Chapter **L**

The Wyck Architectural Conservation Project: An Overview of the Program

History

Wyck is a National Historic Landmark consisting of a house, garden, and outbuildings and is located in the Germantown section of Philadelphia, Pennsylvania. Nine generations of the same family, most of whom were Quakers, lived at Wyck from the late seventeenth century until 1973. The property was purchased in a lottery about 1689 by Hans Milan, a Quaker from Crefeld, Germany. At that time Lot 17, which he drew, consisted of about forty-five acres. It is probable that he built a log structure soon after that date to serve as his farm house. Portions of its foundation survive under the current house, and this project uncovered additional evidence of its nature. An extension of the log house dating from the early eighteenth century (see Charles Phillips' chapter 2) may have been used as a workshop area. In 1736 Milan's son-in-law, Dirck Jansen, built a more substantial stone Georgian-style house at the front part of the lot (the "front house"). During 1771 to 1773, Jansen's granddaughter, Margaret (Wistar), and her husband, Reuben Haines I, added a second house to the property, a larger stone dwelling that was parallel to the front house. This "back house" was built over the foundations of the earlier log structure. Caspar Wistar Haines, seeking to make Wyck a more elegant country seat for his prospering family, visually unified both structures in 1799 with a stylish coat of stucco scored in the neoclassical manner to imitate ashlar.

The greatest changes came to Wyck in 1824 when Caspar Haines's son and daughter-in-law, Reuben and Jane (Bowne) Haines,

John M. Groff

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undertook repairs to what had become an "old house," with rotted floorboards, drafty windows, and small out-of-style rooms. What began as a small repair project evolved into a complete reorganization of interior spaces under the guidance of Reuben Haines's friend,

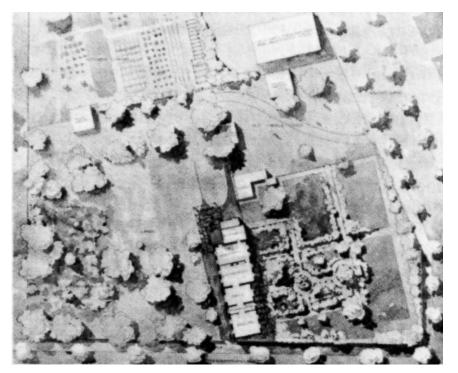


The Wyck house circa 1895.

Wyck Conservatory, 1872.

the architect William Strickland. Reuben wrote to Jane on May 23, 1824, "Thee very well knows few if any ever begin a career of vice! or commence the repair of an old building! that stop exactly at the point they intended." The result of Strickland's alterations was a fashionably new interior, filled with light and air, inside the skin of an older colonial house. Understated Greek Revival details blended with a statuary niche above the fireplace in the back parlor and innovative pivoting doors in the hall, which allowed rooms and passages to be closed off into private spaces or opened into one long room sixty feet in length. The flexibility of space, the numerous windows, and the wide doors of the summer living hall, which open out to the ornamental garden on one side and lawns on the other, fulfilled the desire of architect and client to make the gardens become an extension of the interior spaces. During the period of 1820 to 1840, Wyck was a family house filled with children, friends, and a constant flow of visitors, many from the world of science, natural history, and improved technology.

From 1840 to 1973 Wyck continued to be used as a family home. New furnishings were purchased, small changes were made to the outbuildings and garden, but the essential form of the exterior



A plan for the house and gardens of Wyck, 1902, from House and Garden.

and interior of the house remained unchanged. It was not diminishing wealth that restricted additional remodeling or modernization but a conscious attempt by the family to preserve this architectural relic and its collections and to share it with family and friends. After 1843, Wyck passed through three generations of owner residents, none of whom had children. During this time, Wyck became a center for family activities and a pilgrimage destination for architectural historians, landscape historians, and antique collectors.

By 1902 Wyck was a well-known colonial icon in the Philadelphia area, and after the publication of a photographic essay on Wyck in *House and Garden*, architects around the country drew upon Wyck for stylistic inspiration. Prominent among them were Charles Barton Keen, R. Brognard Okie, and Charles Platt, who recreated Wyck with the "Mallows" for C. Temple Emmet in St. James, Long Island, New York, and with "Woodston" for Marshall Slade in Mt. Kisco, New York.

