From the day it was dedicated in 1963, Paul Rudolph’s Art and Architecture Building at Yale was considered one of the most controversial structures of the postwar period. Known as A&A, it was immediately recognized for its strong urban presence, expressionistic gestures and labyrinthine interiors. In the 1950s and 1960s, Rudolph was one of the central figures of postwar American architecture and was famous for his highly textured surfaces and unique rendering style. Perhaps the most provocative aspects of the Art and Architecture Building, which he had the opportunity to design while chairman of the architecture department (1958 to 1965), were the remarkable properties of the corrugated concrete surface used throughout the interior and exterior, which is the subject of this essay.

As Rudolph’s first large-scale experiment with highly textured surfaces, the building marks his departure from the use of flat, abstract, monochromatic wall planes, in the tradition both of the European modernism of the 1920s and 1930s and the postwar Americanized International Style, toward intensely worked surfaces.¹

When light hit the rough-cast, low-relief finishes, the ever-changing play of shadowed patterns across the surface softened the impact that the imposing concrete mass of the building had upon its surroundings. At the same time, the elements would weather the surface, thus creating an effect more like the traditional masonry of the Yale campus. Only much later was Rudolph fully able to explain his intentions when he suggested that the corrugated surface “broke down the scale of walls and caught the light in a thousand ways and the sense of depth was increased. As the light changed the walls seemingly quivered, dematerialized, [and] took on additional solidity.”²

This complex effect was achieved by first pouring concrete into corrugated forms and then laboriously breaking the ridged surface with a hammer to expose the aggregate to the weathering effects of the elements. Rudolph
The corrugated concrete surface of the Art and Architecture Building at Yale University. Photo: Walead Beshty.
mixed reflective micas, seashells, stones, and even branches of coral into the aggregate. More than the building’s optic qualities, however, it was the tactile qualities of the surface that fascinated, if not downright horrified, most critics. Though Vincent Scully understood quite well that the surfacing technique was one of Rudolph’s optical experiments, he was still dismayed by the physical results. As he stated, Rudolph’s “slotted and bashed surface is one of the most inhospitable, indeed physically dangerous, ever devised by man. Brushing against it can induce injuries roughly comparable, one supposes, to those suffered in keelhauling. The building repels touch: it hurts you if you try.”

The hammered patterns were in fact derived from Rudolph’s unique techniques of architectural rendering. His development of the surface of A&A was the product of a broader investigation into methods of architectural drawing, education, and decoration that can be traced back to the discussions of ornament surrounding the centenary of the birth of Louis Sullivan in 1956. For Rudolph’s raised surfaces also take their cue from Sullivan’s low-relief ornament. In fact, the surface of the Yale building can be interpreted as a form of ornament that has been literally pressed (or repressed) into the concrete. Moreover, in a broader sense, this method of concealing ornament seems to parallel Rudolph’s situation as a closeted, homosexual man during the Cold War period. Indeed, for the homosexual Rudolph, the so-called “brutalism” of his surfaces can be interpreted as a hypermasculinity perhaps unconsciously designed to combat any aspersions cast on the possible effeminacy of ornament.

This symbiosis between draftsmanship and the hammered surface of A&A is most visible in the foreground of this publicity photograph, preserved in Rudolph’s archive from a now-forgotten source, where, as in a didactic illustration of one of the workshops from the eighteenth-century *Encyclopédie*, the capable hands of Rudolph, the master architect and chairman of the architecture department, rest upon a fragment of the hammered surface. Behind him, students in the main drafting room work in
the space created expressly for the practice of architectural drawing, a space presided over by the benevolent but no-nonsense gaze of an actual Roman Minerva. The leitmotif woven through this complex, multi-dimensional space is the corrugated surface visible on all vertically poured forms, which is omnipresent throughout the building. This is a surface that is always present at one's elbow or that seems as though it is brushing against the skin, a surface that is always avoided just in time to prevent grazing the hand. Time and time again in the publicity for this building Rudolph was photographed with the corrugated surface behind him or holding a fragment of it in his hand until it practically became a synecdoche for him and the building. Rudolph's hand is in fact so large in this photograph that there must be some distortion, perhaps yet another sign of the fetishistic attraction between the surface and the hand that made it.

