and an elevator introduced. Door handles, switches, and taps, moreover, have been placed so that they are within reach of a person confined to a wheelchair; they are also suitable for use by people with hand impairments. Students in HLID's vocational training workshops made much of the metalwork and woodwork for the rehabilitation.

Following in the great tradition of social and medical services initiated in Salt almost 150 years ago, STRIDE has started the first cross-disability and community-based rehabilitation training programs in Jordan and the Middle East. The refurbishment of the Old English Hospital will demonstrate to the people of Salt that their distinctive town can be preserved and that the adaptive re-use of the English Hospital and other historic buildings can be compatible with the traditional building functions and the needs of modern society.

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Note

- 1 STRIDE's mandate is fourfold: 1) Train rehabilitation workers and teachers of disabled children, especially through cross-disability training courses (all disabilities in one program); 2) Develop educational and rehabilitative resources for use by and for people with disabilities, especially in the Arabic language; 3) Restore the Old Evangelical (English) Hospital in Salt and revive its community service role, by re-establishing it as a training center for STRIDE, whilst contributing to the restoration of Salt Town Center; and 4) Support and assist disabled individuals and their families through the provision of a respite care program.

Between 1995 and 2000, nearly 1,500 people attended STRIDE training and resource programs in Jordan, Syria, Iraq, Yemen, Egypt, the West Bank, and other locations. STRIDE also produced many educational and rehabilitative resources in the last few years in both English and Arabic, such as the Deaf Kindergarten curriculum; a textbook for teachers of the deaf; vocational training curricula; guidelines for parents, teachers, and interpreters; and a dictionary of Yemeni sign language. The Sign Language Unit is also developing a dictionary of Jordanian Sign Language.

Sustainable Development in the Republic of Montenegro

by Paul Labovitz

The Republic of Montenegro formally declared independence from Serbia in June 2006. A young nation with an old history and a keen awareness of the need to preserve its natural and cultural heritage, Montenegro determined to become an “ecological state” and so crafted strong legislation aimed at facilitating the achievement of its conservation goals. Yet, self-declaration has not been enough to attain Montenegro’s desired ecological condition.

To assist Montenegro’s objectives, the United States Consulate, now an embassy in the capital city of Podgorica, invited Len Materman of America’s River Communities, a conservation nonprofit based in California, and this author to Montenegro to engage several audiences in discussions about sustainable development practices. The American team had paired up previously to facilitate a similar program in Slovakia in conjunction with the U.S. Embassy in Bratislava. In Slovakia, the conversation centered on the region surrounding High Tatras National Park.

Working through the Montenegro Business Alliance (MBA), a local nonprofit partner, the embassy scheduled a two-week program of meetings with a number of government agencies, citizens, environmental and conservation nonprofits, and business owners. The initial gathering brought the American team together with the MBA, which was followed by a brief tour and introduction to embassy staff. The American team then had several opportunities to interact with members of the media. They contributed to a session of the American Corner at the Cultural Center in Podgorica, a forum where different topics are explored and presented to the public. The team talked to several school groups in high schools in Podgorica, Ulcinj, and Mojkovac, including an economics and tourism development class at a magnet high school.



FIGURE 1
This traditional mountain hut in Kolasin, the headquarters town of Biogradske Gora National Park in Montenegro, is home to a restaurant serving traditional Montenegrin mountain cuisine.
(Courtesy of the author)

The American team traveled to many parts of the country. They spent time with the directors of National Parks of Montenegro and three of Montenegro’s four national parks: Durmitor, Biogradske Gora, and Skadar Lake. (Figure 1) Those discussions were based on the premise that natural and cultural resource conservation should be a critical part of Montenegro’s future economic development strategy.

Montenegro’s national parks and its UNESCO designated World Heritage Sites at Durmitor and Biogradske Gora National Parks and the old town at Kotor face

many challenges. Development pressures along the coast threaten the landscape and built environment that form the basis for the World Heritage designation at Kotor, in particular. (Figure 2) State funding can cover only a percentage of the operations at all four of Montenegro's national parks, which therefore must be very creative when it comes to generating revenue to operate, provide visitor services, and protect important natural and cultural features. And yet, revenue generating activities such as logging, river rafting, and hunting are the source of increasing public controversy in Montenegro and, by extension, concern among policy makers.



FIGURE 2
The medieval town of Kotor on Montenegro's Adriatic coast is a UNESCO World Heritage Site. (Courtesy of the author)

Moreover, the nonprofit community in Montenegro is still evolving and not sufficiently equipped to assist the parks fully in their conservation work. Many nonprofits consist of only a few staff, often just one or two people. Capacity building for nonprofit operations, programs, and fundraising is a self-identified need. Consolidation among the nonprofits will help prevent duplication of effort and encourage the development of more comprehensive strategic plans that focus on conservation. Nonetheless several have proven track records and are succeeding in various parts of the country. The institutional evolution underway has created some strong organizations that will continue to thrive.



FIGURE 3
The Tara River Canyon, a World Heritage Site, is the longest canyon in Montenegro and Europe and the second largest in the world after the Grand Canyon in Arizona. (Courtesy of the author)

Hopeful of encouraging other successful ventures, the American team met with delegates from the United Nations Development Programme (UNDP) to talk about rural development and tourism initiatives. A representative of the World Bank Global Environment Facility was also present to speak on efforts in rural communities in the Durmitor National Park region.

Tourism, such as that encouraged by the national parks, is a large component of Montenegro's economy. An equally large part, however, are the two industrial plants that provide employment opportunities and emit most of the country's pollution. Energy consumption at a large aluminum plant near the capital has unfortunately placed Montenegro in the unenviable position, statistically speaking, of appearing to consume three times the amount of electricity per capita on average of other European Union member nations. The European Union energy requirement has led to proposals for hydropower development in Montenegro that could severely impact several large river systems including the Tara River even as Montenegro itself curtails consumption. This catch-22 is particularly trenchant since the Tara River Canyon is one of the deepest river gorges in the world, second only to the Grand Canyon in the United States. (Figure 3) The Tara is also a prominent feature of both Durmitor and Biogradske Gora National Parks.

Getting together in Montenegro forged a connection between people working in related fields and grappling with similar challenges. The embassy wanted to generate proactive discussions that would identify issues and needs and propose ways of addressing them. Among the follow-up strategies: continue to

share concerns and experiences, tackle problems, and help build capacity; bring Montenegrins to the U.S. to meet people and visit places facing similar issues, and nurture relationships for future partnerships such as possible sister-park projects; engage the U.S. Department of State in exploring other opportunities for collaboration; and support future U.S.-Montenegro study tours.

Another potential outcome of the trip is the creation of a fifth Montenegrin national park in the Prokletije region along the border with Albania and Kosovo. Montenegro will petition UNESCO to recertify its existing World Heritage Sites, a requirement due to its separation from Serbia. At the time of writing, Montenegro was also in negotiations with the World Wildlife Fund regarding potential conservation work on the Dinaric Arc along the eastern edge of the Adriatic Sea.

