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Introduction

Alloying Space

During the roughly twenty years following the end of World War II, a renewed relationship between art and architecture became pronounced enough to be considered a bona fide phenomenon. Modernist architects increasingly incorporated modern tapestries, textiles, murals, reliefs, and sculptures, made with a wide variety of materials, into the interiors and exteriors of their buildings. They consulted with clients to select or purchase modern paintings and sculptures, often quite large in size, and worked with designers and craft practitioners as well as firms, like Knoll or Herman Miller, to create unified, aesthetically striking, and sophisticated interiors. Fountains, plazas, and outdoor sculptures for courtyards and campuses, often realized in collaboration with landscape architects, also proliferated, though more so during the later postwar period.¹

Among critics and practitioners alike, this disciplinary integration, or rather re-integration, became a fiercely contested topic, producing a variety of interpretations of what the concept meant and how it could be achieved. The magazine *Craft Horizons*, for example, dedicated their first issue of 1959 to the “use of arts and crafts with architecture.” Ada Louise Huxtable noted in the lead feature that while there was universal support for such endeavors, there was also an equal amount of widespread disagreement over how disparate disciplines should serve one another in practice. She wrote, “The ideal of ‘integration,’ unfortunately, sounds far better than it is. It implies the successful fusion of architecture, the arts and the crafts into a harmonious, homogeneous whole, as we have known in the past. Its objectives are unimpeachable and its moral tone is lofty, but it is full of fallacies for our day.” Huxtable’s misgivings stemmed, in part, from a widespread assumption that integration equaled a kind of disciplinary consensus or conformity.²

What Huxtable recognized was that modern art had become increasingly “*un*-integrated” in American modern life, and thus its relationship to architecture could only achieve something closer to “apposition, not integration.” “Architecturally, it means enrichment by juxtaposition, completion by contrast,” she wrote. For Huxtable, the skillful selection of the most “suitable” piece of sculpture or the “correct craft,” could enhance a building, making it “greater than it would have been without it.” Art should not be concerned with harmony, but rather with providing a “strong counterpoint” to the austere formal simplicity of modernist architecture. Seen in this way, according to Huxtable, a sculpture or painting did not possess structural functionality, but became more than “mere elaboration or decoration.”³

Though it was by far the most commonly deployed term at the time, integration rightfully elicited suspicion, and there is much to recommend in Huxtable’s counterproposal of apposition. She, like many critics and practitioners, was admirably attempting to define and reconcile the myriad sincere, if inconsistently executed, attempts to bring together, once again, art and architecture in the midst of a rapidly changing postwar world. In actual practice, however, the use of art in architecture was never itself homogeneous. A mural, exterior frieze, or freestanding sculpture can provide, as Huxtable asserted, a “sharp, judicious, and extremely

meaningful accent” to a building, but each operates within different frameworks of intent and function. Each possesses the unique limitations or specificities of its given medium. Further, an artwork commissioned for an architectural project will always carry with it a set of circumstances distinct from works selected or purchased, no matter how thoughtfully executed.⁴

While this book originated from a desire to reevaluate what was indeed a legitimate moment of cross-disciplinary exchange during the immediate postwar period, it does not seek to offer a revised, comprehensive survey of either the renewed relationship between art and architecture or the practitioners driving it. Rather, this study focuses on arguably the most high-profile manifestation to emerge from within the overall phenomenon: large-scale sculpture commissioned specifically for the highly visible and well-traversed interior spaces of architectural projects. Projects created in close consultation with architects and possessing strong material resonance with their surrounding architectural settings. This set of parameters reveals a mode of modern sculpture responsive to the imagery and effects of the space age that embraced new industrial materials and processes, and even more significantly, demonstrated the ability of art, of sculpture, to inhabit and coalesce with the lived space of architecture.

These parameters also predetermined this book’s examination of sculptural projects realized by a select group of artists: Harry Bertoia, Alexander Calder, Richard Lippold, and Isamu Noguchi. These four individuals emerge from the historical record as the most active and consistently commissioned artists by modernist architects during the period. The broader, changing sociohistorical conditions of postwar America shaped the work of these artists, but their sculpture, in turn, demonstrated how art could play a more pronounced and multivalent role in contemporary society. The projects they realized for specific buildings, in collaboration with the leading architects of the period, are examples of how art can be put to use or made visible in a more public sphere, but also of how sculpture could adopt the language of architecture.

