

Crombie Taylor's *Sullivan Banks* Essay and Architectural History

by JEFFREY PLANK

Crombie Taylor's *Sullivan Banks* Essay and Architectural History

by JEFFREY PLANK

In 1976 Crombie Taylor (1914-99) adapted then state-of-the-art automated multi-screen multi-media color slide projection technology to exhibit Louis Sullivan's eight midwestern bank buildings at very large scale and with stunning fidelity to Sullivan's exquisite polychromy.

By the 1990s professional studio digital platforms superseded Taylor's hybrid photographing and projection technology, a combination of slide film, mechanical projectors, and a primitive programmer linked to a reel-to-reel tape recorder. Taylor's multi-screen program, so bold and innovative in its time, languished unseen. Now that consumer digital projection hardware and software can support high-resolution digitization of Taylor's *Midwest Masterpieces: The Sullivan Banks* his distinctive contribution to Sullivan studies and to the methods of architectural history is easily accessible. The first to restore a Sullivan building interior, Taylor presents Sullivan's banks from an architect's perspective. The first to document systematically Sullivan buildings with color photographs, Taylor exploits a light-based medium and a light-based presentation format to provide his audience with the visual experience of Sullivan's bank buildings as architectural and artistic wholes.

Taylor's *Sullivan Banks* is a sophisticated visual essay, in which the conventional relationship between the visual representation of the architectural subject and its verbal description is reversed. Large-scale projection — originally three six-by-eight foot screens in a darkened room — fills the eye, and Taylor's very deliberate use of one, two, or three screens directs attention to part-whole and part-part relationships rarely explored in architectural criticism or history. Taylor's spare narrated script provides an architectural vocabulary for understanding these part-whole relationships, and script gaps, some exceeding ninety seconds, provide viewers with visual experiences of Sullivan's architecture unmediated by verbal commentary. Taylor's *Sullivan Banks* belongs to a tradition in Sullivan building photography of the photographic series, initiated by Sullivan and photographers he instructed, and continued at midcentury by Aaron Siskind and his students at the Institute of Design. In Taylor's dynamic series one photograph or set of building photographs is replaced by another, and as the luminous images appear and disappear, each one so arrests the viewer's attention that he or she cannot but save it in his or her mind.

In this brief essay, I want to provide a biographical and conceptual context for Taylor's program and suggest its impact on Sullivan studies and architectural history. Taylor redefines Sullivan as architect *and* artist, whose innovative use of ornament transforms interior space. The architectural function of Sullivan's two-dimensional ornament is largely unappreciated today, but it represents an approach to architectural volume that has the potential to revolutionize our understanding of architectural change in the early modern period.

TAYLOR AND SULLIVAN

Taylor's Sullivan building restoration, architectural exhibit, and architectural photography projects differentiate him from other twentieth-century architectural historians and Sullivan champions. In 1951, as Acting Director of the Institute of Design, Taylor urged newly-recruited photography instructor Aaron Siskind to make a comprehensive photographic survey of Louis Sullivan's buildings, a recommendation prompted by the impending demolition of the Walker Warehouse. Siskind's multi-year class project was the first to document systematically Sullivan's architecture, and Siskind's own photographs informed those of his students and enabled viewers to see Sullivan buildings anew. Siskind's ornament photographs, his use of light and shadow to reveal the decorative function of material and texture, his acceptance of building condition and decay, his capacity through picture composition to make building parts into artistic wholes, and his juxtaposition of scale and print size in the class exhibit made a powerful case for closer attention to more of Sullivan's architectural procedures than architectural historians were willing to admit. In his biographical and critical study *Louis Sullivan: Prophet of Modern Architecture* (1935), Hugh Morrison argued that Sullivan's writings about architecture were more important than his buildings for understanding modern architectural history; at best, for Morrison, Sullivan's buildings demonstrated innovations in structural form, but Morrison found these innovations obscured by Sullivan's pervasive three-dimensional ornament.