In the end, the American team was able to share its success and other stories with its Montenegrin partners. The project demonstrated in irrefutable terms the extent to which Americans and Montenegrins share the desire to protect and interpret their natural and cultural heritage. Both communities grapple with issues related to visitor services, interpretation, and science. All involved in the meeting in Montenegro were recommitted to the idea that resource protection and appropriate development are compatible within both an economic strategy and a desire to be an ecological state.

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The Restoration of Monumental Church in Richmond, Virginia

by Amy Swartz

Monumental Church on East Broad Street in Richmond, Virginia, marks the site of one of the city's worst disasters. A catastrophic fire during a holiday performance at the Richmond Theatre on the site on December 26, 1811, claimed the lives of 72 people, including the newly elected governor of Virginia, George W. Smith. At the time, Richmond had a population of approximately 5,000 people, and the death of 72 residents affected almost every family in the city. While many important and prominent citizens perished in the blaze, the victims represented a cross section of society. The fire killed governor and slave, young and old. In a final gesture of humanity, all were buried together in one common grave on the site.

The theater site became hallowed ground as the city coped with the tragedy. U.S. Supreme Court Chief Justice John Marshall led a committee to raise funds for a memorial on the site of the mass grave. During the fundraising process it was decided that a much-needed church should be built in conjunction with the proposed memorial. A "monumental church" eventually rose out of the theater's ashes and served an Episcopalian congregation until its de-consecration in 1965.

Despite the recognition of Monumental Church's place among the nation's most important historic structures, the building was in dire need of restoration at the close of the 20th century. In October 2002, a Save America's Treasures (SAT) grant from the National Park Service launched a multi-million dollar restoration campaign to preserve the crumbling fabric of this national historic landmark and memorial to the victims of the devastating fire.

History of Monumental Church

The designer of Monumental Church, Robert Mills, maintained that he was America's first native born, trained architect. His architectural instruction began in Charleston, South Carolina, but his knowledge deepened under the tutelage of James Hoban and Thomas Jefferson once he moved to Washington, DC. Jefferson encouraged Mills's architectural endeavors, giving him unlimited access to his library and introducing him to the man who became his mentor, Benjamin Henry Latrobe. Latrobe's sponsorship lasted until 1811, when Mills entered the design competition for a memorial to the victims of the Richmond Theatre fire, which Latrobe had also entered. Mills's design for a "monumental church" and memorial was selected.

FIGURE 1

This view into the portico of Monumental Church in Richmond, Virginia, shows the memorial's funerary urn in place. (Courtesy of the Historic American Buildings Survey Collection, Library of Congress)



Mindful of the desire for a combined memorial and church, Mills created a monumental porch as a vestibule and memorial space with an octagonal shaped church behind, integrating the two functions. Work began in 1812 and lasted for two years. Monumental Church was built around and over the crypt that can be seen in the basement of the structure. The first Episcopal service was held on May 4, 1814.

The most elaborate and only surviving of the five domed octagonal buildings designed by Mills, Monumental Church is a national architectural treasure. Mills strove to innovate, not imitate, and often composed on a grand scale. His inventive style melded many different motifs from antiquity, including Egyptian, Roman, and Greek, into a new American architectural vocabulary that began at Monumental Church. Mills's design for the memorial church goes beyond

the influences of Latrobe and demonstrates his own unique expression of architecture during the nation's infancy.

Restoration Work

John Milner Associates, Inc., the firm hired to develop a conservation plan for Monumental Church, established the guidelines for the building's complete restoration. The project consists of four distinct phases. Phase I, which ran from June 2003 to December of that year, focused on the building envelope and weatherproofing of the exterior to prevent leaks and solve a moisture problem that threatened the structure. Phase II focused on mechanical systems, specifically air conditioning and a dehumidification system to provide the necessary regulated environment inside the building.

The mechanical systems put in place in Phase II also will ensure the sustainability of the work to be carried out in the interior during Phase III, which includes the restoration of the plaster, wood, and painted surfaces. The final phase involves the restoration of the grounds, the surrounding exterior brick walls, and cast iron fencing. This phase also involves site drainage improvements and the construction of outside access to the basement crypt.

Restoration of the Monument

The restoration project also had to include the memorial's signature marble funerary urn. (Figure 1) In 1999, the urn in the center of the memorial, weakened by decades of pollution and weather damage, broke off its base. A team of architectural conservators called in to examine the monument recommended replacing the urn with a replica to minimize further damage to the original.

The conservation team, working with Direct Dimensions, Inc., a laser scanning, digital modeling, and reverse engineering company, began by documenting the monument with a precise seven axis laser scanner. They used information from their scans and historic photographs to analyze areas where sculptural details had been lost and digitally recreated the monument.

The innovative imaging technologies used in this project are at the forefront of conservation and preservation technology. The process combines data acquisition technologies derived from aerospace engineering with established (but not widely known) milling technologies to reconstruct complex architectural and sculptural details in a timely and cost effective manner.

Next, skilled stoneworkers used the virtual reconstruction to fabricate the final three-dimensional replica of the urn out of marble, employing a combination of computer-based milling software and hand sculpting equipment. The replica



FIGURE 2

This image shows the process by which the funerary urn was replicated in ren board, a "poured" wood material. The ren board urn was an exact copy of the original. (Courtesy of the author)

was installed in 2005, and the original was dismantled and safely stored for future conservation and indoor display. (Figure 2)

Since the 1980s, outdoor marble sculptures have been eroding at an accelerated pace. Atmospheric pollutants attack the binding elements in the marble, causing it to disaggregate. The innovative technologies used for examining and remaking the monument have the potential to transform historic preservation practice, protecting original artifacts and digitally restoring them for future generations to study, enjoy, and appreciate. To that end, the funerary urn modeling has already served as a prototype for other endeavors.

Conclusion

To date, Historic Richmond Foundation has completed two of the four phases prescribed by the conservation and restoration plan, plus caring for the funerary monument itself. Plans are underway to continue the work laid out in Phases III and IV. When complete, Monumental Church will be available to tourists, students, and scholars; the facilities will once again host lectures, plays, concerts, and other programs absent from the site since the tragic fire. The auditorium-style seating in the church combines the architectural traditions of the evangelical and educational, further integrating past and present use of Monumental Church.

Amy Swartz is the director of preservation services at Historic Richmond Foundation in Richmond, Virginia.

Notes

- 1 The Robert Mills designed building became a national historic landmark in 1971. Historic Richmond Foundation has owned the building since 1983.
- 2 John M. Bryan, *America's First Architect Robert Mills* (NY: Princeton Architectural Press, 2001), xi, 97-105.
- 3 The others were Circular Church, Charleston (1804), Sansom Street Church, Philadelphia (1808), Octagonal Church, Philadelphia (1813), and First Baptist Church, Baltimore (1816).

