

THE FUTURE OF MODERNISM: ARCHITECTURAL INTENTION AND ADAPTIVE REUSE

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A man is judged by neither intention nor fact but by his success in making values become facts. When this happens, the meaning of the action does not exhaust itself in the situation which has occasioned it, or in some vague judgment of value; the action remains as an exemplary type and will survive in other situations in another form. It opens a field. Sometimes it even institutes a world. In any case it outlines a future. History according to Hegel is the maturation of a future in the present, not the sacrifice of the present to an unknown future; and the rule of action for him is not to be efficient at any cost, but to be first of all fecund.¹

—Maurice Merleau-Ponty, “Indirect Language and the Voices of Silence”

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PRELUDE

What does it mean for architecture to engage an existing building? The pages that follow address the singular importance of intention in the practice of adapting and preserving modernist architecture in the twenty-first century. There is a matrix of forces common to nearly every architectural project that shapes the final built object. Financial, programmatic, structural and environmental

constraints along with client objectives and tastes are all meaningful considerations that must inform the conceptualization of a new building. The aged building in need of restoration, however, contains an additional constraint: the need to engage with its unique history. The tradition of storytelling must be employed to synthesize time and place, bridging past and present.

The practice of adaptive reuse—the preservation, renovation and reuse of an existing structure for a new purpose—links the building’s past with the contemporary world. It requires understanding a preexisting narrative as well as the crafting of a new narrative, one that both continues and extends the original.² Existing buildings function as complex formal entities that develop over time and space, accumulate human experience and produce unique historical richness. This accumulation of experience must be accounted for in the building’s preservation and reuse. The significance of these experiences must be recognized and acknowledged. The narratives must be sorted and evaluated. Should nostalgia, for example, be a protagonist in the historical narrative of a building? Did historically significant events take place at the building? Did the building undergo alterations over its lifetime? Is the building considered significant in the eyes of the architecture or preservation community? Does the building occupy a place of pride in its community? A rigorous analysis and deep understanding of these existing narratives and the complexity of experiences they point to must provide the groundwork for the building’s future. This requires research into the building’s history. The historical context, the original design intentions, the building’s programmatic and construction history, its social and cultural associations, all contribute to its existing narrative and must form a fundamental constraint relevant to all adaptive reuse projects. The narrative must be told. And by reimagining this narrative, adaptive reuse links the past with the present. It creates an urban touchstone that is both history and invention. The preservation of an original design intent requires the extension and maturation of an original idea into a future that both maintains and reinvents the original.

INTRODUCTION

In 1952, the same year that Skidmore, Owings & Merrill (SOM) built the watershed Lever House skyscraper (fig. 1)—thereby heralding a new synthesis of modernist ideals in architecture—the French philosopher Maurice Merleau-Ponty published “Indirect Language and the Voices of Silence,” one of the most important reflections on modern aesthetics



FIGURE 1: LEVER HOUSE
(PRIOR TO RENOVATION)

in twentieth-century philosophy.³ The essay describes the way in which the individual elements of an aesthetic object bestow significance on one another precisely by virtue of their juxtaposition. Their rigorous, rule-based arrangement produces a matrix of meaning which corresponds to the lasting quality of the work. Strikingly, important aspects of the enterprise of modernist architecture—particularly as expressed in the work of SOM—invite understanding in terms analogous to those found in Merleau-Ponty’s thought.⁴ Moreover, this understanding has farreaching implications for what it would mean to preserve the kind of aesthetic objects that modernist architecture sought to produce. These objects—like language itself—bear meaning by means of an interrelationship of parts, the efficacy of which creates a seemingly unending world:

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than the way in which the signs behave toward one another and are distinguished from one another, cannot be posited independently of them.⁵

And further:

It is as if each step taken called for and made possible another step, or as if each successful expression prescribed another task to the spiritual automation or founded an institution whose efficacy it will have never finished experiencing.⁶

This efficacy of the object depends primarily on the density of decision—that is to say, intention—inherent in the work’s conception. Its commanding logic, or grammar, is everywhere present. For Merleau-Ponty, the lateral relations between elements born from the initial intention produce a world or matrix of almost infinite meaning. In contrast to the importance of the literal material of stone and craft—the literalism that is the theoretical foundation for contemporary theories of preservation—the meaning of modern architecture is found in the rigor of arrangement and relationship of its parts. The juxtaposition and relational positioning of architectural elements give meaning to the work.⁷ It is thus in the idea of the elements and their interdependence—rather than the materiality of the elements themselves—that modernism finds its value. And it is precisely this kind of value, this modernist ideal, that SOM sought to produce in the second half of the twentieth century.⁸