One critic at the time did recognize how much A&A owed its appearance to Rudolph's manner of drawing. Reyner Banham posited that the subjects of the building were architectural draftsmanship and the rituals of criticism, or the delectation of drawing so evident in this room. In his words, "It is one of the very few buildings I know which, when photographed, was exactly like a drawing, with all the shading on the outside coming out as if it were ruled in with a very soft pencil."5

Banham noted, in addition, that the appearance of A&A was not just derived from draftsmanship, but from the methods of graphic reproduction used to reproduce architectural images in printed books, that is the practice of engraving. He said this was "a building about draftsmanship as surely as many English eighteenth-century Palladian buildings are, with their carefully pick-toothed rustication with the actual patterns of the design taken directly from the engravings in the Quattro Libri. So that it is a building for draftsmanship and a building conceived in terms of draftsmanship."6

For Banham, however, Rudolph's concern with creating buildings through the process of drawing smacked of the methods of the architecture schools of the past, namely the practices of the Ecole des Beaux-Arts. Banham regarded Rudolph's interest in the congruity between drawing and finished building as a disturbing solipsism. He said that since Rudolph had been in the historically unique position as chairman of the school of architecture of being both architect and client, a position in which few since Schinkel in Berlin or Mies at IIT had been, the result was that "the process of confrontation between architect and program" had become "almost purely one of introspection."7

A comparison between a drawing of the exterior of A&A and a photo of
the outside shows the remarkable similarities between the two. Yet the photograph is unable to register the empirical attention to detail evident in the drawing. It is almost as if Rudolph could not conceptualize the building unless he painstakingly drew in every detail.

Banham was right in that the immensely complicated, large-scale sections and perspectives which Rudolph produced until the end of his career were made more for himself than for the client. Unlike most successful architects of his generation, who usually delegated to draftsmen the process of working sketches into presentation drawings for clients, Rudolph closely supervised the process of rendering because it was so integral to his methods of design. Because of his need to control every line in every rendering, his office never expanded beyond the size of an atelier. Indeed, the creation of a signature drawing style had been crucial to Rudolph’s development.

In the 1940s, when Rudolph was being educated at Harvard’s Graduate School of Design (GSD), Walter Gropius had deliberately downplayed the practice of drawing in favor of more scientifically-based methods of analysis. Like Banham, Gropius believed that the production of aesthetically pleasing architectural drawings was an anachronistic practice of the Beaux-Arts. Following the practices he had established at the Bauhaus, Gropius felt that students should be encouraged instead to work like scientists in teams in order to understand the intrinsic and tactile properties of materials. The production of aesthetically pleasing drawings was viewed as an individualistic practice reserved for artists. Rudolph absorbed this ethos even as he grappled to resolve it with the Beaux-Arts drawing procedures he had been taught as an undergraduate at Alabama Polytechnic University during the late 1930s.

Despite being one of Gropius’s most prized and successful students, Rudolph was to spend most of the decade of the ’50s looking for alternatives to the so-called “functionalism” he had been taught at the GSD. Rudolph’s project can be understood as an internal critique of modernism that remained, nevertheless, at the same time deeply committed to its tenets. He decried the corporatized postwar International Style for its reliance upon the glass curtain wall and became an early critic of the destruction of Park Avenue as an urban ensemble.

When Architectural Forum asked Rudolph why in his one tall building of the 1950s,
the Boston Blue Cross/Blue Shield Building (1957-1960), he had employed a “precast concrete façade instead of the familiar glass-and-metal curtain wall” Rudolph replied that he preferred “buildings that respond to light and shade to buildings that are all reflection.” Following such remarks, Rudolph’s opaque concrete walls might be interpreted as positing an alternative to the spread of the transparent curtain wall. The “responsiveness” of these walls to their environment would be quite different from how the curtain wall passively reflected, like a mirror, anything that passed before it. In even broader terms it can be inferred that this is a commentary on how the curtain wall had come to represent the conformity or passivity of the corporate culture that had adopted it during the '50s. In contrast, Rudolph’s walls would be expressionistic.

Oddly enough, for someone so closely associated with the practices of the GSD, Rudolph spent only two semesters at Harvard, one before and one after the war. It was in fact during the period in which he was left to his own devices supervising ship construction in the Brooklyn Navy Yards, that Rudolph had devised his own unique, highly graphic, chiaroscuro-like manner of rendering, which ultimately had an impact upon his architecture. Following the example of a recognizable graphic style set by the published works of Frank Lloyd Wright and Le Corbusier, Rudolph geared his research toward the creation of a manner of drawing that would register both the increasingly expressionistic direction of his architecture and that could be easily reproduced in architectural journals.