Reviews

BOOKS

Land of Lincoln: Adventures in Abe's America
By Andrew Ferguson. New York, NY: Atlantic
Monthly Press, 2007; 304 pp., cloth, \$24.00; paper,
\$14.00.

As the bicentennial of Abraham Lincoln's birth in February 2009 approaches, Americans can expect even more than the usual large number of volumes dedicated to the nation's 16th president. Andrew Ferguson, a senior editor at *The Weekly Standard* and writer for many other national publications, acknowledges as much in the opening paragraph of his contribution to Lincolnography, *Land of Lincoln: Adventures in Abe's America*. "More books," he writes, "have been written about Abraham Lincoln than about any other American—nearly fourteen thousand in all—and at least half of those books begin by saying that more books have been written about Abraham Lincoln than about any other American. This book, you'll notice, is one of them." Typical of Ferguson's breezy tone and guileless approach, this statement launches the reader on a cheerfully opinionated and often incisive tour of the Land of Lincoln, which it turns out is both a state and a state of mind—or rather, many of them.

Ferguson introduces himself as a partially lapsed Lincoln buff from childhood, a native of Illinois. The book jumps immediately into the heart of today's preoccupation with Lincoln's legacy, as Ferguson visits Richmond, Virginia, the site of a controversial statue of Lincoln that was installed in 2003. He talks to a number of Lincoln detractors who feel the Emancipation Proclamation was a "cynical, empty act." Ferguson sets out on a combination research project and road trip to dis-

cover "how we know what we think we know about Lincoln." In this he reveals a cheerfully accessible historical sensibility that a number of professional historians would envy.

After briskly summarizing the effects of the Missouri Compromise, Kansas-Nebraska Act, and the *Dred Scott* decision, Ferguson focuses on the reality that "Lincoln's political view of slavery, and his personal views on race, were not nearly so simple as most buffs would prefer. They don't fit into the historical categories we're used to dealing with: Lincoln was neither a supporter of slavery nor an abolitionist." That has stopped virtually no one from trying to use Lincoln's words or imputed history to support their own views of everything from the mundane to the mystical. The second chapter, in which Ferguson examines *Herndon's Lincoln*, its sources, and the often creative uses to which it has been put, is a tour de force of historiography, and entertaining to boot. He adopts the phrase "scholars differ" as an amusing but correct mantra, a constant reminder of what we just do not know. His discussion of "the case of young Billy Thompson," an amusing example of the selective use and misuse of source material, brings the chapter to an exciting finish.

Ferguson then takes the reader along as he revisits the places that fueled his enthusiasm as a youth, starting with the Chicago History Museum (formerly the Chicago Historical Society). Mostly, Ferguson is dismayed and irritated by the loss of the heroic in today's museums' dedication to social history that has supplanted things like the hand-crafted dioramas that dramatically, and memorably, recounted the legend of Lincoln's life to generations

of children. He deconstructs the philosophy and the contradictions of modern museum practices and disputes the claim that traditional history museums have lost their relevance and that today's diverse population requires a different paradigm. Time will tell if the next generation of curators agrees with him.

Those who followed the development of the Abraham Lincoln Presidential Library and Museum (ALPLM) in Springfield, Illinois, which opened in 2005, will already have some idea of what to expect from the chapter entitled "The Kingmaker's Wife, the Emotional Engineer, and the Triumph of Fun." The result is a priceless, if subversive, oral history of its origins, philosophy, and overwhelming presence. If the Chicago History Museum is a bit dry, the ALPLM is nonstop entertainment. Ferguson interviews Julie Cellini, a major force in the creation of the museum, as well as Bob Rogers of BRC Imagination Arts, the former Disney man who designed the new Lincoln museum by "lead[ing] with the emotions rather than the intellect [and] the visual rather than the verbal." He boasted to Ferguson that, "after six years of living with Abraham Lincoln, I can give him to you any way you want, cold or hot, jazz or classical. I can give you scandalous Lincoln, conservative Lincoln, liberal Lincoln, racist Lincoln, Lincoln over easy or Lincoln scrambled." The museum is almost too easy a target for people like Ferguson who prefer their heroes heroic. He laments all of its over-the-top aspects but does not mention the areas where it succeeds in conveying real information in innovative ways, such as the astonishing "Civil War in Four Minutes" presentation. Here we start to see a drift to glibness in Ferguson's tone and an occasional tendency towards cynical generalizations based on limited firsthand information.

In the ensuing chapters, on the strange worlds of Lincoln collectors, Lincoln "presenters" (the many, many dedicated people with beards and stovepipe hats who appear at events, parades, and programs), and management coaches who use Lincoln to motivate middle managers, the book's energy flags

a bit and veers off into less interesting directions. Pretty much anybody who is anybody in the Lincoln world, and is willing to talk, shows up in this book. Ferguson does succeed in demonstrating the wild variety of ways in which Americans view Lincoln, from Lincoln as proto-Bolshevik to Lincoln as business guru.

In the last chapters, Ferguson recounts an attempt to retrace his childhood experiences on the 1960s Lincoln Heritage Trail through Illinois, Indiana, and Kentucky with his wife and children. He visits the Lincoln Home National Historic Site in Springfield and makes some trenchant observations about the visitor experience in a somewhat predictably cantankerous fashion. The family tours the Lincoln Boyhood National Memorial in Indiana, sees a performance of *Young Abe Lincoln*, and ends up at the Lincoln Birthplace National Historic Site in Hodgenville, Kentucky, with stops along the way at other Lincoln sites large and small. The tone wavers at times between critique and awe.

Ultimately, the bemused attitude gives way to Ferguson's more serious purpose of lamenting the fall from fashion of the historical hero in American society. The title of his last chapter, "In Defense of the Icon," needs no explanation. He finds the icon in the Lincoln Memorial in Washington, DC, recounting with admiration the serious thought and purpose that went into its design by architect Henry Bacon and sculptor Daniel Chester French, and the mature understanding in the dedicatory remarks by President Warren G. Harding and Robert Moton, then president of the Tuskegee Institute. Here Ferguson finds, to his satisfaction, a Lincoln for adults rather than children, a Lincoln to be admired rather than dissected.

Phyllis M. Ellin
National Park Service

American Chestnut: The Life, Death and Rebirth of a Perfect Tree

By Susan Freinkel. Berkeley: University of California Press, 2007; 294 pp., notes, index; cloth \$27.50.

In the span of about a century, the American chestnut (*Castanea dentate*) went from a thriving species to near extinction. The onslaught of an invading fungus across its historic range (from southern Maine to central Georgia and as far west as Arkansas) was ecologically devastating, particularly in southern Appalachia. In *American Chestnut: The Life, Death and Rebirth of a Perfect Tree*, Susan Freinkel looks at the response to the crisis and efforts to reestablish the species, providing examples of informed management and object lessons on the perils of blindly striking out in an effort to do something before it was too late.