In 1954, shortly after the exhibit of Siskind's class project at the Institute of Design, Roosevelt University asked Taylor to rehabilitate Sullivan's Auditorium Building banquet hall for use as a recital space. As he removed features added to the banquet hall over the years Taylor had the opportunity to examine original finishes; he also sought information about original decorations from early building photographs and descriptions. Early on Taylor decided to restore, rather than rehabilitate, the banquet hall. In the process he recuperated and reproduced Sullivan's original polychromatic stencil patterns, uncovered original art glass windows, and figured out how Sullivan used artificial light—the unfrosted 16-watt carbon filament electric light bulb—to create a luminous dynamic interior volume meant for night-time use. In the Auditorium Building banquet hall Sullivan used gold leaf and single color stencil patterns whose tonal values shift as the angle of reflected light changes: in light reflected back to the eye, the gold leaf is gold, and in light reflected away, it is black; these angles of reflection change as the eye scans the pattern or as the viewer moves through the room. The spatial illusion created by the interaction of pattern, color, and light on a flat wall or ceiling plane is of a screen with deeper space beyond. From simple linear, monochromatic patterns—one color plus gold leaf—Sullivan moved on, in the Garrick Theater, for example, to multi-scale, multi-color patterns in which superimposed color planes establish more complex spatial illusions.

Taylor's capacity to recognize Sullivan's use of color, light, and pattern and to reproduce it through building restoration applies lessons learned at the Institute of Design, particularly from his role as Lazlo Moholy-Nagy's assistant and then as Acting Director and architecture professor. Like Moholy-Nagy's *Vision in Motion* (1947), the Institute of Design curriculum integrated and codified the conventions of the modern arts at the Bauhaus, including the fine and applied arts and architecture,

for new social conditions. The light and space modulator exercises, for example, provided a laboratory for experimenting with light, color, and space. At architectural scale, these student exercises provided Taylor with conceptual tools for his own architectural practice, especially the spatial development of small volumes through open plans with interior cores and peripheral circulation.

In the 1950s and early 1960s Taylor continued his investigation of Auditorium Building interior spaces, restoring the ladies parlor and the second floor lounge and preparing restoration plans for the great theater space and entire building. Using early Auditorium Building photographs Taylor investigated and documented a wide range of stencil patterns throughout the theater and hotel spaces. Taylor's success with building restoration indicated directions and expenses for Roosevelt University that all board members could not support. While the subsequent internal politics at Roosevelt University and difficulties in private fundraising interrupted Taylor's restoration work, it did not diminish his interest in sharing new information, information that would correct architectural historians' distorted emphasis on Sullivan as solely a theorist of modern architecture.

In 1967 Taylor completed an exhibit of 17 stencil designs in color at original scale (and many more in black and white)—25 panels, at two-, three-, and four-foot by eight-foot size—from Sullivan's Auditorium Building and Garrick Building for the Smithsonian Institution. The "Systems of Stencil Ornament of Louis Sullivan" exhibit opened at Taylor's AIA award winning Uptown Hull House in Chicago, and traveled to Washington, DC and nine other American locations. This stencil exhibit, now part of the Art Institute of Chicago Ryerson and Burnham Libraries collection, makes accessible important features of Sullivan buildings long suppressed. Taylor used prints of glass plate negatives commissioned by Sullivan when the Auditorium Building opened to show the architectural context for the polychromic stencils and to suggest their space developing architectural function. Without full restoration of a Sullivan building interior, however, Taylor's demonstration of his understanding of Sullivan's space developing use of two-dimensional ornament remained incomplete. When Harry Weese took over the restoration of Auditorium Theater that Taylor had started, he did not restore the original lighting and stencils or the range of original wall, ceiling, and trim paint colors. By the early 1970s, many of Sullivan's best Chicago buildings had disappeared, including the Garrick Building and the Stock Exchange Building, whose demolition took the life of Richard Nickel. By contrast Sullivan's small midwestern bank buildings survived with little alteration, some in continuous use as banks, perhaps protected by their size and remote location.

VISUALIZING SULLIVAN'S BANKS FROM THE ARCHITECT'S PERSPECTIVE

Taylor left Chicago in 1962 to head the architecture program at the University of Southern California School of Architecture and Fine Arts. In Los Angeles Charles and Ray Eames invited him to participate in charettes for their Seattle and New York Worlds Fair projects. Beginning in the 1950s the Eameses experimented with multi-screen slide programs and films, particularly for corporate-sponsored communication projects. For the 1964 New York fair, IBM commissioned the Eameses to produce static print and dynamic multi-screen exhibits on the computer and computation. Their 22-screen film *Think* uses diagrams, pictures, and witty analogies, such as that

of a hostess planning seat arrangements for a dinner party, to demystify systems thinking — and Taylor appears in formal dress in the dinner party segment. The Eameses typically loaded their multi-screen programs with visual information, using three, nine, and more screens to project multiple images and multiple threads of images that both communicated about complex systems and nonlinear processes and challenged audiences to realize their own potential for visual information processing.