From 1910 to 1930, Caspar Wistar Haines (II) maintained Wyck to exacting standards. An engineer by training and an amateur historian, he was also an early preservationist who meticulously recorded in his diaries the details of all repairs and all additions of mechanical systems to the house. Caspar Haines even attempted to use old wood or architectural elements when it was necessary to replace rotted or rusted original fabric. Much of the way Wyck looks today is owing to his interest in his family's history, his attention to detail, which came from his engineering training and great love of Wyck.

Wyck passed in 1937 to Caspar's nephew, Robert Bowne Haines III and his wife Mary. While they continued to maintain Wyck, its gardens, and collections, they did not do so at the same standard. Owners of fruit orchards in Berks Country, they usually spent only the winter months at Wyck. Their interests and their generosity were often directed to Quaker or Presbyterian missionary activities or toward social causes. Some essential maintenance of Wyck was deferred. It was a City of Philadelphia complaint in 1963 that prompted the replacement of the deteriorating 1875 slate roof with asphalt shingles. The regular coating of Wyck's stucco and trellises with whitewash, which gave Wyck its distinctive white appearance and served as an important buffer to the elements, also became infrequent. Incidents of stucco cracking or loss increased. By 1973, when Mary T. Haines created the Wyck Charitable Trust to preserve and administer Wyck as a historic house museum and "a witness to a way of life," its structures were in need of some "repairs." A committee formed to address the problems hired preservation architect John Dickey to survey Wyck and recommend work that would allow it to be opened to visitors.

The 1970's: Restoration Projects

In 1974 Wyck's first floor was reinforced with structural steel, stucco was patched and repaired, exterior painting was undertaken, and outbuildings were surveyed. That year Wyck welcomed its first visitors. During the next ten years, outbuildings were "restored," and repairs continued on deteriorating stucco. Exterior painting was routinely undertaken, but each time the new paint layer held for a shorter period of time, and additional problems in some areas of the wooden trim were noted. In 1985 Wyck commissioned a Historic Structure Report from John Dickey. Sandra Mackenzie Lloyd, a former Wyck administrator and curator completed historical research, documentation, and description; Mr. Dickey undertook architectural and structural analysis. The strength of this report is its historical documentation and analysis. Engineering, paint analysis, and archaeological reports were included as separate volumes or appendices but were really not as comprehensive as needed to understand the structure and its current condition. This document became the tool to begin study of Wyck's complicated architectural history and to plan its long-term preservation; nonetheless, further investigation was required.

The 1980's to 1990's: A New Conservation Philosophy

In 1988 Marigene H. Butler, Head of Conservation of the Philadelphia Museum of Art, was elected Chair of the Wyck Association, the nonprofit organization that serves as the day-to-day manager of Wyck. Mrs. Butler felt it was critical to document and survey the condition of Wyck's exterior and to devise a long-range plan for the architectural conservation of Wyck. It was apparent that inappropriate repairs and materials had been used at Wyck during both its family ownership and its early years as a historic house museum and that the stucco, exterior wooden trim, chimneys, gutters, and foundation required immediate attention.

Accordingly, Mrs. Butler invited to Wyck Morgan Phillips, at that time Architectural Conservator for the Society for the Preservation of New England Antiquities. From Morgan Phillips' recommendations and from previous surveys, the Wyck Association began to plan long-range architectural conservation. In February 1991 Charles Phillips of Winston-Salem, North Carolina, first visited Wyck. Clearly, his approach to architectural conservation paralleled the Wyck Association's desire to preserve as much as possible of Wyck's period material. His emphasis on complete documentation before any work begin was also in accordance with the Wyck Association's vision. Charles Phillips, in turn, was impressed with the high percentage of original building fabric dating to William Strickland's renovations of 1824, the stuccoing of Wyck in 1799, and the construction of the stone houses in 1736 and 1771 to 1773. He emphasized the significance of this surviving fabric to architectural history. Wyck's Board of Directors then established architectural conservation of the house as its number one priority in its long-range plan.