To do so, Rudolph turned to methods derived from woodcuts and fine art engraving found in such technical treatises as the late-'40s manual entitled Scratchboard Drawing, a copy of which was in Rudolph’s own library. Scratchboard drawing was a technique used in advertising that attracted the attention of the magazine reader through the repetition of parallel lines in bold, chiaroscuro-like images, as in the image of then-movie-star Ronald Reagan. Such images have a graphic
quality similar to German Expressionist woodcuts or the Expressionist-influenced photography of the Hollywood films noir of the late 1940s. Drawings executed in this boldly graphic manner had the advantage of being easy to reduce or enlarge with a minimal loss of detail, in much the same manner as engraved postage stamps or currency.\(^{15}\)

In the scratchboard method, a coating of black ink was applied over a white ground and then scraped or cut away using an engraving tool.\(^{16}\) While the practice of pouring ink across a sheet of paper or cardboard did not prove practical for architectural rendering, the intense concentration and coordination between hand and tool, visible in photographs in Scratchboard Drawing that showed the proper way to hold the instrument, did translate directly into Rudolph’s drawings. Unlike the freehand sketch, which is characterized by its spontaneity, the pen-and-ink technique that Rudolph developed called for precise control of the hand and pen in what amounted to an expenditure of craft, labor, and concentration similar to the amount of time invested by the mason hammering at the surface of the Art & Architecture building. Care and attention were put into working, reworking, patching, and retouching what became the collage-like surfaces of these drawings to create a published image that was paradoxically smooth and unblemished. In addition to this, the development of the Rapidograph pen meant that the drawing instrument could be held in the hand for longer periods of time without refilling it with ink, thus prolonging the period of physical contact between drawing and maker.\(^{17}\)

These methods, originally developed for the creation of commercial art, had an increasing impact upon Rudolph’s methods of design and analysis. All the surfaces in his buildings were usually worked in some way, just as all planes in his drawings were crosshatched or covered with vertical lines as is visible in a detail from a perspectival section of A&A. It comes as no surprise, then, that Rudolph’s almost fetishistic manner of rendering is the source of the corrugated concrete surface at Yale: the rendering of surfaces with multiple parallel lines translated directly into the construction of surfaces with a similar appearance. Rudolph confirmed this when he said, “The development of textured concrete . . . probably started simultaneously with the concept of the rendering and how to make it conform more exactly to the image as depicted.”\(^{18}\) Though the materials and scale

---


Bottom: Examples from Scratchboard Drawing of how hand should hold instrument. Estate of Paul Rudolph.

of the operation differ, the emphasis on obliterating an existing surface to expose what lay underneath that was characteristic of the scratchboard technique resembled the process of pouring concrete and then chipping away at the ridged surface, employed at A&A.

Much of Rudolph’s mid-fifties critique of the International Style had in fact been devoted to pointing out the differences between the conceptual images architects produced and the resulting buildings. At the 1954 American Institute of Architects Convention in Boston, he called for a return to an aesthetic that would unite drawing and building: “We have apologized for being concerned with visual design and indeed there has been little discussion of it even in our schools. This fact is demonstrated again by the difference between a drawing, a model, or photograph, and the actual appearance of so many of our buildings. The conception is constantly discussed, but seldom visually perceived.” It can be inferred from this quote and the context that Rudolph was making a pointed comment about how Gropius’s so-called functionalism focused on methods of research and analysis, or the gathering of quantitative data on a project, rather than on the aesthetic or the visual aspects of design.

At Yale, Rudolph was attempting to recover the practice of drawing after the techniques of the Beaux-Arts had been abandoned. It should be made clear that Rudolph was not sentimental or nostalgic about the Beaux-Arts, nor did he advocate a return to the Beaux-Arts custom of producing large-scale colorful drawings. Rudolph was, however, one of the few modernists at the time who stated that the Beaux-Arts was worth reconsidering for the ways in which it had approached the design of the city. Urbanism would of course become the central problem for Rudolph and his colleagues during the 1960s.

Rudolph’s willingness to reconsider the Beaux-Arts became apparent when he distributed over two hundred bas-reliefs and sculptures from
Yale’s collection of Beaux-Arts plaster casts throughout the interior of the structure. He installed a series of Egyptian bas-reliefs in the glamorous penthouse which accommodated overnight lecturers, as well as in more liminal spaces, like the dark and shadowy stairwell where he installed a Greco-Roman frieze. The deployment of these reliefs staged an exegesis of the nature of the bas-relief, suggesting that the ever-present textured surface was itself a form of low relief.

For Rudolph, the casts had multiple meanings. There was certainly something humorous or ironic about the installation of these outdated pedagogical tools that may have been an instance of homosexual camp. Ada Louise Huxtable said in her review of A&A in The New York Times that Rudolph had installed the casts with “tongue in cheek.” Yet, their reintegration into the very structure of the architecture school perhaps held an even deeper, almost Oedipal meaning for him. “When Gropius came to Harvard,” Rudolph told an interviewer, “he threw out all the plaster casts. Now we are bringing them back again.” Though it was in fact Joseph Hudnut, the dean of the GSD, who had banished the casts from the architecture school at Harvard when he replaced the Beaux-Arts with a modernist curriculum, the return of the casts, albeit for reasons of decoration rather than to be used for education, was indeed part of Rudolph’s extended critique of Gropius. The Beaux-Arts casts, which students in the past had copied in order to learn historical forms, were anathema to members of Gropius’s generation since they represented the stress the Beaux-Arts placed on the integrated teaching of drawing and history.