American Chestnut begins with an overview of the chestnut tree, its range, and its importance in the lives of Native Americans, early European settlers, and the mountain people who were their descendants. The chestnut was considered a “perfect tree,” not for any one outstanding characteristic, but because it did so much so well. A mountain farmer’s grove supplied lumber for buildings and fences. The nuts provided forage for livestock and food for the family. Even the leaves were useful as mattress stuffing and herbal remedies. Any surplus was circulated into a mountain economy built upon trade and barter for items that farmers needed but did not make. The people with whom the author spoke reminisced wistfully about this cherished resource. The most poignant were the memories of the shock at just how quickly the chestnuts died out.

Intertwined with the chestnut’s story are the blight’s discovery, classification, and efforts to stop its ravaging effects. The blight was identified in 1904 by Hermann Merkel, chief forester of the New York Zoological Society, now the Bronx Zoo, whose initial attempts to find the cause of *Cryphonectria parasitica* and a cure were fruitless. The United

States Department of Agriculture had no experts on forest diseases, and the USDA’s recommended treatment regimen was invasive and of doubtful effectiveness. Directly across the road from the zoo, the New York Botanical Garden’s resident expert on fungi, William A. Murrill, established the basic pathology of the chestnut blight. Unfortunately, in lieu of a cure, the only advice Murrill could give was to cut infected trees down and hope the disease would run its course. By the 1920s, the chestnut was considered doomed, and operations went from rescue to salvage, with the USDA urging landowners to cut down healthy chestnut trees and use the lumber before they became infected.

Freinkel examines these attempts to minimize the blight and save the American icon. It was determined that the fungus originated in Asia, and that Chinese and Japanese species of chestnut were resistant to it. As early as 1914, key stakeholders began exploring the idea of creating a hybrid that combined the resistance of the Asian species with the desirable traits of the American. The USDA began research on the idea and promoted the introduction of Chinese chestnuts as replacements for native trees. Disappointing results led to the termination of the research effort.

The desire to preserve the American chestnut spawned myriad efforts to reproduce or recreate the tree. The book describes these efforts including research underway on genetic modification of the fungus itself and the introduction of biological controls. The American Chestnut Foundation is working on a program of backcross breeding to produce a hybrid with predominately American traits. Others have been seeking out the few non-infected chestnuts to serve as breeding stock for a potentially blight resistant tree. Unfortunately, the USDA salvage recommendations were too successful, and survivor trees are few and far between.

The book also ponders the future. Is it too late for the American chestnut? Can hybrids be considered true representatives of the species? At this point, can

the tree be reestablished or restored to its original range and habitat, and if so, what are the ramifications to current ecosystems? Although the author may be rooting for the chestnut, she knows there are no simple answers, and ultimately concludes that the reestablishment of the American chestnut would at the very least “add a layer of diversity to forests that are becoming increasingly impoverished.”

This well-researched and footnoted book is highly recommended for resource managers, interpreters, and resource enthusiasts. The author has an enthusiasm for the subject, which she imparts to the reader. The only quibble is the lack of illustrations. There is only one photograph of a chestnut tree opposite the title page and one map of the tree’s historic range. The addition of photos showing healthy and infected trees, restoration efforts, blight symptoms, and the personalities involved in the discovery of the blight and the efforts to save the American chestnut would be helpful and increase the book’s value as an interpretive resource. There are some nice illustrations of the nut and the leaf cleverly utilized for chapter and section markers respectively. *American Chestnut* would be a valuable addition to any park library.

Kevin Moriarty
National Park Service

Architectural Records: Managing Design and Construction Records

By Waverly Lowell and Tawny Ryan Nelb. Chicago, Illinois: The Society of American Archivists, 2006; 250 pp.; illustrations, appendices, index; cloth, \$62.00.

Hidden within the 250 pages of essays, illustrations, color plates, appendices, and in-depth author biographies in Waverly Lowell and Tawny Ryan Nelb’s *Architectural Records* is the storyline of the next great American musical. The yet-to-be-written Broadway smash, “The Architect and the Archivist,” stars two young professionals (an architect and an archivist) whose eyes lock during—of all things—an architectural records conference, and their lives and professions are never quite the same again. Over the course of three days of intense workshops on archival arrangement and description and other topics, the two star-crossed lovers express their heartfelt desire to live in perfect interpersonal and professional harmony with each other in emotionally gripping male-female duets, their budding relationship a ray of hope for two established professions philosophically at odds with each other when it comes to records retention, their respective choruses (archivists for her, architects for him) reinforcing the traditional professional attitudes and stereotypes that would keep them apart.

The turning point in the story takes place midway through the conference in the hotel lounge, where the architect—starry-eyed, brilliant, and brimming with creative energy that only a budding design genius could possess—emotes over the Creative Moment as he leaps, with pen in hand, from barstool to banquette and beyond, feverishly sketching his design ideas on cocktail napkins and then carelessly tossing them, one after another, over his shoulder. All the while, the archivist struggles to pick up after him, her vocal part a probing piece about his emergent genius and whether to save all or just some of the soiled napkins, to respect original order, and whether and how to react to her

paramour's disregard for her predicament. The curtain closes with the chorus of archivists singing a round of "If only architects were more like archivists. . . ."

One of the last things anyone expects from a comprehensive and patently no-nonsense manual on managing design and construction records is a storyline worthy of the stage, but Lowell and Nelb have exposed, albeit unintentionally, the underlying tension that exists between humans who create things in the present and those who preserve things from the past. It is precisely that tension, in fact, that may help explain the desperate state of so many design records the world over, the push within the past couple decades to make things right, and the tremendous need for *Architectural Records* and similar publications explaining what design records are, why they are worth saving, and how to manage them for future use.

The horror stories are legendary: Scores of important design records relinquished by an architectural firm decades ago languish rolled up in janitor's closet in the basement of [insert institution name here] because few understand them and most find them too unwieldy to handle. The sad truth of the matter is—or so say the authors—that design firms "do not, as a rule, consider the future uses of their records by historians, communities, preservationists, and future owners" and usually move on to the next project before the previous one is completed and its voluminous set of presentation and construction drawings are carefully culled and arranged for future reference. Considering the amount of emphasis the authors place on understanding the design and drawing process *before* cataloging design drawings or, far more seriously, rearranging or disposing of them altogether, they must be of the opinion that librarians, archivists, and curators will have to assume full responsibility when it comes to caring for records that are so "fundamental to understanding society and the world around us." If archivists do not step up to the plate to preserve

these bona fide cultural resources for the benefit of humanity, in other words, who will?