The core of a team of architect and architectural conservators was formed with Charles Phillips as preservation architect and Morgan Phillips specializing in paint analysis and conservation treatment of the exterior wooden trim. Aware that the deterioration of the historic stuccoes and inappropriate cementitious patching were also critical problems, Frank Matero, Director of the Architectural Conservation laboratory of the University of Pennsylvania, who is noted for his expertise in stucco conservation, was asked to assist us. Also added to the team was John Greenwalt Lee, an architectural conservator who specializes in wood.

In the summer 1991, The Wyck Association began its process of architectural documentation and survey of conditions with a stucco survey conducted by Catherine S. Myers, a graduate student in historic preservation at the University of Pennsylvania. She was supervised by Frank Matero. This multivolume survey included historical background with photographs, a discussion of historical precedents and technical history, technical description with microchemical analysis, wet chemical/gravimetric analysis, grain size distribution analysis, and particle size summary. Annotated drawings documented both extant stucco types and current condition. This exterior stucco study became a critical planning tool for future work.

In October 1991 Wyck underwent a Conservation Assessment Program "Survey of Existing Architectural Conditions," by Frank G. Matero and Joel C. Snodgrass, and a "Collection Survey and Evaluation of Display and Storage Conditions," by Meg Loew Craft and Sian B. Jones, supported by the National Institute for Conservation and the Institute of Museum Services. These reports provided important documentation and recommendations for the development of our project of architectural conservation and emphasized the critical problem of water penetration and its effects.

The architectural conservation project then moved into a preparation phase in 1992 to 1993. This was funded by a \$30,000 Project Preparation (documentation) Grant from The Getty Grant Program, which was matched with \$50,000 by The Barra Foundation, Inc. In February 1993, the Wyck Association was awarded a \$200,000 grant from the Historic House Museum Challenge Grant program of The Pew Charitable Trusts, which was administered by the Philadelphia Historic Preservation Corporation. This grant was matched by an Institute of Museum Services Conservation Project Grant, by the Keystone Preservation Grant Program of the Pennsylvania Historical and Museum Commission, by the Quaker Chemical Foundation, and by private individuals. A total of \$340,000 was raised for the implementation of the Wyck model project of architectural conservation, which was undertaken in 1994 to1995.

In the summer of 1992 Sara Pennell, a graduate student in historic preservation at the University of Pennsylvania, conducted a survey and documentation of the exterior wooden elements and hardware (see chapter 7). In the fall of 1993 Robert FitzGerald, a post-graduate fellow from the same department, began a year of tests of conservation treatments. In October 1994 the Wyck Association began implementation of its model architectural conservation project. The start was postponed from the originally planned date to ensure that the desired project team was in place. It included the preservation architect, architectural conservators, project managers, local craftspeople, and preservation students from the Graduate Department of Historic Preservation at the University of Pennsylvania.

As the project progressed, we met regularly with our architects and conservators, and the project managers were in daily consultation with them using photographs and faxes to address questions or problems that arose. Weekly job meetings were held to review progress and the budget. The project managers tracked all expenses and estimated percentage of work completed. Wyck's Board of Directors was expertly represented by Marigene Butler, Vice-Chair, and Daniel Butler, Chair of the Building Committee. We tracked income and cashflow. These meetings were especially important for determining progress, reviewing funds available, and outlining the following week's schedule.

Cornice, Eaves, and Gutters

The first phase of work was the treatment of the eaves and cornice and replacement of the failed box gutters. Under the direction of preservation architect Charles Phillips, students from the University of Pennsylvania began recovering and recording material taken from the area between the roof rafters as sheathing was removed for consolidation. Consolidation took plan in situ or in specially designed racks at the roof level on the scaffolding. Each element was carefully marked as it was removed so it could be correctly put back in place. The work was done at the roof level to minimize the risk of loss or misidentification. Once an element is mixed with other pieces, even if it remains on site, the chances for confusion or mishandling dramatically increase.