In 1935, three years after Henry Russell-Hitchcock and Philip Johnson’s “Modern Architecture: International Exhibition” at the Museum of Modern Art in New York City—and as Le Corbusier visited the United States for the first time—Gordon Bunshaft was in Europe as a Rotch Travelling Scholar, absorbing the ideas of early European modernism.⁹ Less than a year later, Louis Skidmore and Nathaniel Owings began a partnership that would become Skidmore, Owings & Merrill and, by 1950, the firm had completed several large projects including Manhattan House in New York, the Terrace Plaza Hotel in Cincinnati, and the Brooklyn Veterans Hospital. It was the corporate headquarters for Lever Brothers Company on Park Avenue, however, built in 1952, that was to shape the image of Skidmore, Owings & Merrill as a notable proponent of postwar modern architecture. Following the Lever House project, SOM would go on to design a number of the most representative buildings of modernist architecture in the United States including the Manufacturers Hanover Trust building in New York City and the United States Air Force Academy campus in Colorado Springs. These projects proposed design concepts

that were grounded in the modernist sensibility of the time. Based on rigorous conceptual models, modern architecture no longer found its meaning in the literal materiality of stone and brick, but rather in the almost fathomless depths of its concept. This understanding of the modernist enterprise is particularly significant to the preservation of modernist buildings. The rejection of the literal and the material in favor of matrices of ideas and rules require novel approaches to the practice of historic preservation more adequate to the objects of interrogation.

VICTORIAN ERA PRESERVATION

In 1849 John Ruskin published *The Seven Lamps of Architecture* where, in a section called “The Lamp of Memory,” he develops his now-famous attack on the practice of architectural restoration: “Do not let us talk then of restoration,” he writes. “The thing is a Lie from beginning to end.” For Ruskin, the act of restoration is primarily an act of destruction:

the old building is destroyed, and that more totally and mercilessly than if it had sunk into a heap of dust, or melted into a mass of clay [...] But, it is said, there may come a necessity for restoration! Granted. Look the necessity full in the face, and understand it on its own terms. It is a necessity for destruction. Accept it as such, pull the building down, throw its stones into neglected corners, make ballast of them, or mortar, if you will; but do it honestly, and do not set up a Lie in their place.¹⁰

What is of primary significance for Ruskin in his understanding of 19th century architecture is the literal materiality of the structure, the craft of its production and the process of its aging. Particularly with respect to medieval stone buildings, Ruskin and other English Romantics found aesthetic meaning in the material’s weathering and decay, “in

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walls that have long been washed by the passing waves of humanity.”¹¹ As England was in the initial throes of industrialization, it became increasingly fascinated by its preindustrial past.¹² Four years after publishing *The Seven Lamps of Architecture*, Ruskin published the second volume of *The Stones of Venice*, his three volume treatise on Venetian art and architecture. In a section called “The Nature of Gothic,” Ruskin emphasizes the importance of medieval and gothic craft arguing that, in previous epochs, art was the expression of man’s pleasure in labor. It was this sentiment that led the protopreservationist William Morris to reprint “The Nature of Gothic” in 1892; helping to create the theoretical basis for the contemporary preservation movement. Morris described Ruskin’s paean to medieval labor and craft as “one of the very few necessary and inevitable utterances of the century.”¹³ Both Ruskin and Morris—the theoretical grounding behind contemporary preservation theory—insisted on the virtues of high quality hand labor, and the importance of the material in considerations of architectural preservation.

This romantic response to the industrialization of Victorian England took more definite shape in the Arts and Crafts movement toward the end of the 19th century, heavily influenced by Ruskin and Morris, which advocated the traditional craftsmanship of medieval arts and architecture. In 1877 Morris founded the Society for the Protection of Ancient Buildings, an organization that came to be called “Anti-Scrape” for its insistence that the materiality of historic structures be preserved without alteration. Any work on the building was “a feeble and lifeless forgery” and “deaf to the claims of poetry and history.”¹⁴ The Anti-Scrape movement sought to resist all tampering with the fabric of a given structure and to “treat our ancient buildings as monuments of a bygone art, created by bygone manners, that modern art cannot meddle with without destroying.”¹⁵ This approach, born of an era in which the character found in the literal and the material were of primary importance, indeed remains appropriate and necessary for a premodern architecture. In this context, the preservation of the literal suppresses the precise boundaries of time and place, combining history, memory and architecture to link the discarded and the fragmentary with new beginnings. And while the intended concept remains significant for Ruskin, this prioritization of the literal material of the building contrasts sharply with the idea that the significance of modernist architecture lies wholly in its concept, allowing for a preservation approach radically different from that of Victorian architecture.

Postwar modernism, however, requires a preservation approach more adequate to its purpose. While the preservation of premodern architecture

finds its meaning in the literal and the material, in addition to the idea of the building, the muse of postwar modern architecture is located primarily in the conceptual. And it is this distinction that has extensive and far-reaching implications for the preservation and restoration of modernist architecture. For if, in contrast to the valuing of the literal materiality of the structure, the meaning of postwar modernism is located primarily in the rigor of the concept, its preservation requires an approach radically different from that of Ruskin and the Victorian Romantics who would not have distinguished between the idea of a building and its material execution, understanding one as a mere extension of the other.