Huxtable expressed concern that the term integration carried the implication that art and architecture were fused together to create a harmonious whole. The large-scale commissioned sculptures by Bertoia, Calder, Lippold, and Noguchi examined in this book, however, present an altogether different notion of fusion, one that is not predicated on a loss but mutual gains. Contemporary theories around the principles of synergy offer a useful, alternative framework to consider the renewed relationship between sculpture and architecture. The Greek (*synergos*) and Latin (*synergia*) roots of synergy demonstrate that the concept has always maintained strong connections to the notions of process, cooperation, and working together for common benefit, but during the postwar period the term took on further, more pronounced associations with science and technology. For the polymath Buckminster Fuller, no stranger to cross-disciplinary collaboration himself, the “essence” of the modern industrial world was synergy, or the “cooperative action of discrete agencies such that the total effect is greater than the sum of two or more effects taken independently.”⁵

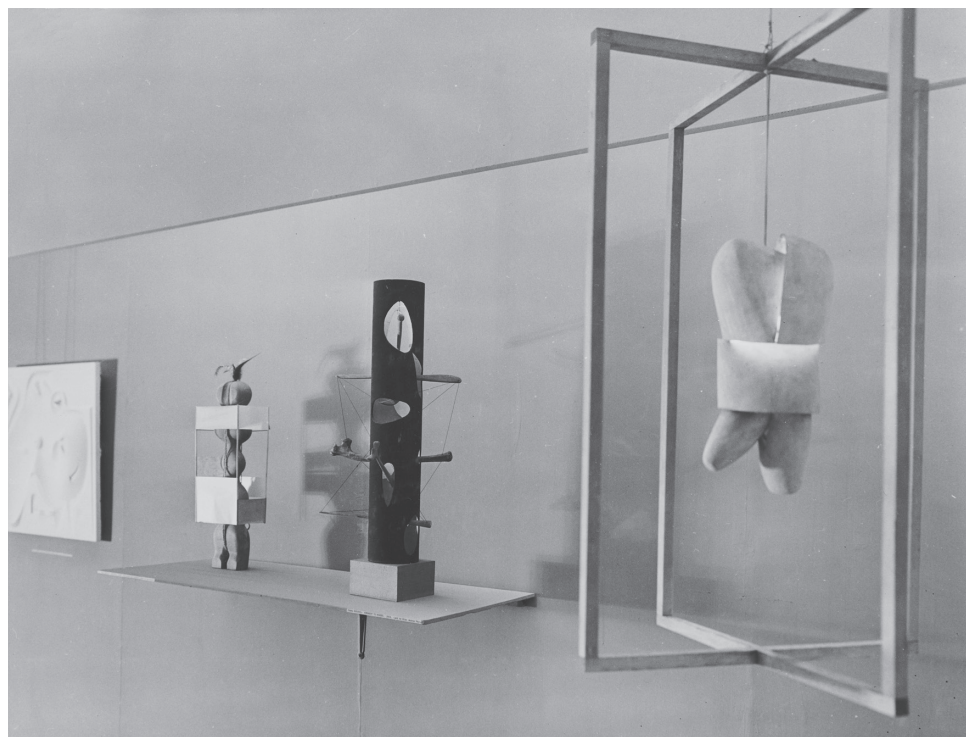
Synergy was also visible in a new type of practitioner that Fuller referred to as “the comprehensive designer,” whom he described as a “synthesis of artist, inventor, mechanic, objective economist and evolutionary strategist.” Fuller also identified the underlying synergistic principles and strengthening force created in the alloying of metals like chrome, nickel, and steel. He wrote, “The strength of ‘industry’ as with the strength of the ‘alloy’ occurs through the co[n]centric enmeshment of the respective atoms.” Synergy and integration are similar concepts, both centered on the act of combining. With the former, however, entities amalgamate into a new unified whole, but continue to maintain their own agency, their own material being. Copper and zinc, for example, combine to create brass, but still retain their individual properties. The same type of permutation can occur with large-scale sculpture and the architectural space for which it was commissioned. When fully realized, a new configuration of space has been inextricably fused together even while a distinct sculpture and building remain. Both are examples of alloys or alloying, a process of synergistically combining elements into an entity made stronger, better, by its respective parts.⁶

Bertoia, Calder, Lippold, and Noguchi created sculpture intended to be as permanent as the buildings they inhabited, and, as a result, their work offered something beyond just striking surface decoration or a humanizing juxtaposition to modernist architecture. Their sculptures certainly enhanced the aesthetics of the buildings they occupied, but also shared with architecture a similar mode of production, materials, size, scale, and sense of space. In the process of alloying with architecture, however, sculpture itself was forever changed as it also took on more structural, functional, and environmental qualities. The large-scale commissions realized during the immediate postwar period suggest a more expansive history of modern American sculpture, as well as an earlier origin point for some of the key concerns of contemporary sculptural practices.