As always is the case in an architectural conservation project, as layers of historic fabric were peeled back at the eaves, problems were encountered that required more work and expense than had been anticipated. Areas of rot in the roof sheathing and cornice were extensive because of the failure of a replacement box gutter that was installed in 1963. Although treatment of this area took additional time, it also served as a very good training period for our craftspeople. All of the project team agreed that adequate roofing and guttering had to be completed before any other work on the facades began. By early January 1995 the work was finished, the roof was resealed, and a new box gutter of terne-coated stainless steel designed by architect Charles Phillips was installed. Phillips designed this gutter system based on the1875 gutter of Wyck, which is very well documented in photographs and reports in family diaries.

Wooden Trim

Wyck, whose earliest extant section dates circa 1700 to 1720, is situated in an urban area, on what is now a busy roadway and bus route.

During the nine generations of family ownership, the house was well maintained, and repairs and alterations were meticulously noted in family letters, diaries, and financial accounts. In 1974 when Wyck was first opened to visitors, the tradition of careful maintenance was continued, but the changing urban environment made it more difficult to maintain paint on the wooden trim. Flaws in the design of a replacement box gutter in 1963 (noted above) also caused water problems that accelerated the weathering of paint and trim. While the wood was in surprisingly good condition, mainly being hard pine or oak in the earlier sections of the house, there were areas of rot and damage. It was found that the paint film was lasting only a few years before it blistered and peeled off. The project preparation phase had arrived at the proposed solution to this problem. This would include the stripping of paint, consolidation and repair of wood, consolidation of the surface fibers with Kyanoil, and the application of layers of paint (see chapter 9 for a detailed description). This procedure was used for the south facade. The east facade is stucco only.

After careful review and discussion, it was decided in July 1995 to be less aggressive in stripping paint from the shutters and windows of the remaining two facades: the north and west. This was for reasons of economy and, more important, conservation philosophy. We were being so careful to preserve as much of the original stucco as possible and to straighten a leaning chimney (see below) rather than disassemble it, yet we had been willing to strip paint off the wooden elements (Workers were supposed to leave a one-inch square of paint on each element in a consistent location for future sampling.). Of course, the larger concern was to stabilize the wood and to create as sound a surface as possible for the reapplication of paint. This was both for the protection of the wood from water penetration and for improved appearance. Yet the Wyck Association's overall conservation philosophy is to maintain age value or patina and to undertake the minimum required for ongoing preservation in the way of cleaning or treatment. For us aesthetics were not the guiding factor. The completed work on the wooden trim of the southern facade was very appealing, the details of the muntins and beads on the shutters clearly revealed, but some of the appearance of age had been lost.

We discussed these issues with our project team and concluded that areas that had tightly adhered paint could be maintained. Areas where there was flaking paint, rot, or cracked putty would be treated more aggressively. This "softer" approach produced an appearance of age that is in keeping with the presentation of the interior spaces and furnishings. In this case "less is more" became a successful approach. The elements are not as crisply finished, but they seem to work particularly well with the luxuriant summer growth of the grape arbors that adjoin the house and the early nineteenth-century gardens beyond.

Overall, the approaches for the two main facades ultimately were successful for their individual presentation and interpretation. The southern facade is the main facade and is viewed from Germantown Avenue. It is the first view visitors have of the house and effectively shows the designs of the colonial craftsperson who built the early structures and of William Strickland who remodeled the house in 1824. The whitewashed stucco contrasts subtly but handsomely with the "stone"-colored wooden trim. It sets the stage historically for the house and is much admired by visitors and Wyck's neighbors.

The northern, or garden, facade, emphasizes the picturesque growth of both house and garden and allows Wyck's interpretive staff to discuss the multiple generations of Wyck, their maintenance of the property, and issues in preservation of older buildings today (see also chapters in Part II of the book for detailed discussions of paint and wooden element survey and treatment).

Stucco

Wyck's stucco problems were more critical than those of the wooden trim and were having a serious impact on the interior environment as well as the stability and appearance of the exterior.