A notable counterpoint to Ruskin's nineteenth-century approach is that of his contemporary Eugène Emmanuel Viollet-le-Duc whose unique preservation ideas have remained anathema to preservation thinking for nearly two centuries. In contrast to Ruskin's emphasis on the significance of materiality, Viollet-le-Duc sought to maintain a fidelity to the original design, "to re-establish it to a finished state, which may in fact never have actually existed at any given time."¹⁶ For Viollet-le-Duc, whose work focused primarily on the Gothic and Romanesque, preservation finds its adequate expression in re-establishing an original idea. Such an approach functions as a kind of precursor to the modernist emphasis on the importance of the conceptual. His studies of nineteenth-century iron structures contributed to his interpretation of the Gothic as comprised of a rational scheme of skeletal forms designed to bear the weight of increasingly taller vaults. On this view, aesthetic value is to be found, above all, in the visual expression of structural elements—ribs, arches, and vertical supports—that compose the logical structural system. Preservation warranted modification to this logical system when, in the example of the Vézelay Abbey, the changes preserved the appearance of the original structural

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intention.¹⁷ Although a relevant precursor to the modernist emphasis on the conceptual in its eschewal of materiality, Viollet-le-Duc's attempt to recreate an original intention was often based primarily on an imagined fiction. The emphasis on the conceptual in the preservation of modernist architecture, however, benefits from advances in technology that allow for a more accurate understanding of a building's original design intent. The greater the understanding, moreover, the more potentially radical the intervention. Knowing the entirety of the original design intention allows for a preservation approach that articulates that intention in ways more adequate than Viollet-le-Duc and more appropriate to the contemporary world. In contrast to Ruskin, Viollet-le-Duc and the Victorian belief in the equivalence of ideal intention and material articulation, the meaning of modern architecture is expressed in its idea, thus requiring a radical rethinking of its preservation.

LEVER HOUSE

Consider, for example, New York's Lever House (fig. 1)—an architectural icon heralding “the beginning of a new wave of American skyscraper construction and a new synthesis of modernist architectural ideals”—was restored in 2001 and its famous glass and stainless-steel curtain wall was completely replaced.¹⁸ Built in 1952 and designated a historic landmark by New York's Landmarks Preservation Commission (LPC) in 1983, the building is exemplary of postwar American modernism. Situated on the west side of Park Avenue between East 53rd Street and East 54th Street, Lever House is a 24-story glass and stainless-steel clad office building composed of a vertical slab rising above a horizontal base. Taking advantage of a unique zoning provision, the project broke the tradition of “shaped tower” skyscrapers that predominated in New York City. Its glass-sheathed façade and novel design concept became dominant elements of contemporary architecture. Its structure consists of two counter-posed volumes, balanced in proportion but contrasting in shape. And in contrast to the traditional commercial lobby, the ground floor is a two-story open plaza with a paneled glass gallery. The project introduced a number of innovations in skyscraper design including an integrally designed window-washing mechanism and the concept of the ground floor public courtyard.

The density or intensity or weight of decision—which is to say intention—in the making of its form is everywhere evident. The work is saturated with traces of artistic intention. And this intention is articulated by the lateral relations among its parts; in the language of

Merleau-Ponty, “in the eloquence of arrangement and configuration” that “implants a meaning in that which did not have one.”¹⁹ The entirety of the structure articulates a sureness of concept that made it a pioneer in American architecture. To begin, the plan features an open, colonnaded space flowing into the width of the Park Avenue sidewalk. Only one third of the ground floor is indoor space which is primarily enclosed by glass panels. The second floor then hovers over the entire site taking the form of a horizontal slab wrapped around the open courtyard below. The ground floor column grid is set back from the plane of the second-floor façade, giving the second floor slab the appearance of a weightless floating volume. The just 53-foot-wide tower, a vertical slab set perpendicular to the avenue, is entirely glazed on three facades (as well as the returns on the rear façade) giving the building a crystalline and volumetric quality. Its exterior walls are a grid of stainless-steel mullions, anchored to the structural skeleton at each floor, which hold in place large and small panels of fixed glass. The large panels, functioning as windows, are green-tinted heat absorbent transparent glass and the small panels are tinted wire-glass spandrels concealing the floor slabs behind. These darker bands give the structure a horizontal emphasis that provides a delicate counterpoise to the verticality of the building’s columns and metal framing. And this juxtaposition of vertical and horizontal in the facade thematizes the vertical and horizontal volumes of the building more generally. It is the purposeful mutual inflection of elements throughout—its syntax—that gives meaning to the building. That is to say, its meaning is found in the internal consistency of its concept. And it was to the appropriateness of its concept that Skidmore, Owings & Merrill’s 2001 curtain wall replacement sought to respond.