For Taylor the Eameses' multi-screen slide and film programs provided a novel platform for presenting architectural information. Aside from the very considerable potential of the color slide for representing Sullivan's architecture at architecture scale, the platform released Taylor from the institutional constraints of static exhibits and commercial limits of book publication. While the Eames office in the mid-1960s enjoyed extraordinary resources, including dozens of graphic and exhibit designers, film production experts, and a dedicated music composer, the automated multi-media slide projection technology was affordable and simple enough for a sole practitioner to use. John Taylor recalls that his father tracked down the Eames projection technology at Schaeffer Photo in Hollywood, where professional photographers from film industry compared equipment, traded tips, and shared a lively social scene. Schaeffer Photo directed Taylor to the Spindler and Sauppe factory in San Fernando Valley where he purchased his first system, a simple programmer with punch tape and a paper tape reader that controlled a dissolve unit, a reel-to-reel tape player, and six slide projectors.

To make a slide program about Sullivan's buildings Taylor needed more experience with color slides in architectural photography, particularly with light-transmitting and light-reflecting polychromatic architectural features. During his tenure as Moholy-Nagy's assistant and acting director, the Institute of Design photography program became perhaps the best in the country. Taylor hired Harry Callahan and Aaron Siskind, and Arthur Siegel shared with him information about the history of photography. In the early 1950s Taylor photographed his own architectural projects, and he learned from colleagues and students, such as Konrad Wachsmann, Richard Nickel, and Siskind, that he recruited to photograph his buildings for publication. In the summer of 1973 Taylor photographed 12 cathedrals in France and Italy, with special attention to rose windows and stained glass side windows and the fugitive color values of glass and stone in natural light. From these experiments, Taylor developed a method for photographing the exteriors and interiors of buildings in which colored glass played an important part. He had his best results with the great rose windows in France, especially at Reims, Amiens, and Chartres.

From the cathedral photographs Taylor made the *Nine Roses* prototype automated slide program, with medieval chants on the music track, but without narration, that he used to secure funding for his first two modern American architecture programs. Taylor completed *The Rise of the Chicago Skyscraper*, with vintage and contemporary building photographs by other photographers, and *Midwest Masterpieces: The Sullivan Banks*, with his own photographs (and seven by Henry Fuermann) for the Chicago celebration of the national bicentennial at the Chicago Museum of Science and Technology.

In the summer of 1975, sometimes accompanied by John Taylor, sometimes by Morris Hirsh, Taylor photographed the Sullivan bank buildings. Taylor used an F1 and F2 Nikon 35mm camera, with a 35mm perspective correcting lens for building elevations, a 50mm and 90mm lens for general views, and longer lenses for building details. His favorite lens for Sullivan's art glass windows was a 200mm telephoto because it enabled tight detail photographs taken further away from the building with less tilting of the camera and thus less distortion than with a shorter lens tilted higher at closer range. The longer lens required longer exposures, typically three to four seconds, than a faster, shorter lens, so Taylor needed a sturdy tripod, a Gitzo tripod that extended to nine feet and weighed some 50 pounds. For exterior photographs, Taylor used warm Kodachrome slide film, then with emulsions especially sensitive to red; for interior photographs, cool Ektachrome slide film, then sensitive to blue. He tried to photograph building exteriors in the afternoon; building interiors, in the morning. Because he could not see his photographs until the film was developed, long after a photographing session, Taylor made bracket exposures (with a spot light meter, he took one photograph on, one above, and one below what he took to be the right exposure), at least three photographs for each subject, and many, many more photographs than he knew he would be able to use. Photographing Sullivan's art glass windows proved especially difficult, because the color values shifted constantly and because the human eye accepts more contrast than the camera does.

Taylor composed his automated slide programs on a large light table, selecting from many hundreds of slides those that he could arrange in a storyboard; the text came later. The *Sullivan Banks* program was edited and mixed by Jim Ruxin, a professional film editor who worked on Hollywood studio movie trailers, at the time a University of Southern California graduate student in film. For the music track Taylor used Johann Pachelbel's "Canon and Gigue" (in the mid-1970s not yet the ubiquitous tune that it soon became), perhaps because its simple theme and 28 variations and delicate counterpoint echoed his points about Sullivan's plain geometric forms and endlessly varied ornament (his second Pachelbel theme is from the "Partie VI in B-flat major"), and Aaron Copland's "Appalachian Spring," no doubt for its correspondence to the metaphorical language in Sullivan's letter to Owatonna bank president Carl Bennett.