In 1799 Caspar Wistar Haines attempted to unify three distinct sections of the house and to make them more fashionable by having a coat of stucco applied to all but the west facade, which would be viewed only by the farm workers. The stucco was mixed from local sand out of the Wissahickon Creek and lime putty. The Haines family was associated with Quakers near Plymouth Meeting who had extensive lime quarries, a probable source for the lime. When the stucco was applied, it was scored to look like ashlar, another stylish statement. Stucco jack-arches were created over the



Wyck front facade after removal of cement patches.

windows and front door. From the beginning the stucco was whitewashed, sometimes with whitewashes softly tinted pink or blue.

When William Strickland remodeled Wyck in 1824, he changed much of the window arrangement but retained the earlier stucco, filling in where necessary and rescoring. Over the years the family maintained the stucco walls, but references in letters and diaries indicate it was an ongoing chore. Underground streams in the area exacerbated the problem of rising dampness, which is endemic to Germantown. Extremes of cold in winter and heat and humidity in summer constantly stressed the stucco, yet it surprisingly held on.

After the introduction of Portland cement as the new panacea in the late nineteenth century, local masons began to include it in the patching mix used at Wyck. From the early 1900's right through extensive stucco repair in 1974, Portland cement in high proportions was an ingredient in the stucco repairs. During the preparation phase of the Wyck project, specifications were developed for the removal of the hard, impermeable cement patches and the mixing of replicated stucco to in-fill these areas where necessary. (For more details on stucco repair, see chapters 5 to 7.)

Photographs and Reports

Preservation interns and project managers recorded all details of the project with photographs and field notes and began to organize the extensive photographic archive that resulted from all aspects of the project. A photographic intern was also hired to photograph all facades of the house after the cement patches were removed. These images can be placed side by side to create an overall view of the complete facade. Unusual discoveries in construction details or anomalies were sketched, described, photographed and analyzed by preservation architect Charles Phillips for this report and for incorporation into Wyck's Historic Structure File.

During the project, our consultants offered a variety of lectures and workshops to the public or to historic site administrators on the conservation methods being used at Wyck. In May 1995 preservation architect Charles Phillips gave a special lecture in Philadelphia on architectural conservation that featured the Wyck project. A month later in June, architectural conservator Robert FitzGerald presented a report on the Wyck stucco work at the annual conference of the American Institute for Conservation.

When Wyck reopened for visitors in spring 1995, we made the architectural conservation project and its methodologies an integral part of tours. Visitors were very interested in both the philosophy and methodology of conservation as well as the discoveries we had made about the house's construction history. They also have responded very favorably to the appearance of the finished wooden trim and stucco.

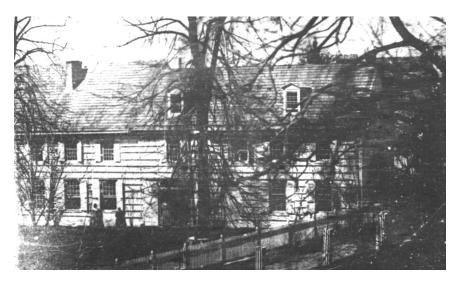
Project Impact

If Wyck's only historical asset were its architecture, it would still be of national significance. But add a collection of over 10,000 objects, the early nineteenth century gardens growing in their original plan, and over 100,000 documents and it becomes apparent how multilayered and rich are the resources that Wyck has to offer. The level of documentation present for each aspect of Wyck reaffirmed the decision to proceed carefully and conservatively in the stabilization and treatment of the buildings.

Wyck's decorative arts collections blend noteworthy eighteenth century furniture, silver, and ceramics with Greek, Gothic, Elizabethan, Rococo and Colonial Revival pieces. Individually, they are admirable examples of design and taste of a wealthy Quaker household. More important, mixed with the practical wares of everyday life that also survive, they visually document changing fashions and physical needs. Seeing themselves as preservers of family values and traditions, residents saved all manner of objects, from eighteenth century mud shoes to Victorian glassware. Complementing them and giving them their greater historical value are the thousands of bills of sale, expense books, and accounts that document maker or vendor and purchase price, thus establishing patronage patterns among Quakers and craftspeople. Hundreds of photographs of the house's exterior and interior and gardens, some dated as early as an 1840 daguerreotype of the facade, enhance our ability to reconstruct the house's appearance over time and the changing tastes of the residents.