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In 1952 the building’s glass curtain wall was at the cutting edge of a new technology. Almost half a century later, it required restoration. Due

to construction material limitations, fabrication limitations, and weather conditions, the curtain wall experienced severe deterioration. The corrosion of the curtain wall resulted in the bowing of the horizontal mullions and the breakage of most of the smaller spandrel glass panels, as well as some of the larger window panels. The Landmarks Preservation Committee designated the building a historical landmark in 1982— noting it as “outstanding for its spatial clarity, scale and beauty of form”— and allowed for a full replacement, in kind, of the building’s curtain wall assembly.²⁰ This “radical facelift” has significant implications for a theory of the preservation of postwar modernist architecture.²¹ It suggests that, in contrast to Ruskin’s emphasis on literal materiality, certain buildings are characterized less by their physical instantiation than by the concept of the design. And therefore, any attempt to preserve and restore such buildings must determine its original grammar—the rules of its design—in order to preserve the meaning of a given structure. The logic of its rules will determine the appropriate degree to which restoration and alteration can occur without altering the original meaning of the design. Thus the entirety of Lever House’s literal glass curtain-wall could be replaced with new, updated materials while maintaining the integrity of the initial design. The original tinted wired spandrel glass, no longer manufactured, was replaced with as close to a match to the original as possible. The original steel subframe was replaced with a concealed glazing channel, reflecting a state of the art solution in today’s curtainwall technology. Throughout the restoration process, the materials were replaced—either in kind or as closely as possible—so as to reproduce the quality of the idea.

MANUFACTURERS HANOVER TRUST

Consider also the Manufacturers Trust Company Building, the preservation of which goes even further in extending the original design intention. Often seen as the very model of modernism (fig. 2), It was built in 1954, two years after Lever House, at 510 Fifth Avenue on the southwest corner of West 43rd Street and Fifth Avenue. It is a steel and glass cube with an unbroken glass façade featuring a seven-foot-wide circular metal bank vault visible from the street. Breaking all modes for bank architecture of the time, these elements opened what had been a cloistered world more commonly housed behind masonry walls and produced a novel relationship between architecture and city. Evoking the claim that the idea is paramount, *Architectural Forum* referred to the building as “the first big building truly to fulfill architects’ immaculate drafting board idea of glass



as an invisible material.”²² Particularly notable is the sense in which the meaning of the design is precisely the appearance of the building’s materiality, rather than its materiality as such. In contrast to the formidable stone and shuttered fortresses of the premodern, the building’s guiding design concept is the impression of an extreme, unparalleled lightness. “If it is characteristic of the human gesture to signify beyond its simple existence in fact, to inaugurate a meaning,” Merleau-Ponty writes, “it follows that every gesture is comparable to every other. They all arise from a single syntax.”²³ Almost everything in the syntax, or grammar, of the Manufacturers Trust building contributes to its meaning, to the unparalleled appearance of lightness. Supported by eight interior columns set eleven feet from the Fifth Avenue building line and twenty feet from the West 43rd Street building line, the second-floor concrete slab cantilevers off the columns and is set back from the clear glass curtain wall façade. Accordingly, the main banking areas appear to be contained within one forty-foot-high space and the second-floor slab seems to float. Both the concrete slabs and the external metal skeleton were kept extremely thin,

FIGURE 2:
MANUFACTURERS
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enhancing the building's appearance of lightness. Finally, cathode tube lights concealed behind thin plastic panels dematerialize the surface of the ceiling producing an impression of weightlessness. A true landmark in the delineation of space—and an arrangement of elements far beyond mere existence in fact—its design completely transformed our concept of the glass wall creating an entirely new relationship between interior and exterior.²⁴

More than a half century after its construction, the building's striking formal clarity and rich history remain. The evolution of the city, however, has rendered its technical efficiency and programmatic relevance obsolete. 510 Fifth Avenue was optimized to the standards and ideals of its day. But by 2010, its original owner had closed its bank branch, the building's technological innovations were long outdated, and it no longer met the standards of contemporary architecture. In 2012 SOM adapted the building for retail, allowing old forms to meet the demand for new functions. Beyond the mere replacement of the structure's existing materiality, the adaptation required more significant changes that would work within the logic of the original concept. By means of subtle architectural alterations that tailor the space for an alternate purpose, they preserved the formal ingenuity of a unique and historic architecture while simultaneously producing new relationships between architecture and city. Drawing on archival research and guided by the original design intentions, SOM preserved the building's architectural meaning by preserving or restoring its primary elements including the glass curtain wall facade, the vast luminous ceilings, the Bertoià-designed screen, the white marble piers, and the celebrated circular stainless-steel vault door. The renovation and restoration of its glowing ceilings and polished plate glass façade brilliantly maintain the building's lucid grace and almost complete erasure of the threshold between architecture and city.²⁵