Of all the wordage in the manual, one sentence stands out. Midway through the book appears, in bold on purpose, presumably: "Project files [text records, photographs, drawings] are the fundamental unit for arrangement and description of design and construction records." From the initial contact with a potential client about a specific project to the punch-lists, rare as-builts, and more common photographs documenting the completed building, the whole process of design and construction from soup to nuts revolves around the building project itself. The project is the generator of records in architectural offices, and archivists must respect the primacy of the project when organizing architectural records collections. If for no other reason than ease of access to the materials (since, the authors note, most research into architectural records is project-based), the project helps researchers make sense of a complicated and often nonlinear process. Sounds so obvious that it is almost not worth mentioning, but I imagine Lowell and Nelb have come across enough collections arranged exclusively by date, media, drawing dimension, or some other painfully non-project-based criterion that they felt compelled to emphasize the importance of project-based file arrangement here.

Throughout, the manual grapples with electronic project records and digital imaging—issues that are unavoidable in this day and age. Whereas the latter vis-à-vis paper and film records raises all sorts of copyright, privacy, metadata, and physical security (in the case of buildings) questions that are now commonplace concerns in libraries and archives, the former presents some significant management and preservation challenges of which every cultural resource professional should take notice. Since the invention of computer-aided design (CAD) in the late 1950s, the design and construction process has transmogrified to such an extent that the traditional phases of design, design development, and construction have lost their distinction. Lowell

and Nelb note that design tools like AutoCAD span those phases and have, as a consequence, blurred the boundaries: The drawings and documents related to each phase can be produced on demand from a single master design file on an architect's computer or an office network.

The stunning reversal of roles (the paper record which was once a final product is now, in an electronic environment, a by-product, and visa versa) has certainly facilitated the design and construction process and saved some trees if not dollars, but it has also added a whole host of new words to the architect's vocabulary and new responsibilities to the architect's repertoire. Mundane and at times, mind-numbing non-design related matters such as file version control, software and hardware obsolescence, and data file backup and recovery increasingly compete for human time and creativity, not to mention financial resources in an industry often operating at the margins. The benefits, though, of going digital in the architectural office must significantly outweigh the costs, including the loss of traditional hand drawing skills; otherwise, the estimated 83 percent of architectural firms in the United States that have embraced computer-aided design would be stockpiling cocktail napkins right about now.

With chapter titles like "Identification and Preservation Maintenance of Common Visual Media and Supports," the manual is clearly intended for serious professional audiences and people facing really big architectural records issues. Other chapters in the manual address similarly serious topics, such as the appraisal of records, standards of preservation and maintenance, and research and use. Nelb's essay, "A Brief History of Western Architectural Practice," which races through the evolution of WAP from a 7th-millennium BCE floor plan painted on a wall at Catal Hoyuk in Asia Minor to a 21st-century 3-D building information modeling exercise in cyberspace, and Appendix A, "Doing Your Neighborhood History," by Lowell will appeal to generalists and architectural enthusiasts alike: The authors and

their publisher, the Society of American Archivists, may have even included the neighborhood history piece to extend the publication's reach.

All readers will appreciate the sample project indices, series descriptions, and especially the drawings and photographs without which any discussion of architecture or architectural records would be pointless. Although the quality of some of the color images leaves something to be desired, they do not detract from what is, by all other accounts, a well produced book and an extremely important contribution to the architectural, archival, and associated professions.

Martin Perschler

National Park Service

1. The irony of the scene, as Lowell and Nelb would attest, is that preliminary design sketches—those precious and few records of that initial burst of design creativity that do, in fact, wind up on napkins from time to time—are among the most important yet the least likely of all architectural records to survive beyond the design and construction phase of a project.

Tourism in the Mountain South:

A Double-Edged Sword

By C. Brenden Martin. Knoxville: University of Tennessee Press, 2007; 246pp.; illustrations, notes, index: cloth, \$32.00.

C. Brenden Martin, Professor of History at Middle Tennessee State University, enters the current debate among cultural resource managers and scholars about the advantages and difficulties of tourism by addressing the subject in his book on the Mountain South with *Tourism in the Mountain South: A Double-Edged Sword*. This region includes Southern Appalachia, the Cumberland Plateau, and the Ouachita and Ozark Mountains. From his historical perspective he strongly recommends that future planning seek a diversified economy not

dependent on tourism alone. Although a buoy for sluggish economies, tourism is not without serious limitations, hence the book's subtitle.

Martin addresses the subject in three sections, each dedicated to a period. In each, he investigates how tourism influenced not only the economy but the local culture and the natural environment. Tourism began in the Mountain South during the early 19th century when transportation by horse and wagon set a pattern of development across the region that lasted until the end of the Civil War. The sick and ailing went to simply provisioned spas and taverns for "taking the cure." Gradually, the South's upper classes added the social rituals they practiced in their Tidewater and Low Country homes to the health-giving spas as they turned them into stylish pleasure-vacation sites. Southern women found antidotes for their home-bound isolation in these settings, and the young welcomed opportunities for courtship. These settings exacerbated the distinctions between the wealthy outsiders and the local denizens of generally modest means.

Railroads marked the next period of tourism in the Mountain South, transporting most of the visitors during the period between the end of the Civil War and the start of World War I. Gone were the southern elites, replaced by wealthy northern industrialists and New South businessmen whose wealth gave them advantages over the local communities in financing the new resorts. This imbalance of power led to more prestigious and elegantly appointed resorts. The curative powers of spas eventually gave way to their suitability as settings for rest and relaxation from the exertions of city life. Failure to gain nearby railroad access doomed some spas and locally-owned boarding houses.

The new tourism perpetuated the demand for cheap labor on which the southern economy had long been based. Local boosters, however, looked to the profits of widespread financial opportunity, minimal environmental impacts, and the cultural distinctiveness that tourism promised.

Interactions between tourists and local communities within the Mountain South had lasting consequences on the popular perception of the region and its inhabitants. Local inhabitants came across as unsophisticated, if not primitive, to the visitors. Conversely, this same perception led to efforts to preserve the arts and crafts associated with those simple folk or "hillbillies." Differences between the tourists and the local communities helped build the foundation for a marketing strategy after the railroads. Just as tourism enabled encounters between tourists and local people, with considerable misunderstanding as a result, so encounters with the attractive natural features ended up jeopardizing nature's survival.

The number of tourists dramatically increased in the 20th century, when automobiles surpassed railroads as the primary means of access to the region. The new mode of transport brought a tourist less wedded to luxury and more concerned with convenience. Small Mom-and-Pop business owners and managers abounded initially because the costs of entry into those businesses were minimal, and promoters of the Mountain South ballyhooed tourism as the way to the region's prosperity. State and Federal Governments built an extensive highway system to make the tourist influx possible but, by the end of the 20th century, the tourist service industry had landed in the laps of big companies based outside the region. New forms of tourism developed—recreational, escapist, such as Helen, Georgia's Bavarian village, a town divorced from local circumstances, and entertainment. True of many service industries, tourism depended on seasonal, low-paying local jobs lacking benefits and increased local government support of the physical infrastructure. Tourism also fed cultural and historic preservation efforts; however, the efforts were geared toward economic gain and commercial popularity.