To appreciate Taylor's adaptation of automated multi-screen technology to architectural history it is important to understand several of his basic innovations, all involving the relation of building photograph to text. Like Siskind in his Institute of Design print exhibit, Taylor uses the photographic series to stimulate attention, but in an automated slide program the photograph series becomes a virtual sequence, and the virtual sequence provides new opportunities for communicating and processing visual information. Unlike Charles and Ray Eames, who fill each of three, nine, or twenty-two screens for each separate projection, Taylor uses the three screens sparingly. Of the 137 separate projections in the *Sullivan Banks* program 19 are three-screen, 29 are two-screen, and 89, one-screen. In the Owatonna bank segment, for example, the projection sequence is: 1 screen-1-1-1-1-2-3-3-3-2-1-1-3-1-1-2-1-2-1-2-1-2-1-2-1-2-3-1-3-2-2-2-1-1-1-1-1-1-3. In the Grinnell segment it is: 1-1-2-2-1-2-1-3-1-1-1-1-1-1-1-1-2-1-2-2-1-1-1-3-1-1-1; in the Sidney segment, 1-1-1-1-1-1-2-1-3-3-2-1-1-2-1-2-1-2-1; in the Columbus segment, 1-3-1-1-1-2-1-1-1-1-2-2-1-1-2-1-1. The

three-screen projections establish the projection format and an ultimate architectural scale; once that format is established, the unused screens function as negatives that intensify single images or the juxtaposition of two. And, because Taylor means to exhibit the relation of Sullivan's architecture and art, that is, geometric shape to two- and three-dimensional ornament set on planar surfaces or structural components, his photographs emphasize information that is fundamentally nonlinear. With a series of single photographs Taylor allows his audience to take the measure of a building exterior or interior and its constituent parts, that is, with the series to move the eye from one photograph to the next so as to survey the entire architectural composition. With each photograph, the viewer's eye moves, unconsciously, perhaps; but with repeated series for each of the major banks the viewer begins to anticipate the building survey and to move his or her eye to discriminate Sullivan's variations on his principal themes. For this strategy of a disproportionate number of single image projections to succeed, Taylor's photographs need to be quite good or they must surprise. They are, and they do. In 1976 Sullivan's original interior polychromy had all but vanished from his urban buildings, and the rural bank decorations were little seen. Informed by his first-hand understanding of Sullivan's use of light, form, and color, Taylor's photographs, especially color slides that transmit light, capture Sullivan's polychromy with a fidelity impossible in prints. In his art glass skylights and windows Sullivan juxtaposes the natural striated patterns of the glass itself with two-dimensional geometric patterns that create the spatial illusion of shallow depth, just enough to dissolve the glass plane. The angle and intensity of sunlight constantly creates variant color combinations, none repeated. Nonetheless, there is a "sweet spot" in photographing this glass: too much light, and the colors wash out; too little light, and the patterns are obscure. Taylor's photographs consistently find that sweet spot.

Taylor also uses text and text gaps to change the status of visual information, especially to represent the architect's perspective and to reclaim Sullivan's architecture from architectural historians. In the Owatonna bank segment, for example, Taylor describes the building exterior with 40 seconds of narrated text, followed by a 54-second narrated text gap. He then moves to the building interior, with a 36-second narrated text, followed by one minute 26 seconds of the Sullivan letter, 44 seconds of narrated text; a 40-second text gap completes the segment. By alternating text and text gaps over a continuous sequence of photographs Taylor establishes the primacy of the visual image. As noted earlier, Taylor's text provides a vocabulary for discriminating geometric form, structural components, and ornamental features, without reference to architectural historians. Sullivan's April 1908 letter to Bennett, written as the final work on the banking room began, confirms and extends Taylor's architectural perspective. As a personal communication, it also closes the distance of the audience to the photographs by sharing the intimacy that Sullivan and Bennett shared, an intimacy that allowed Sullivan to express his aspirations, his sense of risk, and the special opportunities afforded by a small commission. After he and Dankmar Adler parted in 1895, Sullivan never published comments on his own architectural decorations. In reviews of the Auditorium Building, the project that launched his national reputation, Sullivan was identified as the designer of the building interiors, and the building interiors, as the only part of the project in which the architects had a free hand. Working