Wyck's garden is one of the oldest that continues to grow on its original plan. A two year-long Historic Landscape Survey completed in 1992 helped to shape a master plan for the garden and to integrate it into the overall interpretative plan. Manuscript and photographic documentation for the gardens is also very extensive. The parterres were first planted with vegetables, fruit trees, and some flowers in the 1790's. By the 1820's a variety of roses, decorative shrubs, and other flowering plants filled the ornamental garden, while experimental farming and husbandry techniques were carried out on Wyck's fifty acres of farmland. Reuben Haines III drew his friends and colleagues from the worlds of botany, natural history, and intellectual study to Wyck, where it was not unusual for figures such as John James Audubon, Rembrandt Peale, Thomas Nuttal, Thomas Say, and Robert Owen to gather for an evening's conversation.

The 100,000 documents preserved by six generations of the family give context to house, garden, and collections. The Wyck papers include letters, diaries, accounts, receipts, deeds, recipe books, scientific and botanical writings, and a rare early pamphlet collec-



Daguerreotype of Wyck, 1840.

tion. Now on deposit at the American Philosophical Society in Philadelphia, they are housed in a safe archival environment and made available to researchers nationwide through the Research Libraries Information Network (RLIN). The library at Wyck has over 2,000 volumes containing many rare botanical and scientific works and is catalogued and available for research.

Together these collections give a rare picture of the way of life, traditions, and values of a family who actively participated in the development of Philadelphia's cultural, educational, economic, and religious institutions. Wyck is not a restoration, a contrived series of period rooms, or an assemblage of furnishings that tentatively suggest what might have once been. Instead, its buildings, furnishings, and documents are the tangible survivors of the past (For a discussion of the structural history of Wyck, see Charles Phillips's "The Wyck Conservation Program," chapter 2.).

Improved Environmental Conditions at Wyck

Testing already shows that the completion of the project has improved the interior conditions at Wyck, lowering humidity and eliminating water penetration through decayed stucco or rotted areas of wood. The new box gutters are effectively channeling water into larger downspouts, and spill-over along the roofline has stopped.

Improved Appearance

Although aesthetics are not the primary consideration in making decisions about Wyck's buildings, collections, or garden, the unkempt appearance of the exterior of the house, with peeling paint, decaying stucco, and unsightly cement patching, was troubling and off-putting to potential visitors. Many commented on the appearance and felt it reflected neglect rather than a conscious plan of conservation. We know some visitors did not stop to tour Wyck because they felt the exterior appearance suggested the interior condition and were uncertain as to whether any of it was worth their time. As the work progressed we found visitations actually increased. In part, people were fascinated by the work in progress, but also this positive sign of exterior improvement suggested a site that was cared for and worth visiting. Since the work has been completed, we have also found an increased number of tours being booked. Wyck has always served as an anchor and a landmark for its neighborhood. The nearby houses built on the side streets off Germantown Avenue in the nineteenth century are on land that was part of Wyck's farm. There is a sense of community and identification with Wyck's history. But for several years Wyck had not been much of a symbol of pride for the neighborhood. It seemed to reflect a general deterioration in conditions in some parts of Germantown. The completion of the project renewed that pride and neighbors soon stopped by to ask about the history of the house and to tour the interiors and gardens.

Conclusions

The Wyck Association views this project of architectural conservation as successful and consistent with its original goals and plan, and we look back with fascination at how much we learned about not only the physical process but also the impact on the historic site itself during the period of work and the requirements for efficient project management.

We also conclude that while a project like this is one distinct campaign of work, it is also part of a larger ongoing process of maintenance and treatment and an opportunity to develop and implement our new methodologies. The project does not end the day the last worker leaves; if anything, it is only beginning. Careful maintenance is necessary to sustain the results, and this requirement must be incorporated into a long-range plan and budget considerations.



A view from the house of the Wyck rose garden, 2001.