To adapt the building for new uses, the architects integrated entrances into the building's east façade, divided the first floor to allow for additional tenants, and rotated the escalators to run parallel with the new partial-glass demising wall. By preserving the original architecture while adapting certain of its features for programmatic change, the renovation produces a kind of urban monument, one that is simultaneously both retrospective and prospective. On the one hand, the building's preservation brings forth layers of accrued implication deposited by time and human experience into contemporary urban life—almost Victorian in its materiality. On the other hand, the vitality of adaptive reuse lies in its essential engagement with the precise demands of the present. It allows for an architecture

that takes on new and disparate functions thereby producing new meanings. It directly mediates between past and present in an ever-changing world of shifting values—and, in this instance, it is precisely by virtue of this juxtaposition of past and present that the mutual inflection of elements bestow significance on one another.

UNITED STATES AIR FORCE ACADEMY

The idea of preserving architectural intent reached an apex in 2016 with Polaris Hall, SOM's addition to the United States Air Force Academy campus



(fig. 3). With a scope far beyond that of Lever House or Manufacturers Hanover Trust, the project sought to extend the extreme rigor of the original concept into a completely new structure. It found in the depth of the initial concept the possibility for a building that would preserve the meaning of the original while begetting new meaning, born of the established relationships between already existing elements. This, in extreme contrast to the literalism

FIGURE 3: POLARIS HALL

of the premodern Romantics, implies a theory of preservation at its most speculative, in which we locate the maturation of a future in the fecundity of the present. Its original design concept contained futures within its logic, allowing for precisely the kind of addition conceived almost a half-century later.

Begin in 1954 after the establishment of the United States Air Force Academy by President Dwight D. Eisenhower, the project is located at an elevation of 6,500 feet along the foothills of the Rampart Range of the Rocky Mountains in Colorado. Given the scope of the project—both a university and flight training academy, nine buildings in total—the concept not only addressed individual buildings but both the natural landform and the interrelationships between buildings.²⁶ By creating artificial terraces at the ridge crest with a series of concrete retaining walls, the plan allows the spaces between buildings to open into the larger landscape, maintaining the expansive character of the site.²⁷ The buildings in the Cadet Area—sited on the highest ridge and the symbol of the Academy to the public—were nestled into the mesa, allowing the structures’ monumentality to be apparent from outside the complex while maintaining a human scale and smaller perceived-size from the pedestrian level. The entire area is based on a seven-foot module that produced the relationships and proportions of the buildings throughout. It produced the sizes of the beams and structural bays in the Cadet Quarters, as well as the width of the rooms, windows, spandrel panels and the detailing of the facades. Delineated rows of marble tile on the Terrazzo produce gridlines that reflect the module, a twenty-eight-foot organizing grid. The module organized the buildings and the space, but never restricted them resulting in “an extraordinarily sensitive composition of built and natural forms.”²⁸ The corners of the grid were intentionally left open and implied, creating breaks in the horizontal plane that mirror those on the vertical plane, in the upper level loggias and height drops of the Academic Building and Cadet Quarters. The lengthwise visual momentum of the buildings—themselves floating on pilotis above open space—elevated above its surrounding terrain produced sensations of expansive soaring. Set against this backdrop of horizontality and the dramatic vertical peaks of the Rampart Range, the Cadet Chapel—the focal point of the Cadet Area—is intentionally distinct. Visually separated from the Court of Honor by its unique surface treatment, its wide ramp, and its dissimilar landscaping, the Chapel functions as the virtuosic punctum of the composition.

A half-century after its opening, the United States Air Force Academy sought an addition to its campus. Serving as an education and research

center and situated opposite and offset from the Cadet Chapel, Polaris Hall functions as the new home of the Academy's Center for Character and Leadership Development. Built in 2016 and designed by SOM, the addition's puzzle-like fit is as if the idea of the building were embedded within the concept of the original design. And in a sense, it was. It is a future that grew out of the outline and fecundity of the initial design. It is in this sense that the addition of Polaris Hall preserves the original, articulating the survival of its concept in another form.