Rudolph was perhaps aware of how the juxtaposition between bas-reliefs and textured walls provided an almost historical precedent or justification for his development of surface. Though Alois Riegl’s essay on the appeal of aged surfaces, “The Modern Cult of Monuments: Its Character and Its Origin,” would not be translated into English until the 1980s, and Rudolph read no German, the patina and obvious antiquity of these plaster sculptures attested to the passage of time just as the shattered and irregular surfacing of the walls amounted to a sort of “antiquing.”

Indeed, the building seemed to be littered with allusions to nineteenth-century theories as well as the movements that were important during Rudolph’s years as a student, such as Surrealism and Regionalism. For instance, the corrugated surfaces had a woven or textile quality that seemed to recall the history of the wall as it had been theorized by nineteenth-century historians like Gottfried Semper. At the same time, the worn material quality of these surfaces recalled Rudolph’s experiments with Regionalism in the series of vacation houses he had designed in

---

Top: Interior of Yale Art and Architecture Building penthouse with plaster casts of Egyptian bas-reliefs. 

Bottom: View of Greco-Roman casts in stairway of Yale Art and Architecture Building. 
Florida after completing his degree at Harvard. Finally, the placement of the casts in sometimes unexpected spots, like on stairways, throughout the building contributed to the feeling that this labyrinthine building of thirty-six different levels, or strata, was in fact an excavation, an archaeological dig, or even a surreal metaphor for the multiple layers of the unconscious. Rudolph's sometimes inchoate allusions to history and theory mirror the conditions of an architectural discourse that only half knew its own past and was in the process of rediscovering it.

In his typically taciturn fashion, Rudolph would admit to only the most formal of motives for their placement. "These works," he claimed, "have been used to reduce the scale of the interiors, which is, I believe, the basic relationship between all ornament and architectural space." Ornament is the key word here, and it points to one of the hidden subjects at A&A. Ornament exists as a sublimated narrative within the building, weaving its way across the surfaces and through the passages in an almost furtive way.

Ornament and decoration had long been a difficult subject for modern architecture. Theorists like Semper and Riegl investigated the origins and history of ornament in order to suggest or prescribe what a modern ornament could be like. The practitioners of Art Nouveau and other early modernist movements attempted to create new types of ornament for modern times as well. Yet there were many working in the tradition of this discourse, like Sullivan, who believed that the role of ornament in modern architecture needed to be reconsidered.

In 1908, Adolf Loos wrote in his famous article, "Ornament and Crime," that ornament was something primitive, erotic, and criminal that was not modern. In the post-World War II period, Banham rediscovered Loos's article, and went one step further to say that "Ornament equals crime." Critics like Banham were particularly uneasy with ornament because they believed that in the postwar years it was misused to sell goods targeted at a mass audience. Banham wondered what Loos would "have made of a Cadillac economy, where undecorated goods are apt to be in an inaccessible luxury price-bracket, while ornamental products are within the reach of all but the most depressed strata of society?" Seen within the context of this complex history, Rudolph's suppressed ornament with its half-conscious allusions to the theories of Riegl and Semper can be interpreted as a postwar installment of this discussion. Yet given the ambivalent, and at times hostile, ways in which ornament was discussed in the 1950s, it is not surprising that Rudolph might choose to reexamine ornament and conduct his experiments in a clandestine way, as though it were indeed a criminal act.
As already stated, Rudolph deployed the casts in an almost critical manner. He marked his territory within the school by installing a set of Sullivan friezes from the recently demolished Schiller Building in Chicago above the entrance to his office door and an ironwork elevator grille from Sullivan’s Chicago Stock Exchange at the entrance to the faculty offices. These fragments were themselves perhaps the object of a fetishistic fascination by Rudolph and others. Carroll Meeks, one of the historians at the school, believed that the elevator grille was in fact designed by Frank Lloyd Wright when he had been Sullivan’s chief draftsman. In this role, Wright described himself many times as “a good pencil in the master’s hand.” Scully extended this connection when he noted the resemblance between Wright’s recently demolished Larkin Building and A&A. Rudolph’s building can as such be interpreted as a sort of memorial to the demolished works of Wright and Sullivan. Wright had been an important early influence upon Rudolph during his undergraduate years, and although he had been put aside in favor of the European-derived modernism of the GSD, the presence of Wright was always detectable in Rudolph’s work.