alone, Sullivan sought to represent himself as an architect who could give form to the tallest buildings with the most complicated programs. His letter to Bennett is a rare, likely unique, verbal account of a specific building, perhaps with the intent of an architect to draw his client closer and extend the scope of his decorations for the building. Sullivan's metaphorical language is interpretive and provides a conceptual vocabulary for understanding the impact of the building on the architect, the client, and the building users. Sullivan's language insists on the importance of color, pattern, and light and on the architectural function of decoration. During the reading of the letter Taylor's photographs connect Sullivan's words to Sullivan's building. Following the Sullivan letter text segment, Taylor's text continues the linking of Sullivan's terms to the point at which his words are not necessary.

Interestingly, Sullivan's public commentary on the Owatonna bank took the form of building photographs taken by Henry Fuermann. The weekend before the bank opened, when construction was complete but before it was occupied, Fuermann made at least 24 photographs with Sullivan at his side. Bennett published several of these in an essay on the bank for *The Craftsman*; reviews in architectural journals, such as the *Architectural Record*, published them as well. Fuermann's glass plate negatives were among those Taylor discovered at the Chicago Architectural Photographing Company in the early 1950s when he was searching for early Auditorium Building photographs. Taylor used seven Fuermann photographs in his program. Fuermann's large-format view camera and slow films sensitive to single light waves produced very clear photographs with sharp edges, little line and angle distortion, and a wide range of gray tones, ideal for the strong geometry and subtle ornament that characterize Sullivan's architecture. These black-and-white photographs register some tonal values in the art glass windows, but no color. Early slow films made photographing interior glass very difficult; very long exposures intensify even subdued contrasts between light and shadow. Because Fuermann's photographs represent the architect's perspective, Taylor mastered Fuermann's conventions, using different equipment and film to capture not only Sullivan's strong geometry and low relief ornament but also the dynamic interplay of light and light-reflecting and light-transmitting ornament that he discusses in his letter to Bennett.

The Owatonna segment plays a disproportionately large role in the *Sullivan Banks* program: it must persuade the audience that Sullivan's smallest buildings provide the best evidence for understanding his architectural procedures. It takes some five minutes for Taylor to make this case and to establish the relation of visual image to verbal text, of image to image, and image to viewer. The Owatonna bank segment is the longest in the program, and Taylor modulates its force by putting the Grinnell bank, with its breathtaking rose window photograph series, at the midpoint, and the Sidney and Columbus banks, at the close. To achieve this symmetry and isolate the more important bank buildings he takes the West Lafayette bank from its chronological position, so that two short bank segments, the Cedar Rapids and Algona banks and West Lafayette and Newark banks lie on either side of the Grinnell bank segment.

Having established a method for taking the measure of a Sullivan bank with the Owatonna segment, Taylor repeats and varies it with the Grinnell and the Sidney and Columbus bank segments. In the

Grinnell bank segment Taylor uses the poet Samuel Taylor's Coleridge's general claim about artistic unity followed by a 90-second script gap to stimulate unmediated part-whole thinking about a series of building photographs that includes the rose window series, a tour de force series that celebrates Sullivan's art. As an art object, the window bears the closest scrutiny; as the viewer's physical distance to the window changes, so does the pattern scale and the part-part relationships and the color values of each art glass fragment. When the narrator's voice returns, invoking key phrases from Sullivan's letter to Bennett, Taylor holds the skylight and window photograph for 20 seconds to reinforce the connection between Sullivan's metaphorical language and particular examples of two-dimensional ornament with architectural, or space developing, function.

In the Sidney bank segment, Taylor's text begins by stressing the "mint condition" of the building to reinforce his point that it is in the small rural bank buildings that Sullivan's original designs can best be seen. Indeed, the deep blue mosaic on the front façade and the crisp terra cotta ornament detail appear pristine in the low afternoon light. Here Taylor uses long script gaps because the viewer has learned to see a Sullivan bank building. In a single photograph, the charming photograph of the child at the fountain, perhaps a fortuitous accident of Taylor's photographing schedule, Taylor makes a point about designing for human needs that his audience now can visualize for all the Sullivan bank buildings. For both the Sidney and the Columbus bank segments, Taylor uses long script gaps and narrated lists of building features to eliminate the distance of audience to image and to recapitulate the tools the audience has learned for experiencing Sullivan's buildings. The music track amplifies Taylor's claim that the Columbus bank is a triumphant conclusion, to the bank series and to Sullivan's career, and so heightens attention.