Given the sensitivity necessary in adding to the sacred ground of the existing Academy, the Air Force proposed a competition between the three principal offices of SOM: San Francisco, Chicago and New York. The design jury consisted of Air Force officials Lt. General John Regni and Lt. General Ervin Rokke, architecture historian and critic Joan Ockman, Cornell University School of Architecture dean Kent Kleinman, and Robert Nauman, whose *On The Wings of Modernism* is widely considered to be the standard work on the architecture of the Air Force Academy. SOM began with a site visit and the design process took shape immediately. Weaving through the surrounding hills and valleys to approach the existing campus, the buildings came in and out of sight as a kind of dramatic foreshadowing of the intensity of experience induced upon arrival. Seen as a kind of ancient citadel recalling a modern Acropolis, the monumental scale of both site and architecture produced an almost spiritual effect. The low, long orthogonal lines and overwhelming consistency of the architecture stood in stark contrast to the raised rugged mountaintops and expansive blue sky of the surroundings. Significantly, the team noted that the architecture is raised on pilotis throughout to create cinematic, framed letterbox views of the natural landscape. These framed views, moreover, align with the grid of the campus that is everywhere present,

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inscribed in the very ground on which the cadets march. It was this visit to the site—and the attendant recognition of its monumental, quasi-spiritual character—as well as what SOM saw as the inescapable necessity to engage with the logic of the existing grid, that began the process of conceptualizing Polaris Hall.

The SOM design team underwent a period of sustained research into the existing architecture of the Air Force Academy as well as the self-understanding of the institution it houses. It became clear that the discipline of the existing architecture—the omnipresent grid, the perfect orthogonal lines, the exactness of framing—corresponded in important ways to the discipline of the cadets. And central to the Academy’s mission (as to its crest), embedded in its conceptual framework like the buildings in the terraced plinth, was the Polaris star. The brightest star in its constellation, Polaris is known as the North Star, and functions as a symbol of the core values of the Academy. SOM used this guiding symbol as the basis of their design, seeking to embody Polaris by means of architecture. The idea to create a structure that emerged directly from the gridlines of the original thickened, rectilinear landscape with a skylight aligned toward Polaris came early. The initial design of the campus addition resembled a telescope, a long shaft extending diagonally from the ground toward the sky. To complement the telescopic form, SOM considered a collaboration with the artist James Turrell, with whom SOM had already collaborated on two other academic buildings. An intermediate design review with Air Force officials, however, caused a subtle but significant change.²⁹ Concerned that the initial design could be too easily read as a military instrument of violence, the design team added volume to the thin shaft, extending its base to encompass the entire form. This allowed for a more iconic, wing-like shape while bringing light and air into the entire space. The logic of the design follows almost naturally from its origin point of North Star alignment: its sunken form allows for clear views at ground level, glass demising walls bring the skylight as far as possible into the building, and the structure aligns the existing grid with the diagonal angle of Polaris.

The final design, a 105-foot glass-and-steel skylight aligned toward Polaris—the Academy’s metaphorical guiding principle—emerges almost inevitably from the existing landscape. Like the Academic Building and Cadet Quarters, its auditorium protrudes into the Terrace level mimicking the stepped terraces of the original design. It follows the straight lines of the campus, preserves crucial sight lines and adheres to the original masterplan grid. It references the materials of the original campus including the colorful

Murano glass tiles that line the entry walls and the granite for the main exterior stairs which was cut from the same quarry used for the Cadet Chapel in 1954. Its structure, diagonal steel plates composed in a triangular grid calibrated to resist lateral forces, directly alludes to the Chapel's triangular repetition. The meeting and seminar rooms surrounding the central space below the Terrace level are comprised of glass storefronts adapted to the campus's seven-foot grid. And yet the building provides its own additional metaphors. Its protruding skylight works as a metaphorical moral compass, a reminder of the Academy's core values. The size and shape of the oculus align precisely with the North Star, signifying the Academy's guiding values. It serves as a source of natural light, and creates a precise optical alignment with the respondent's seat in the Honor Board Room, where investigations into the cadet honor code take place. The details of the building mirror the logic of continuity and break found in the horizontal momentum of the site plan. Shaped like an aircraft tailfin, the building eschews the muscularity of the Cadet Chapel, preserving the campus's existing hierarchy of importance.

An open, transparent nexus of interaction, the terraced levels of the building accommodate gatherings at a variety of scales and levels of formality. Its glass-walled collaboration rooms surround the central space emphasizing and encouraging collaborative, forward-looking research. The entirety of the largely transparent structure is an architectural interpretation of the Academy's moral aspirations more generally, aspirations of communication, transparency, and openness. Embedded within the constraints of the original campus design, Polaris Hall converts morality, sincerity, implicit hierarchies, and guiding principles into physical spatial conditions. Revisiting, renovating and adding to architectural icons requires that the original narrative be considered. And the revisiting engenders its own narrative, related to and born

“ POLARIS HALL, HOWEVER, ACTIVELY REINTERPRETS THE ORIGINAL, EXTENDING AND ADAPTING THE IDEA OF ITS GRID, ITS HIERARCHY, AND ITS MATERIALITY INTO A BRIDGE THAT BONDS PAST AND PRESENT.”

of—but different from—the original.³⁰ Polaris Hall, for example, can be seen as a kind of secular corollary to the original Cadet Chapel; a temple of research and learning more adequate to the cultural mores of the twenty-first century. In this sense, it is a project that exists in the unique, liminal space between past and present, a portal connecting one to the other.