Postwar Synergy

In 1946, one year, almost to the date, after the end of World War II, the Museum of Modern Art (MoMA) in New York City opened its fall season with *Fourteen Americans*. The exhibition, curated by Dorothy C. Miller, was intended to serve as a cross section of contemporary American art, and was the second in a series known as the Americans, which began with *Americans 1942: 18 Artists from 9 States* and continued into the early 1960s, with notable iterations including *15 Americans* (1952) and *Twelve Americans* (1956). *Fourteen Americans* showcased artists like Arshile Gorky, Robert Motherwell, Isamu Noguchi, Theodore Roszak, and Mark Tobey (figure I.1). The inclusion of Noguchi was a particularly significant choice at the time, given his status as a Japanese American.⁷

Miller selected modern and largely abstract works to feature in the exhibition, including Noguchi’s *Monument to Heroes* (1943), *Lunar Infant* (1944), and *E=MC2* (1944). The checklist, however, reveals a more complex picture of contemporary American art, one in which artists grappled with both the residue of a



I.1
Installation view of the exhibition, *Fourteen Americans*, MoMA, New York City, September 10–December 8, 1946. Photographic Archive, Museum of Modern Art Archives, New York City, IN329.7.

I.2
Herbert Matter, *Atomic Head*, 1946. Cover for *Arts & Architecture* (December 1946). Herbert Matter papers, c. 1937–1984, Department of Special Collections, Stanford University Libraries, California.

catastrophic war and the possibilities of a new world order. As Noguchi expanded in his artist statement published in the accompanying catalogue, “The essence of sculpture is for me the perception of space, the continuum of our existence. All dimensions are but measures of it, as in relative perspective of our vision lie volume, line, point, giving shape, distance, proportion. Movement, light, and time itself are also qualities of space. Space is otherwise inconceivable. These are the essence of sculpture and as our concepts of them change, so must our sculpture change.”⁸ Noguchi’s work from the mid-twentieth century, and his close relationships with figures like Fuller, reflected his willingness to engage with, and respond to, new conceptions of space and dimensions of reality.

While space has always been a central concept in sculptural practice, something it shares with architecture, the term carried new weight and connotations during the first two decades following the end of World War II. A building boom transformed the urban landscape of American cities, and two nuclear superpowers with competing political and economic ideologies strove for spaceflight dominance. Space was no longer just volume and mass to be shaped and contained, but evoked intergalactic exploration, molecular scientific discovery, and everything in between. The modern sculpture of Harry Bertoia, Alexander Calder, Richard Lippold, and Noguchi, as well as the clean lines of modernist architecture may, at first glance, seem detached from these broader historical contexts. Their forms, however, reflected a world forever changed by the detonation of atomic bombs, the promises of nuclear technologies, and a continued threat of global annihilation—something visually encapsulated by Herbert Matter in his design for the cover of the December 1946 issue of *Arts & Architecture* magazine (figure I.2).⁹