Once Rudolph became chairman of his own architecture school, however, it was to these origins that he returned. The manipulation of these fragments could be interpreted as Rudolph realigning his genealogy away from the Bauhaus and back toward his American forebears. Though Rudolph would never associate himself with post-modernism, the deployment of these fragments can be seen as a witty and sophisticated form of quotation that tells of the renewed importance of history for postwar modernism. Aside from the figure of Le Corbusier’s Modulor, inscribed upon a pier in the drafting room, these fragments were the only elements designed by a modern architect to be included in the extensive decorative program of the building.

Rudolph’s fascination with Sullivan at this time is in fact related to developments within architectural discourse. In 1956, on the centenary of his birth, Sullivan had been the subject of an extended revisionary debate over the nature of his achievements. The effort was to challenge Sigfried Giedion’s claim, extant from the late 1930s, that Sullivan’s main contribution had been the privileging of structure, as the coiner of the term “form follows function” and the creator of the modern skyscraper form. Edgar Kaufmann, Jr. curated a retrospective of Sullivan’s work at the Art Institute of Chicago featuring architectural fragments and large-scale photographs of his ornament in close-up by John Szarkowski. Kaufmann and others, like Scully, used the occasion to call for a reassessment of Sullivan’s ornament, arguing for its significance for contemporary architecture.
One of the few to sound a contrary note about this celebration of Sullivan was Philip Johnson. He proclaimed that Sullivan and his ornament were overrated, even doubting whether Sullivan was the father of functionalism. Johnson said, “Sullivan’s interest was not in structure, but design; and indeed more and more, in the ornament which covers his buildings.”44 He implied that ornament had distracted Sullivan from the main business of architecture: the creation of form. Though Sullivan’s ornament seemed inconsistent and individualistic to Johnson, it was, as already noted, in fact developed from the discourse of ornament that had evolved during the nineteenth century. Among the problems that had led to Sullivan’s downfall were what Johnson euphemistically called his “sex troubles,” that is, his rumored homosexuality.45

It was perhaps the eroticism that permeated the theory, as well as the art and architecture, of the early modern period that so intrigued yet perplexed the thinkers of the more straight-laced Cold War years. Like Symbolism, Art Nouveau, and other turn-of-the-century “decadent” movements which would be rediscovered during the 1950s, Sullivan’s at times wildly organic ornament had an erotic and introspective quality about it that had been memorably characterized by Wright: “Ah, that supreme erotic adventure of the mind that was his fascinating ornament!”46 These artistic movements were redolent of the highly aestheticized homosexuality of Oscar Wilde and were alluded to obliquely in J. K. Huysman’s A Rebours—a book with a strong homosexual following.47 Though the American and European wings of these movements were quite different, when rediscovered in the 1950s they were often lumped together in the pages of journals and in exhibitions so that Sullivan and Victor Horta were seen side by side.48 Despite the pedigree of Sullivan’s ornament in nineteenth-century theory, Jennifer Bloomer has pointed out the peculiar treatment which Sullivan and his decoration have received, as something strange, irrational, or uncontrollable, at the hands of historians uneasy with the subject of his possible homosexuality.49 In fact, the rumors about Sullivan’s homosexuality were never committed to print until Robert Twombly’s biography of 1986.50

Johnson’s stance on Sullivan’s ornament may have had to do with his own experiments with decoration at this time and with his own homosexuality.51 Johnson was engaged in a process of overturning the rules of the International Style that he had helped codify over twenty-five years earlier. Johnson and Henry-Russell Hitchcock’s 1932 book The International Style had recommended the “avoidance of applied decoration.”52 After initially emulating Mies during the 1950s, Johnson had
developed an architecture that prominently featured graceful, almost ornamental arches, best seen in his preliminary schemes for the New York State Theater at Lincoln Center (1958). Banham soon coined the term “ballet school” to describe these forms that evoked both the swaying androgynous or epicene forms of dancing figures and the whiplash curve of the Art Nouveau. Banham believed that the renewed interest during the 1950s in the aesthetic movements of the turn of the century signaled a “retreat” or “regression” from what he believed was the true path of modern architecture, the pursuit of technology. He himself thought that the one early twentieth-century movement that forecast the proper path for modernism was Italian Futurism.53

The phrase “ballet school,” which would be used as well to describe the ornamental experiments of Edward Durrell Stone, Minoru Yamasaki, Eero Saarinen and even Rudolph’s early work, suggested that these buildings were like ballet in that they were an elitist, old-fashioned, and introspective art form with a strong homosexual following.54 In this way, ornament was marginalized and discredited by implying that it was somehow effeminate or homosexual. These associations, and knowing how vulnerable his own architecture was to such aspersions, might explain why Johnson was so critical of Sullivan’s ornament. It was a way of distancing himself from the ornamental and all that it implied.