It is this unique condition that the practice of adaptive reuse engages more broadly. Its ability to preserve an existing building while replacing materials (Lever House), repositioning the program (Manufacturer's Trust) or adding to the original (Polaris Hall), challenges certain widely accepted notions of historic preservation. Because of modernist architecture's unique focus on the rigor of concept, its preservation requires a shift in our understanding of what it means to preserve, which has typically focused on the preservation of the literal. In the case of Lever House, for example, the very materiality of the original object was wholly replaced while retaining its Landmark status, thereby shifting the framework of what it means to preserve modernist architecture. In a kind of response to Theseus's Paradox—the famous thought experiment in which the ship of Theseus, the mythical king and founder of Athens, has been completely replaced over time thus questioning whether the restored ship is the same object as the original—the renovation of Lever House expresses a determinate position. The complete replacement of its curtain wall assembly suggests a radical break in how we approach the historic preservation of modernist architecture. And just as the founder-hero of Athens is associated with major cultural transition and the establishment of a new social order, the preservation approach to Lever House, 510 Fifth Avenue and Polaris Hall heralds a new and radical approach to the practice of preservation more generally.

Viollet-le-Duc's attempt to recreate an original intention based primarily on an imagined fiction, while a radical approach for its time, foregoes any meaningful connection between past and present, as if existing on opposite sides of an unbridgeable gulf. Polaris Hall, however, actively reinterprets the original, extending and adapting the idea of its grid, its hierarchy, and its materiality into a bridge that bonds past and present. Merleau-Ponty claimed that in a successful aesthetic object, its meaning does not exhaust itself in the moment that has occasioned it, but remains as an exemplary type and survives in other situations in other forms and in other times. The United States Air Force Academy does exactly that. The depth and originality of its original conception outlined a future in its origin. The rigor and logic of the design almost included within it the birth of Polaris Hall. It instituted a world unto itself pregnant with transformations to

come. “History,” Merleau-Ponty reminds us, “is the maturation of the future in the present, not the sacrifice of the present to an unknown future.”³¹ The Air Force Academy was decidedly not sacrificed to an unknown future. The fecundity of its original design inaugurated an institution. Its extreme rigor and depth of intention established a future within the logic of its present; a present that called for and made possible its next iteration. Rather than a complete departure from the initial design, Polaris Hall is the maturation of the original conception of the Air Force Academy campus into an inevitable future.

ENDNOTES

1. Maurice Merleau-Ponty, “Indirect Language and the Voices of Silence,” *Signs*, trans. Richard C. McCleary (Evanston, Ill., 1964), pp. 39-83. The original essay in French, “Le Langage indirect et les voix du silence,” was first published in *Les Temps Modernes* in 1952 and was included in Merleau-Ponty, *Signes* (Paris, 1960).
2. As Ada Louise Huxtable, the dean of American architectural criticism, writes in *The New York Times* in 1968, “What preservation is really all about is the retention and active relationship of the buildings of the past to the community’s functioning present.” Ada Louise Huxtable, “Where Did We Go Wrong” in *Will They Ever Finish Bruckner Boulevard?* (Berkeley: University of California Press, 1989), 223.
3. *Ibid.* Notably, the work of Merleau-Ponty is at the heart of some of the most important art criticism of the 20th century, in particular the writing of Michael Fried whose seminal essay “Art and Objecthood” was published in *Artforum* 1967. He cites Merleau-Ponty throughout his writing, and “Indirect Language and the Voices of Silence”

in particular. See Michael Fried, “An Introduction to My Art Criticism,” *Art and Objecthood: Essays and Reviews* (Chicago: University of Chicago Press, 1998), 28-31.

4. The paper does not claim that SOM architects were explicitly reading Merleau-Ponty’s writing. The claim, rather, is that Merleau-Ponty’s understanding of how meaning is produced by the interrelationship of parts can help us think productively about the early work of SOM and what it means to preserve that work today.

5. Huxtable, “Where Did We Go Wrong,” 223.

6. *Ibid.*

7. So Merleau-Ponty writes, “The primary operation which first constitute signs as signs, makes that which is expressed dwell in them through the eloquence of their arrangement and configuration alone, implants a meaning in that which did not have one, and thus—far from exhausting itself in the instant at which it occurs—inaugurates an order and founds an institution or a tradition.” *Ibid.* p. 7. Michael Fried further echoes this sentiment in his description of the English sculptor Anthony Caro: “Everything in Caro’s art that is worth looking at—except the color—is in its syntax.” Commenting later on these lines, and citing Merleau-Ponty’s essay in particular, he writes, “I associated the notion of syntax with that of abstract gesture, but what I saw was that the entire expressive weight of Caro’s art was carried by the relations among the girders, I- and T-beam segments, and similar elements out of which his sculptures were made, not by... the industrial, modern-world connotations of his materials.” Fried, “An Introduction,” 29.