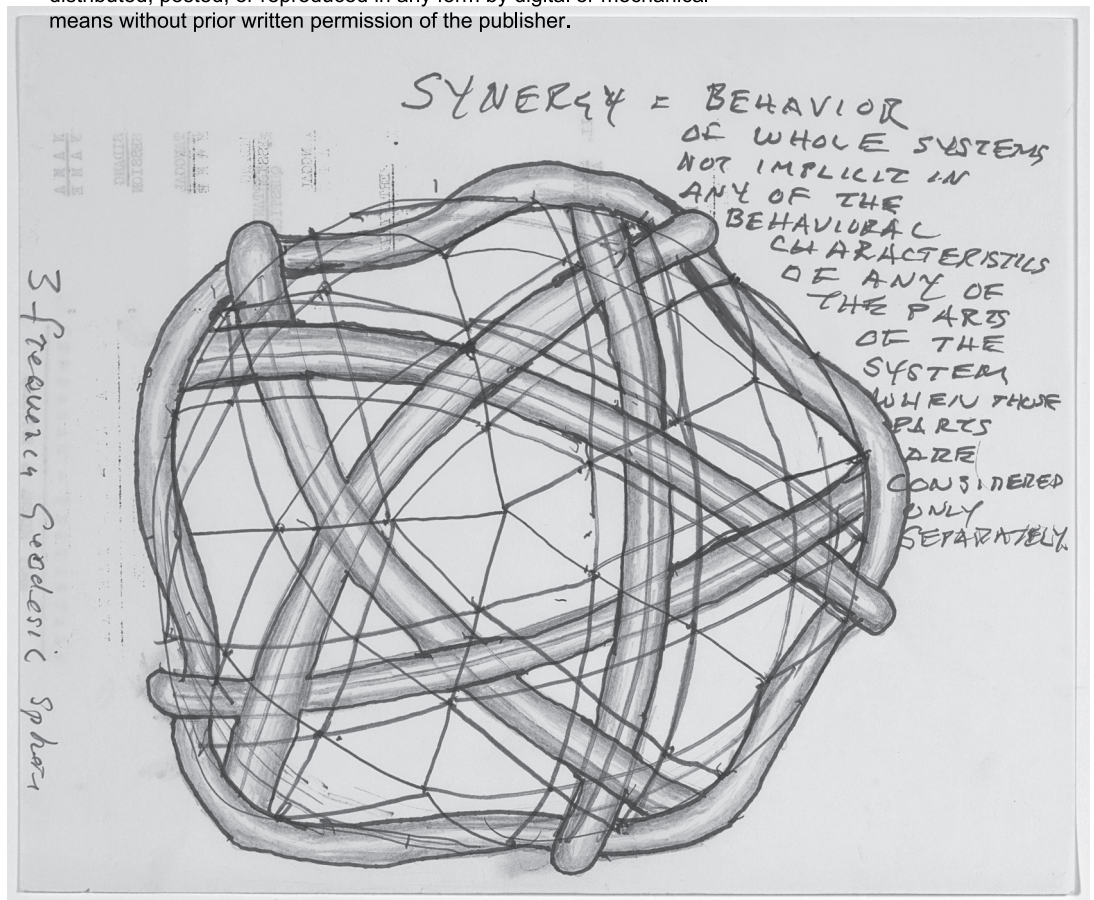
The response of the artists and architects examined in this book, however, seldom manifested as literal expressions of antinuclear sentiment or traumatic anguish. Rather, the sculpture and, more importantly, the commissions of Bertoia, Calder, Lippold, and Noguchi displayed a more optimistic approach, exploring the possibilities wrought by new relationships with science, technology, and industry in a postwar, atomic United States. A feature on Noguchi in *Interiors* from 1949, for example, called attention to the emerging connections between art and “contemporary scientific concepts,” noting how even five years prior such a topic “would have seemed particularly strange in a magazine devoted to the subject of interior design.” What had been “destroyed during the intervening years were those little mental pigeonholes that used to isolate the various arts and sciences.” Or as Lippold conveyed to *Time* magazine in 1963, faith no longer resided in pyramids or cathedrals, but in “space, energy, [and] communications.... In the twentieth century we do not look at things; we look through them.” In this new age, as the magazine pointed out, the “great preoccupation” was space, “not only the getting of things off the ground, but also the many ways of opening things up, from atomic fusion to psychoanalysis.”¹⁰

An interest in cross-disciplinary exchange was not limited to sculpture, or even art and design more broadly, during the immediate postwar period, though the visual arts writ large were never as autonomous or detached from their

sociohistorical context as the now-entrenched narratives of American art history might suggest. Art and design were intimately connected to, and enmeshed within, a world radically reshaped by science, technology, and an emerging military-industrial complex. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) was formed in 1945 along these lines, and international events like the World's Fair resumed in the 1950s and 1960s to further international and interdisciplinary agendas. Terms like synergy, but also organicism and synthesis became common across the arts, humanities, and sciences during the postwar period. Art theorist Jack Burnham, for example, attempted to trace the combined impact of vitalist philosophy and the “effects of science and technology,” declaring “for the first time in history our culture has the option of literally fusing organic activities with the linear-geometric precision of machines.” He wrote that “organicism,” was a “conscious concern of the designer,” and “could be defined as the awareness of the interrelation between systems and their components within larger systems so that behavior of the whole ensemble can be understood and manipulated.”¹¹