Rather than close the program with the last building in the series, Taylor quickly summarizes the series with single building photographs and gives Frank Lloyd Wright, Sullivan's protégé and fellow architect, the last word, with an edited passage from his *Genius and the Mobocracy* (1949). Taylor's use of Wright's words is particularly effective in giving shape to his slide program. Edited and stripped of its qualifiers, it answers Sullivan's articulation of his aspirations in his letter to Carl Bennett in the Owatonna bank segment. Where Sullivan's personal communication serves to share the architect's secret, Wright's words resonate with emotional intensity: "wherever the practice of architecture today rises to the dignity of an idea in harmony with place and time . . . the origin of that practice is middle-West . . . and stems from one, Louis H. Sullivan." Wright's tribute points beyond the *Sullivan Banks* program to grounds for a new history of modern architecture.

THE VISUAL ESSAY, SULLIVAN STUDIES, AND ARCHITECTURAL HISTORY

The *Sullivan Banks* program restores to Sullivan studies the importance of interior space. Much has been written by architectural historians about Sullivan's contributions to the structure and exterior form of the modern skyscraper. By comparison, Sullivan's interior volumes have been neglected, perhaps because his major building interiors, such as the Auditorium Building and the Garrick Building, were remodeled early on. Taylor's restorations, exhibits, and slide program document Sullivan's use of color, pattern, and artificial and natural light to develop spatial illusions. In volumes

intended for night-time use, what might be termed closed boxes, to use the Institute of Design space and light modulator analogy, Sullivan uses light-reflecting two-dimensional stencils and the electric light bulb to dissolve or modulate wall and ceiling planes and create visual effects that change with the user's physical motion or with the movement of his or her eyes. In volumes intended for day-time use, open boxes, such as the banking rooms, Sullivan uses light-transmitting art glass walls and skylights to break wall and ceiling planes and connect interior volumes to unbounded volumes outside and to create visual effects that change with the daily and seasonal movement of the sun and clouds. From the inside Sullivan's volumes appear to be enclosed or marked off by minimal structural components, just enough to bound space for a particular purpose. Sullivan's two-dimensional light-reflecting and light-transmitting ornament convert solid planes to translucent or transparent screens to create the illusion of near and deeper space. With abstract and representational art Sullivan designs or characterizes that virtual space so that it assumes the features of a natural environment. In a space frame building with transparent glass curtain walls it is unnecessary to design the space beyond. For Sullivan the abstract and representational art is essential to his construction of volume because he wants for his interior volumes the illusion of space-developing planes open to natural light, color, and space beyond.

Knowing Sullivan interiors thus raises important questions about the explanation of architectural change in the modern period. Modern architectural historians, exemplified by Hugh Morrison and Siegfried Gideon, describe the shift from Victorian to modern architecture as one driven by developments in structure, from masonry to steel or space frame construction. With space frame construction came tall buildings, transparent curtain walls, and open plans — and a greater abstraction or purification of structural form. In this history Sullivan gives form to structure, especially in his theoretical writings. But Sullivan's interiors, as documented by Crombie Taylor, demonstrate sophisticated innovation in the construction of interior volume that predates later modern refinements in building structure. Taylor bank building photographs enable us to see that Sullivan's interiors are more important, and more modern, than previously recognized.

Sullivan's architecture makes an ideal case study for appreciating the role of the visual essay in architectural history because the photographic record is unusually rich. Sullivan worked closely with three photographers, J.W. Taylor, Ralph Cleveland, and Henry Fuermann, and directed the visual documentation of his own buildings. At midcentury Aaron Siskind and Richard Nickel photographed Sullivan's buildings when they were largely neglected; their visual survey led to the identification of dozens of "lost" buildings and a catalogue raisonne, *The Complete Architecture of Adler & Sullivan*, completed by John Vinci and Ward Miller in 2010. Taylor's Sullivan building restorations exhibited pristine Sullivan interior volumes, never seen by architectural historians and thus never part of their architectural histories. Taylor's Sullivan bank building photographs and automated slide program systematically document the architectural function of two- and three-dimensional ornament and polychromy in a single building type. In this collective visual record — and it is worth noting that architects and visual artists compiled it — many Sullivan buildings survive only as building photographs. To study Sullivan's architecture is to study its two-dimensional visual representation.