8. This approach is notably different from the more standard approach to Merleau-Ponty within architecture which prioritizes Merleau-Ponty’s writing on phenomenology. For an interpretation of Merleau-Ponty and the role of phenomenology in the rise of postmodernism, see Jorge Otero-Pailos, *Architecture’s Historical Turn: Phenomenology and the Rise of the Postmodern*, (Minneapolis: University of Minnesota Press, 2010).

9. Bunshaft joined SOM in 1937 where he remained for more than forty years as lead design partner. He is credited with ushering in a new era of modernist skyscraper design and corporate architecture.

10. John Ruskin, *The Seven Lamps of Architecture* (London: George Allen, 1903), 244.

11. *Ibid.*, 177.

12. See, for example, Charles Dellheim, *The Face of the Past: The Presentation of the Medieval Inheritance in Victorian England* (Cambridge: Cambridge

University Press, 1982).

13. William Morris, "Preface," *The Nature of Gothic* (Kelmscott Press: London 1892, p.i).

14. William Morris, Philip Webb, et al, "Manifesto of the Society for the Protection of Ancient Buildings," first published 1877, accessible on the society's contemporary website: "The SPAB Manifesto" at

<https://www.spab.org.uk/about-us/spab-manifesto>, accessed 10 Oct 2019.

15. *Ibid.* For discussion of these lines, see Andrea Elizabeth Donovan, *William Morris and the Society for the Protection of Ancient Buildings* (Routledge: London 2008), pp. 24 ff.

16. Eugene-Emmanuel Viollet-le-Duc, "Restoration," from *Dictionnaire Raisonné de l'Architecture Française du XIe au XVIe Siècle (1854-1868)*, English translation as *On Restoration* (Sampson Low, Marston: London, 1875).

17. See, for example, Kevin D. Murphy, *Memory and Modernity: Viollet-le-Duc at Vézelay* (Penn State University Press, 1999).

18. Landmarks Preservation Commission (November 9, 1982); Designation List 161, LP-1277.

19. Maurice Merleau-Ponty, "Indirect Language and the Voices of Silence," 67.

20. *Ibid.*

21. Suzanne Stephens, "The restoration of New York City's Lever House is not so same-old, same-old, as architects SOM and William T. Georgis demonstrate," *Architectural Record*, March 2003, Vol. 191, Issue 3, p. 122.

22. Landmarks Preservation Commission October 21, 1997; Designation List 285 LP-1968. According to Nathaniel Owings, the designers "were encouraged to come up with whatever popped into their heads, and the history and tradition of banking

be damned. Nathaniel A. Owings, *The Spaces in Between: An Architect's Journey* (Boston: Houghton Mifflin, 1973), 103.

23 Maurice Merleau-Ponty, "Indirect Language and the Voices of Silence," 68.

24. *Architectural Forum*, "Modern Architecture Breaks through the Glass Barrier [Manufacturers Trust Co. Branch, N.Y.]" *Architectural Forum* 101 (December 1954): 104-11.

25. For additional background and context to this project (510 Fifth Ave), see Evan Bindelglass, "LPC Chair, Top Architects Review NYC's Adaptive Reuse Projects", *New York Imby* (Dec 23, 2015), at <https://newyorkyimby.com/2015/12/lpc-chair-top-architects-review-nycs-adaptive-reuse-projects.html>, accessed October 10, 2019.

26. Robert Bruegman, *Modernism at Mid-Century. The Architecture of the United States Air Force Academy* (University of Chicago Press: Chicago 1994), 47.

27. As Hegel points out in his *Aesthetics*, "Works of art enchant us not because they are so natural but because they have been made so natural." G.W.F. Hegel, *Aesthetics: Lectures on Fine Art, Vol. 1* (New York: Oxford University Press, 1975), 164. The artificiality of the landscape is yet another articulation of the project as willed intention. *Architectural Forum* declared that the architects "shaped the slopes as powerfully as the Babylonians, the Incas, and the Greeks once did." *Architectural Forum*, "The Air Age Acropolis", *Architectural Forum* 110.6 (June 1959), 158-65.

28. Bruegman, *Modernism at Mid-Century*, 53.

29. Meeting attendees included Lt. General Regni, Dr. Rokke, Colonel (ret) Tom Berry, and Colonel Ackerman.

30. As Nicholas Adams writes in *Casabella*, "it respects everything around it and yet it offers something completely original." Nicholas Adams, "Polaris Hall, Center for Character and leadership Development, Air Force Academy, Colorado Springs, Colorado," *Casabella* 871 (March 2017).

31. The logic of the present unfolds into its future. "It is as if each step taken called for and made possible another step, or as if each successful expression prescribed another task to the spiritual automation or founded an institution whose efficacy it will have never finished experiencing." Maurice Merleau-Ponty, "Indirect Language and the Voices of Silence," 54.