Scholars of tourism are an impassioned group, weighing the pros and cons of tourism's powerfully transformative force on the host setting. Martin takes his place among these writers, whose moral

soundings can be traced back over 40 years in a steady stream of powerfully-reasoned and well-researched books. The earlier scholars in this lineage were more nuanced and usually addressed how the tourists themselves were affected. Hal K. Rothman concluded prophetically in *Devil's Bargain*: "We are all industrial tourists. . . . Psychically, socially, culturally, economically, environmentally, we inexorably change all we touch."¹

Although Martin is sensitive to the truth that tourism jeopardizes the very thing that lures tourists, he concludes that tourism can be acceptable as long as the right balance is achieved in dollars and cents. Why is tourism not taken for a cultural activity as opposed to a strictly economic one? After all, the arithmetic of the balance sheet is a cultural derivative, the underlying assumptions of which are debatable.

This criticism itself is outweighed by what Martin has accomplished. He has provided a useful history for public and scholarly activity, outlining a subject deserving more attention. Those managing the landscapes of the Mountain South or its economic future will appreciate Martin's conclusions, which are written in very accessible prose from essential primary documents and secondary sources about the Mountain South, a region long overlooked.

Keith A. Sculle

Illinois Historic Preservation Agency

1. Hal K. Rothman, *Devil's Bargain: Tourism in the Twentieth Century American West* (Lawrence: University of Kansas Press, 1998), p. 377.

California Vieja: Culture and Memory in a Modern American Place

By Phoebe S. Kropp. Berkeley: University of California Press, 2006; 384 pp.; b&w photographs, illustrations; cloth, \$39.95.

In this important study, Phoebe S. Kropp examines the construction of historical memory and regional identity in southern California between 1880 and 1940. She aims to explain the origins and development of what she calls "the Spanish past"—the romanticized view of regional history that took shape in the early 20th century, as many white Americans relocated in droves to southern California. She examines different views and appreciations of the regional past and explores the role of historical memory in the development of tourism, commercial boosterism, and urban and suburban development in this historically complex and, at the time, rapidly growing region. The result of her efforts is an engaging study that addresses important questions about popular uses of the past and offers insight into the iconic image that has long been identified with southern California.

According to Kropp, the publication of Helen Hunt Jackson's novel, *Ramona*, was a seminal event in the creation of the Spanish past. When this melodramatic tale of forbidden romance and tragic loss appeared in 1884, it introduced countless readers to a seemingly bygone era in California history. Although Jackson intended the book to expose the injustices suffered by mission Indians, readers instead focused on its "intoxicating descriptions of the past" and vivid depictions of California's lush landscape. In the years that followed, tourists flocked to see the sights and scenery described in the novel. Kropp notes that several people sought to capitalize on the novel's popularity while striving to show that "the region contained modern amenities and civilized society." In most cases, this meant separating the region's Mexican past from the present. Racial stereotypes excluded Mexicans from an emergent vision of "a graciously civilized and definitively Anglo future."

Between 1900 and 1920, *Ramona* morphed into a fully developed narrative of regional history. Boosters drew upon “Spanish memories” to craft slogans that would attract tourists and promote the region’s commercial potential. In time, the Spanish past became synonymous with growth and a symbol of Anglo conquest. This transformation could be seen in a number of ways, but nowhere was it more apparent and paradoxical than in the growing popularity of Spanish Colonial-style architecture. According to Kropp, many white Americans saw—of all things—stucco-clad houses as symbols of affluence and leisure—southern California’s version of the good life.

The heart of the book is four case studies, each of which examines the making of a different “venue”—a physical place and space that Kropp argues “gave form and meaning to Southern California’s regional memory.” They are, in order of analysis: El Camino Real, the highway that linked California’s 21 Spanish missions; the Panama-California Exposition of 1915; Rancho Santa Fe, a planned suburb outside of San Diego; and Olvera Street, a public market in Los Angeles. Kropp argues that the making of these venues had a crucial role in the construction of the Spanish past. The campaign to build El Camino Real, for example, was an important episode in the commercialization of the past. When supporters encountered concern about the missions’ foreignness, they responded by portraying the missions as vestiges of a distant past and incorporating them into a narrative of national progress. These efforts helped secure state funding for construction of the road and promoted the missions as tourist attractions.

The Panama-California Exposition of 1915 marked a new and monumental stage in boosters’ use of the past. Its elaborate displays of Spanish and Indian heritage highlighted the advancement of Anglo American civilization and cast progress in high relief. Rancho Santa Fe and Olvera Street, Kropp contends, illustrated the expanding public and private roles of the Spanish past. The former linked

Spanish Colonial-style houses to an affluent suburban lifestyle, while Olvera Street made the Spanish past a central presence in the heart of a major city. Olvera Street became “a key site for negotiating” who would share in southern California’s version of the good life.

In its mature form, the Spanish past paid homage to Spain, ignored certain aspects of the region’s rich, varied, and sometimes brutal history, and overlooked contemporary social realities. Kropp argues that it placed “Anglos at the center of Southern California’s future while exiling all others to its past,” thereby defining citizenship in these same terms. Yet, the cultural power of the Spanish past began to unravel at the height of its popularity. In the 1930s and 1940s, critics called attention to its frivolities and contradictions, which Kropp concludes is to account for that past’s “ambiguous legacy.” Although it endures as part of the region’s cultural fabric, it “saved and created a built environment for future generations to see, interpret, and [significantly] reclaim.” Many Hispanics and other minorities now look to that past to forge more inclusive memories.

By concentrating on debates that shaped the form and meaning of the Spanish past, Kropp makes important contributions to the study of historical memory. Her analysis of the built environment calls attention to the role of architecture and landscape in shaping and sustaining collective memories and the significance of architectural style and place. Her emphasis on the boosters’ roles in creating the Spanish past and using it as an instrument of progress advances debate about the “modern” and “anti-modern” impulses of historical memory. Although she overstates the degree to which other scholars have portrayed memory as a retreat from a troubled present, her book will undoubtedly be cited for its interpretive stance, which sees nostalgia working in concert with, and in the service of, progress.

The major shortcoming with Kropp’s book is its shifting and occasional lack of focus. Although Kropp shows that the Spanish past had important

consequences for tourism, commercial development, architecture and landscape, public culture, race relations, and white American ideas about progress, she engages such a broad range of topics that readers are sometimes left wondering what is ultimately at stake. This problem is compounded by a lack of social and political context. In the book's best moments, the struggles to define southern California's past are clearly positioned in relation to formal politics and a changing social and economic landscape; in others, they seem to play out independent of economic, social, or political developments.

Kropp has written an important book. *California Vieja* brings new insight to the American fascination with images and metaphors of Spain and contributes to broader discussions about the construction of historical memory and regional identity. It will become required reading for specialists in these fields and students of Southwestern history. It should also appeal to anyone interested in the powerful influence the past has exerted in American life in the late 19th and early 20th centuries.