For Rudolph, however, the possibilities that Sullivan’s ornament presented may have outweighed the risks. We can only speculate about how Rudolph might have identified with Sullivan as a homosexual architect, like himself devoted to the practice of drawing, who was trying to break free of a dominant form of architectural pedagogy in order to create highly expressive forms.

In Sullivan’s case, he had gone beyond the forms of the Beaux-Arts in which he had been trained, only to have his own architecture eclipsed by the renewed importance of the Beaux-Arts, in a more rigidly orthodox form, in America during the 1890s. More importantly for Rudolph than the development of a homosexual iconography or an identification with a personality, Sullivan’s architecture may have suggested to him an alternative to the orthodoxy of form he found in both Gropius’s “functionalism” and in the International Style. Indeed, the tripartite arrangement of Rudolph’s Blue Cross/Blue Shield building bears a striking resemblance to Sullivan’s Guaranty Building in Buffalo (1894–1895).

For someone like Rudolph who was attracted to dramatic plays of light and shadow, the way in which Szarkowski’s photographs from the Chicago exhibition were published in book form in 1956 as The Idea of Louis
Sullivan must have been riveting. Many, including Rudolph, who owned this book, knew Sullivan’s work best through this dramatic set of black-and-white images that emphasized the play of light and shadow across the surfaces of the buildings’ façades, an effect similar to the ridged surfaces of A&A. In this case, architecture that had been transformed into representation by means of the photograph once again inspired more architecture. At the same time, this assemblage of quotations from Sullivan’s writings and fragments in book form is really a prototype for how Rudolph would use architectural fragments within the interior of his building.

Rudolph had experimented in a similar fashion with shifting patterns of shadow in 1958, when he covered the façades of his Jewett Art Center at Wellesley with sun-protecting screens or grilles similar to those used by Edward Durrell Stone in the New Delhi embassy in what became Stone’s contribution to “ballet school” architecture. These highly patterned grilles, which cast reflections and shadows across the façades, were initially praised by critics, but their time already seemed past by 1960. Other critics soon joined Banham to criticize these buildings for their formalism and commonly described them as epicene or effeminate.

It seemed at this time that American architecture’s experiments with ornament had reached a dead end, with its practitioners increasingly being viewed as effete and reactionary. Perhaps in an effort to distance himself from these aspersions as well, or in learning from Sullivan’s example what not to do, Rudolph sublimated ornament into the very surface of the building. The hammered surface at A&A is indeed a type of built-in ornament or decoration. In his critique of modernism, Rudolph had listed decoration as an omission in the agenda of contemporary architecture: “Monumentality, symbolism, decoration and so on—age-old human needs—are among the architectural challenges that modern theory has brushed aside.” And for him, Sullivan appears to have provided an answer to the question of how to create ornament in modern times. In “Ornament in Architecture,” which Szarkowski excerpted in his book, Sullivan had written that ornament should “be applied in the sense of being cut in or cut on, or otherwise done: yet it should appear, when completed, as though by the outworking of some beneficent agency it had come forth from the very substance of the material and was there by the same right that a flower appears amid the leaves of its parent plant.”

Though A&A has often been called Brutalist, Rudolph’s Brutalism is not about the frank expression of structure and materials as described by Banham and practiced by Le Corbusier, the Smithsons, and James Stirling. Bearing little resemblance to Le Corbusier’s béton brut, to which it was
often likened, Rudolph’s exterior surfacing at Yale is in fact a form of raised relief like Sullivan’s ornament. Thus, it is indeed more about the “outworking of some beneficent agency...from the very substance of a material” into a highly finished or patterned surface whose optical effects and prickly surface in fact repel and conceal their role as ornament. The decorative surface at A&A masquerades as a bravura piece of engineering that seems to be too rough to be considered ornamental or decorative.

Rudolph’s Brutalism should be seen as an expression of hypermasculinity—it is the working-up into form of anxieties about methods of architectural representation, competition with other forms of modernism, and the Oedipal struggle with the first generation of modern architects. Sullivan, it seems, had similarly practiced a sort of hypermasculinity. In a passage from Kindergarten Chats, Sullivan had described H. H. Richardson’s Marshall Field Warehouse as “a virile force—broad, vigorous and with a whelm of energy—an entire male.” The ambivalence of surface at A&A in fact says it all: “touch, but don’t touch” or “come close to me, but not too close.” Scully later hinted at the undercurrent of repressed sexuality within the building when he assessed it as “sado-masochistic.”