Taylor's building photographs and automated slide program point to the potential of the visual essay and digital technologies for architectural history. As this digitization demonstrates, digital technologies can release architectural history from the limits of book publication or print exhibits. If book publication conventions and exhibit costs have reified text-based formats and contributed to the suppression of this rich visual record, there now are new opportunities for visual alternatives, beginning with the visual essay and the case of Sullivan. But visual images, including building photographs, do not speak for themselves. They can initiate a way of using the eye that architects use in order to interpret and explain architectural subjects, and thus supplement or clarify text-based conventions. The early modern architectural history based on Sullivan's writings and the later modern architectural history that privileges theory in explaining architectural practice are ripe for reassessment. Admitting the visual record of Sullivan's architecture may alter our explanations of architectural change at the beginning of the modern period, and these new explanations, the process of architectural change in our own time as well.

ACKNOWLEDGMENTS

Hope Taylor, Victoria Taylor, Beth Taylor Fergon, and John Taylor welcomed the opportunity to preserve Crombie Taylor's *Sullivan Banks* and provided the original slides and reel-to-reel audiotape for digitization. John Taylor also reviewed the work in progress at every stage and shared information about his father's methods and intentions.

Joel and Jeri Rothman, long-time champions of Crombie Taylor's Sullivan scholarship, generously contributed the financial support that enabled this digitization project.

At the Art Institute of Chicago Ryerson and Burnham Libraries Mary Woolever, and her colleagues Nathaniel Parks and Joseph Tallarico, encouraged this digitization of Taylor's program and insured that it would meet their emerging standards for web-based materials. The first of its kind for the Art Institute archives, it completes the Art Institute collection of Taylor's building drawings and photographs, his Institute of Design records, and his Sullivan building restoration materials, exhibits, and photographs.

At the Office of Charles and Ray Eames David Hertsgaard provided information about the Eameses' multi-screen slide and film projects and documentation of Taylor's participation in the *Think* film.

At the University of Virginia Eric Field, director of the School of Architecture Insight Lab, developed and supervised the digitization process with assistance from graduate student Lain Jiang. Dean Abernathy, at the Institute for Advanced Technology in the Humanities, and Steven Villereal, at University Libraries Preservation Services, digitized the slides and audiotape, respectively.

Elaine Kobold (Robertz and Kobold, Inc.), who designed *Crombie Taylor: Modern Architecture, Building Restoration, and the Rediscovery of Louis Sullivan* (William Stout, 2009), composed the *Sullivan Banks* web page; the graphic continuity between these two publications reinforces their close topical relationship.

Bill Sherman offered helpful comments on the architect's perspective, and John Rowlett, on the theoretical issues associated with visual and verbal representation and explanations of change across the arts.

NOTES

For citation references and additional information about Crombie Taylor's career, including drawings and photographs of his own architectural commissions and polychromatic stencil patterns from his Sullivan stencil exhibit, the early Sullivan building photographs, and Aaron Siskind's Institute of Design Sullivan project, see my three-book series: *The Early Louis Sullivan Building Photographs* (William Stout, 2001), with Crombie Taylor; *Aaron Siskind and Louis Sullivan: The Institute of Design Photo Section Project* (William Stout, 2008), and *Crombie Taylor: Modern Architecture, Building Restoration, and the Rediscovery of Louis Sullivan* (William Stout, 2009).

AUTHOR BIOSKETCH

Jeffrey Plank (b. 1947) collaborated with Crombie Taylor for more than 20 years on architectural history projects, including restoration of Sullivan's Van Allen department store building in Clinton, Iowa. In 2009 he completed a three-part book series on Louis Sullivan and architectural photography, building restoration, and architectural history: *The Early Louis Sullivan Building Photographs* (William Stout, 2001), with Crombie Taylor; *Aaron Siskind and Louis Sullivan: The Institute of Design Photo Section Project* (William Stout, 2008), and *Crombie Taylor: Modern Architecture, Building Restoration, and the Rediscovery of Louis Sullivan* (William Stout, 2009). Trained as a literary historian, Plank's academic career included teaching and administrative positions at the University of Southern California, Georgia Tech, the University of Chicago, and the University of Virginia.