Daniel Vivian
Johns Hopkins University

EXHIBIT

George Washington Carver

The Field Museum, Chicago Illinois; Organized by The Field Museum in collaboration with Tuskegee University and the National Park Service; Michael Dillon, Curator; Hilary Hansen, Project Manager

February 1 to July 6, 2008 and traveling

"I am a dreamer who dreams, sees visions, and listens always to the still, small voice. I am the trail blazer."

—George Washington Carver

A visitor who knows only a little about George Washington Carver's life before coming to this exhibition will have the experience of looking up from a single cotton boll to the white-flecked sea of a cotton field. Carver led a rich life, and this exhibition does justice to its drama and complexity. Over the course of an hour or so, visitors who thought of Carver as "the peanut man"—as did many of his contemporaries—discover he was a teacher and researcher whose natural curiosity and humanitarianism set an example that has inspired generations.

A two-minute video introduces the exhibition by sketching the highlights of Carver's extraordinary life, whetting the appetite for the material to come. Historic photographs and original artifacts capture the story of his dramatic infancy, telling how young George was born a slave in 1864, brought to death's door by whooping cough, kidnapped, orphaned, and emancipated before he was a year old. A diorama of the Missouri farm where Carver grew up and samples of his childhood hobbies of sketching and fossil-collecting help visitors imagine him running through the fields of the rural south, awakening to a love of nature that lasted his whole life. One of the most remarkable artifacts on display is a linen tablecloth embroidered with delicate tulips, a product of Carver's hands: Weakened by disease, he learned sewing, knitting, and embroidery to help around the house.

The exhibit also tells the story of Carver's 20-year struggle for higher education. Having outgrown several local and regional high schools, Carver sought education at three different colleges. The first college that accepted him turned him away when it discovered he was black. At the second, Simpson College in Indianola, Indiana, Carver's teachers encouraged him to pursue the arts. Examples of his sketches illustrate why their recommendations were so strong. However, Carver decided that he wanted to help poor black farmers and that a degree in agriculture would serve him best. He graduated from Iowa State College in 1896.

Carver's contributions to the scientific field formerly known as "chemurgy," which entailed the production of industrial products from agricultural materials, were largely made during his tenure at Tuskegee University in Alabama. The handmade lab equipment on display in the exhibition is a testament to the stark conditions at the university when Booker T. Washington invited Carver to head the school's agriculture department. Carver and his students conducted research and experimented with different types of crops and crop rotation in their quest to improve soil quality.

The exhibit does a good job of placing Carver's work within the context of Reconstruction in the South after the Civil War. Cotton was in some ways Carver's enemy: It fueled the economy that had fueled slavery; it drained the southern soil of vital nutrients; and it trapped poor black sharecroppers into grueling poverty. King Cotton, once the great cash crop, was scarcely profitable when Carver came to Alabama. Knowing that planting nitrogen-fixing plants could restore the soil, Carver encouraged farmers to rotate their cotton crops with peanuts, soybeans, and sweet potatoes, increasing their yield and contributing to better soil quality overall.

Learning about Carver's research was interesting, but learning how he spread that knowledge to help impoverished black farmers was one of the most

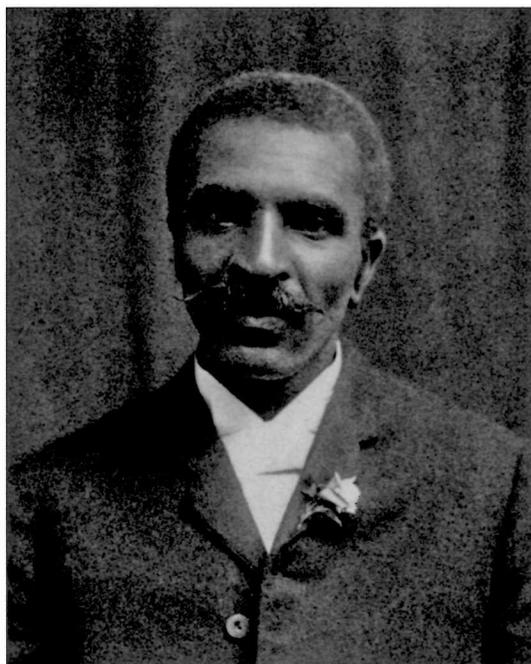


FIGURE 1
A visionary scientist, George Washington Carver, shown here in this undated portrait, has inspired generations. (Courtesy of the Tuskegee University Archives and Museum)

fascinating parts of the exhibition. In 1906, Carver designed a mobile educational laboratory called the Jessup Wagon, named after its financial backer, Morris K. Jessup. The exhibit includes a full-scale reproduction of the wagon on which visitors can find examples of the demonstrations Carver did as he traveled around Alabama. Nearby are two good interactive presentations that illustrate two lessons: how to improve soil quality and how to re-use materials to beautify a homestead. The interactives are short, attractive, clear, and fun.

Though not overtly discussed in the exhibit, one theme that becomes clear is that throughout his life, Carver was in situations where he was considered something of an outsider. Orphaned before he was a year old, Carver lived with his former owners and took their last name, but it is unclear whether they considered him more of a son or an indentured servant. At Simpson College, Carver was the only black man on campus and, while encouraged, was always something of an anomaly. At Tuskegee, he encountered racial tension from his black



FIGURE 2
Carver, shown here studying a Yucca plant, believed that nature could provide everything that people needed and was innovative in creating everyday products from plants instead of resources like oil and ores. (Courtesy of the Tuskegee University Archives and Museum)

colleagues, who disdained what they considered to be his Northern affectations and need for “special treatment.” As a result, Carver spent more social time with his white colleagues there.

The penultimate section of the exhibition focuses on the products Carver developed to make his three soil-restoring crops more profitable for the farmers who grew them and the lab equipment he used to create them. Though it is the most conventional part of the exhibit, consisting of beakers and jars in glass cases, it is the section that best presents Carver’s ingenuity. Visitors are asked the question, “Guess which plant is used to make all of these: molasses, ink, vinegar, flour, library paste, shoe blacking, alcohol, dyes, hog feed, after-dinner mints, candy, and yeast.” The answer? The sweet potato.