In his various articles and talks, Rudolph discussed Sullivan only in passing. However, Sullivan’s ornamental casts continued to play a role in Rudolph’s architecture. When Rudolph left Yale in 1965, he took with him, and installed in his own New York apartment, a number of Sullivan’s ornamental casts that had been left over from A&A. For him, these fragments may have had some sort of talismanic value. Perhaps they truly were a fetish, though they failed to ward off misfortune. (Like Sullivan, Rudolph too had a long twilight from the 1970s onward, after an initial period of dazzling success.) To this day, one of the casts is still the central ornament of the living room of Rudolph’s Beekman Place penthouse, a series of labyrinthine spaces that recall the penthouse and drafting rooms of the Yale building. Through the medium of Sullivan’s ornamental fragments, Rudolph inserted clues in his collage of a building about the real nature of his surfacing, in effect pursuing a strategy of closeting to conceal his ornament. Progressive Architecture unconsciously cooperated with these “closeted” practices as well when they montaged Rudolph’s crewcut visage, itself a prickly “touch but don’t touch” signifier, onto the very surface of the building for their February 1964 cover.
Notes
Acknowledgments: This essay is based on a talk presented at Princeton University’s Hypotheses 3 conference in February 1999 and is drawn from material used in my doctoral dissertation, “The Architecture of Alienation: Paul Rudolph’s Postwar Academic Buildings” written at Harvard University. The author would like to thank Neil Levine, David Smiley, and Felicity Scott.


2. Rudolph hints at his ideas about how the striations can dematerialize the mass of the building but does not fully articulate these ideas until the publication of a 1977 essay, “Enigmas of Architecture,” in a special issue of A+U devoted to his work entitled “100 by Paul Rudolph, 1946–1974.” A+U 80 (1977): 318.


9. Gropius’s thinking on education, creativity and drawing is complex. Despite Rudolph’s differences with the GSD approach, he had probably absorbed or learned a great deal from Gropius’s ideas about creating a “universal language of form.” See essays in Walter Gropius, The Scope of Total Architecture (Harper & Brothers Publications, 1955). For Gropius’s thoughts on drawing see “My Conception of the Bauhaus Idea,” (1935), 19 where he says, “The ability to draw is all too frequently confused with the ability to produce creative design.” The best source for the early work of Gropius and his students at the GSD is the volume of L’Architecture d’aujourd’hui edited by Rudolph himself in 1950 and entitled “Walter Gropius—the Spread of an Idea.” L’Architecture d’aujourd’hui, 20 (February 1950). For an American interpretation of these methods see the article in the same volume of L’Architecture d’aujourd’hui by Michael Aime entitled, “Notes on Architectural Education in the U.S.A.”


12. “Boston Bucks a Trend: no slick curtain-wall structure, the Blue Cross office building is a basket-weave of concrete that
enriches the urban scene.” *Architectural Forum* 113 (December 1960): 64–69.
15. Mildred Schmertz points to Rudolph’s technique as an example to other architects in her article, “Architectural Drawing for Printing Processes,” *Architectural Record* 133 (February 1963): 137–144.
22. Susan Sontag’s “Notes on ‘Camp,’” is published in *The Partisan Review* 1964, the same year A&A is completed. This article captures the spirit of irony present in Rudolph’s work and that was part of Pop art as well. For this essay, see Sontag, *Against Interpretation and Other Essays* (New York: Doubleday, 1966 and 1990), 275–292.
25. Jill Pearlman writes of how it was in fact Dean Joseph Hudnut who removed the plaster casts from Harvard’s Robinson Hall in 1935 or so. Most, like Rudolph, believed that Gropius had removed the casts. See Pearlman, “Joseph Hudnut’s Other Modernism at the ‘Harvard Bauhaus,’” *Journal of the Society of Architectural Historians* 56 no. 4 (December 1997): 460.
26. Pearlman, “Joseph Hudnut’s Other Modernism,” 471–472. It should be pointed out that Rudolph did relatively little to alter the curriculum at Yale. He did not insist on students taking more architectural history or drawing classes. For the most part, he functioned as a brilliant design critic. For background on the intellectual history of the Yale school and Rudolph as a design critic see Robert A. M. Stern, “Yale 1950–1965,” *Oppositions* 4 (October 1974): 35–62.
27. In a very tantalizing way for the scholar, the juxtaposition of Egyptian and Greco-Roman bas-reliefs against the raised relief walls of the building seems to recall Alois Riegl’s thinking about relief sculpture in books like his *Late Roman Art Industry* (1901). Riegl’s configuration of baptic/optic is quite different from Rudolph’s surfaces, however, which resist touch. Riegl’s ideas are best encapsulated in his essay “Late Roman or Oriental?” in *German Essays on Art History*, ed. Gert Schiff; essay translated by Peter Wortsman (New York: Continuum/ The German Library, 1988), 173–190. Riegl’s thinking about the bas-relief and the shadow may have been transmitted without


29. Rudolph’s surfaces were commonly compared to corduroy. He also hung the windows of A&A with cargo-net-like curtains made from sisal that had a quality similar to the roughened aggregate walls. He probably had little access to thinkers like Semper, except through figures like Giedion who would sometimes allude to the thinkers of the nineteenth century without naming them. An intriguing source for Semper is Anni Albers, the Bauhaus-trained weaver who was married to Josef Albers, the chair of the Yale School of Art. She published an article in *Perspecta* that alluded to the textile origins of architecture without specifically naming the German-speaking theorists from which these ideas descended. Anni Albers, “The Pliable Plane: Textiles in Architecture,” *Perspecta* 4 (1957): 36–40.