Equally fascinating is an audio interactive that allows visitors to hear Carver’s voice as he responds to a reporter’s question, “Do you consider yourself

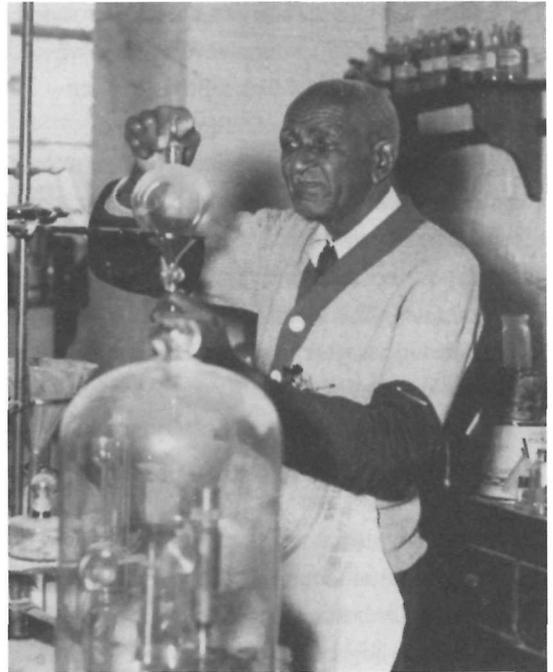


FIGURE 3
Shown here in his laboratory, Carver wanted to do great things for people, not solely for academic science. (Courtesy of the Tuskegee University Archives and Museum)

a chemist?” In his high, thin voice shaped by childhood disease and age, Carver says that he uses the laboratory to find things he is looking for, that it “is simply a place where we tear things to pieces.” Here, we understand that Carver is just a curious man, wanting to know more about the world. This curiosity, this humility, and also an abiding faith are expressed in samples of his correspondence on display.

The end of the exhibit follows Carver’s growing fame in his lifetime and his legacy. Magazine articles illustrate how he became famous as “the peanut man” after testifying before the U.S. Congress about the potential uses of peanuts during a debate over a proposed protective tariff for the crop. The caricature of him as the father of peanut butter (which, incidentally, he did not invent; it predated him) started at that time, when the press and public lauded him as a black hero whose humility and focus on economic improvements rather than social

struggle made him palatable to whites nationwide.

Finally, the exhibit puts Carver's work into the context of our current resurgence of research into natural products. Chemurgy was overpowered by petroleum in the decades after Carver's work, but it is experiencing a revival through the New Uses Council developed in 1990 to promote research and development of new products from natural sources. A display of some of these recent discoveries includes soy-based newspaper ink, soy fiber stuffed animals, and a biodegradable plastic water bottle.

Although not intended for children, the text and materials are accessible for young adults.

The exhibit has a corresponding website—<http://www.fieldmuseum.org/carver/index.html>—that includes highlights from the exhibit and an extensive educator's guide. The exhibit will travel through 2010. The schedule is available online at http://www.fieldmuseum.org/exhibits/traveling_carver2.htm.

Sarah Arehart
University of Chicago

MULTIMEDIA

Looking for Lincoln

<http://www.lookingforlincoln.com/>

Maintained by the Looking for Lincoln Heritage Coalition; accessed on April 25, 2008

Abraham Lincoln prepared a brief autobiography in 1859 at the request of a friend who was promoting the Illinois lawyer as a presidential candidate. Sending the manuscript to his friend (dated December 20, 1859), Lincoln commented: "There is not much of it, for the reason, I suppose, that there is not much of me." Since Lincoln dismissed himself so concisely, one can only wonder what the 16th president of the United States would make of the sustained interest in every aspect of his life. Countless biographies, poems, novels, studies, plays, and films attest to the American public's fascination with Lincoln since his assassination in 1865.

As the bicentennial of Lincoln's birth approaches in 2009, places associated with him have drawn the attention of heritage tourism planners at the national, state, and local levels. One such group is the Looking for Lincoln Heritage Coalition, a consortium of Illinois communities that share in the legacy of Abraham Lincoln. The coalition helps communities enhance their Lincoln sites and interpretive programming and provides marketing support. The coalition's website, *Looking for Lincoln*, is dedicated to historic places associated with Lincoln's life in Illinois. The site presents itineraries for automobile travelers who want to tour sites where Lincoln lived and traveled throughout the state.

Four "hub" tours focus on the Illinois cities of Bloomington, Charleston, Decatur, and Springfield. Each tour takes two to four days of travel, visiting nearby towns and sites and returning to the hub city at the end of each day. Visitors can also choose a city or town from a drop-down menu and get detailed information on local historic sites, including hours of operation and directions. Links from the home page provide a map of the region and a calendar

of events that visitors may want to include in their travels.

Travelers with children will enjoy the website's "History Hunt." Creatively designed to present clues and answers to questions about each featured site, these activity pages also offer a "Mystery History Object" to locate on a tour of the site and interesting historic facts under the heading "Betcha Didn't Know This." Unfortunately, the website lacks a brief essay on Lincoln's life in Illinois, or even an informative bibliography for those interested, so one must look elsewhere for a historical context about Lincoln's life and information on local customs and history.

The Illinois historic sites featured on the tours range from the New Salem State Historic Site, a reconstructed log village that interprets Lincoln's six years in New Salem and the beginning of his political career; to the Lincoln College Museum in Lincoln, which contains a collection of Lincoln-

related artifacts. The Reuben Moore Home near Charleston, where Lincoln and his extended family gathered on January 31, 1861, to celebrate his election to the presidency, is included. Those concentrating on historic sites directly associated with Lincoln will appreciate seeing the Lincoln Herndon Law Offices State Historic Site, where Lincoln practiced law with his partner, William Herndon, from 1834 to 1852, as well as the Lincoln Home National Historic Site. Both are in the Springfield Hub Tour, which offers the most places associated with Lincoln.

The site lacks direct information on local lodging, but a link to the Illinois Bureau of Tourism website leads travelers to that information. Overall, the *Looking for Lincoln* website successfully fulfills its mission of presenting travel itineraries to places in Illinois associated with the life of the nation's 16th president.

Rustin Quaide
National Park Service

ON THE COVER

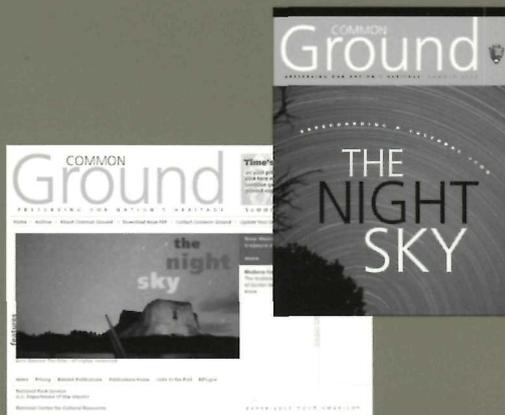
HABS photographer Alex Bush, working with HABS team member Katherine Floyd, took this view of the brick milk house at the Otts Place in Greensboro, Alabama, in the spring of 1935. Based at the Alabama Polytechnic Institute (now Auburn University) in Auburn, the Alabama District Office of HABS employed several women, many of them design students at the Institute, one of the few architecture departments in the U.S. open to women at the time. Although her identity and role in the survey remain a mystery, the woman shown here standing next to the milk house is a reminder of the many contributions women from all backgrounds made to HABS during the 1930s. (Alex Bush, photographer, April 9, 1935. Courtesy of the Historic American Buildings Survey, National Park Service)

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