36. Mark Wigley investigated modernism’s troubled relationship with ornament and fashion in *White Walls, Designer Dresses*.

37. The Yale architectural historian Carroll Meeks made a list of the works of art in the Art and Architecture Building for Rudolph in which he noted that the gate may have been designed by Wright. See “List of Original Objects of Art, Art and Architecture Building,” n.d., in Carroll L. V. Meeks papers, 1930–1966, group 706, box 4, Sterling Memorial Library, Manuscripts and Archives, Yale University, New Haven, Conn.


43. From the very first issue, Sullivan’s ornament had been continually cited in the Yale Architecture School’s journal Perspecta, beginning with Henry H. Reed, Jr., “Monumental Architecture: Or the Art of Pleasing in Civic Design,” Perspecta 1 (Summer 1952): 51–54. This is a call for a return to decoration to humanize modern architecture that is illustrated with a close-up photo of Sullivan’s ornament that was not by Szarkowski. After the 1956 exhibition, Edgar Kaufmann Jr. published another article on the possibilities of a modern architectural ornament: “Architectural Coxcombr or the Desire for Ornament,” Perspecta 5 (1959): 5–15. In the very same issue, Vincent Scully published the most important of these articles, “Louis Sullivan’s Architectural Ornament, a Brief Note Concerning Humanist Design in the Age of Force,” Perspecta 5 (1959): 73–80. It should be pointed out that Scully’s article is a reply to Philip Johnson’s “Is Sullivan the Father of Functionalism?” Art News 55, no. 8 (December 1956): 44–46, 56–57.

44. Johnson, “Is Sullivan the Father of Functionalism?” 56.

45. Philip Johnson, “Is Sullivan the Father of Functionalism?”, 44.

46. Frank Lloyd Wright, Genius and the Mobocracy (1949; reprint, New York: Horizon Press, 1971), 96. This is the volume of Sullivan’s drawings that Wright published as a tribute to his “lieber-meister.” After Sullivan’s death, Wright had become the custodian of his drawings and had kept them and some ornamental fragments at Taliesin. Sullivan had asked Wright to publish the drawings, which he did in 1949. Eventually they passed into the collection of the Avery Architectural Library at Columbia University.


48. For instance, someone like Edgar Kaufmann, Jr. was interested in both Sullivan and examples from the European movements of the turn of the century, which he brought into the permanent collection of the Museum of Modern Art as early as 1949. Peter Selz writes about Kaufmann’s role in the acknowledgments to the catalogue for an exhibition at MoMA that seemed to summarize the 1950s’


53. Banham was as dismayed by Italian postwar architecture’s attraction to ornament and the Art Nouveau as he was by these tendencies in America. His feeling that a renewed interest in Art Nouveau was a form of “infantile regression” is best explained in his article “Neoliberty: The Italian Retreat from Modern Architecture,” *Architectural Review* 125 (April 1959): 230–235. Banham, of course, advocated another turn-of-the-century movement, Italian Futurism, with its emphasis on technology, as the proper inspiration for modernism. See Banham, *Theory and Design in the First Machine Age* (1960 reprint, Cambridge: MIT Press, 1986).

54. The provenance of this term is elusive and as far as I have been able to trace, probably first used by Banham to describe Johnson’s architecture in one of his late-’50s reviews in the *New Statesman*. For an example, see Banham’s comments from the *New Statesman* about Eero Saarinen’s U.S. Embassy in London, excerpted in *Architectural Forum*. “Controversial Building in London,” *Architectural Forum* 114 (March 1961): 84. Johnson was particularly associated with the ballet because he was a founder, along with Lincoln Kirstein, of the New York City Ballet, and was the architect of its home, the New York State Theater at Lincoln Center (1964). Franz Schulze credits the term to British critics in his biography of Johnson and briefly discusses the homosexual connotations of the term in Johnson: *Life and Work*, 253. So does Alice Friedman in her *Women and the Making of the Modern House: A Social and Architectural History* (New York: Harry N. Abrams, 1998), 147–159.


60. For the term “Brutalism” see Reyner