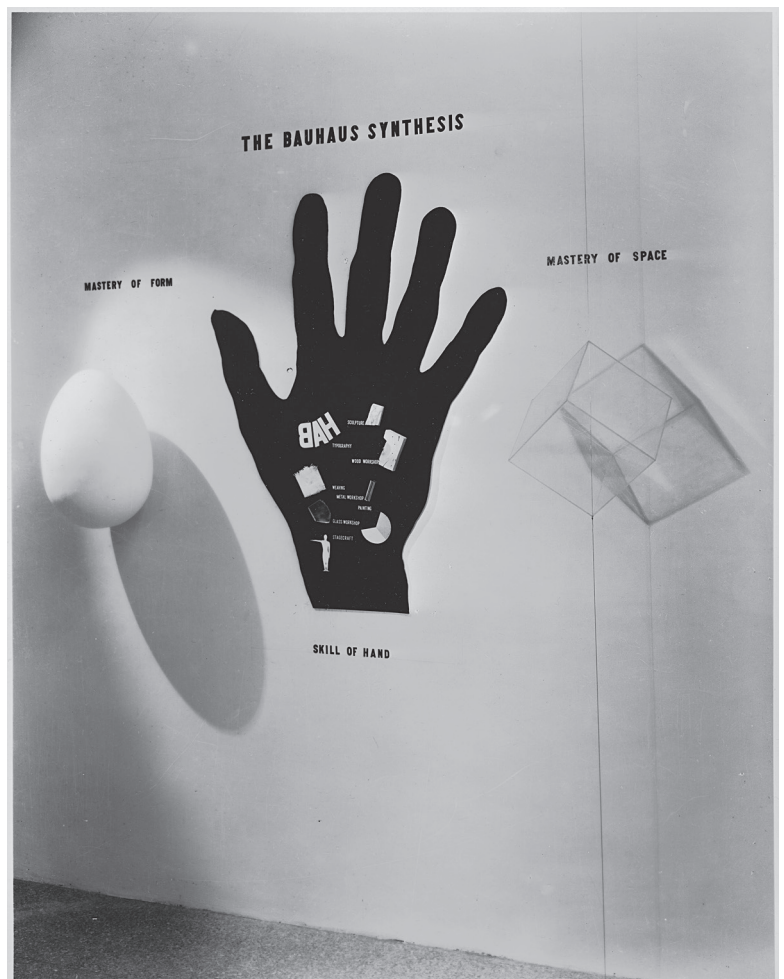
Within academia, figures like Buckminster Fuller, György Kepes, and Norbert Wiener further promoted transdisciplinary theories of convergence, systems, and connectedness. Fuller, for example, drew from modern chemistry, geometry, psychology, philosophy, and thermodynamics to develop his theory of synergy and a “system of holistic thinking” he called synergetics (figure I.3). Alloys, Fuller further explained, were integrally synergetic and their “high cohesive strength and structural stability” were what made the jet engine possible, which in turn “changed the whole relationship of man to the Earth.” All of this was “brought about by synergy,” which is the “only word having its unique meaning,” the “behavior of the whole systems unpredicted by the behavior of their parts taken separately.” Or put more precisely: “Synergy means behavior of integral, aggregate, whole systems unpredicted by behaviors of any of their components or subassemblies of their components taken separately from the whole.” As art historian Eva Díaz writes, “Ultimately, it was [Fuller’s] belief in a ‘synergetic,’ or antispecialized, ecology of thought that he hoped to impart to his students; carving a path to the future founded in the belief in collaboration, universality, interrelatedness, and a technocratic allegiance to progress through design.”¹²

Kepes similarly turned his attention to the formal and conceptual resonances between science, art, and design. He became a vocal proponent of interdisciplinary methods he referred to as “interthinking” and “interseeing,” and his correspondence and numerous publications, including the six-part series he edited titled *Vision + Value*, read as a veritable who’s who of artists, designers, architects, scientists, and theoreticians of the postwar period. Kepes, like Fuller, became an important midcentury interlocutor, connecting individuals across disciplines, nationalities, and geographies. He was one of the numerous European intellectuals and creative practitioners who immigrated to the United States prior to World War II.¹³ More specifically, Kepes was one of the many émigrés, including Josef and Anni Albers, László Moholy-Nagy, and Ludwig Mies van der



I.3
R. Buckminster Fuller, *Three Frequency Geodesic Sphere*, n.d. Graphite and felt-tip pen on paper, 8 1/2 in. x 10 1/4 in. Department of Special Collections, Stanford University Libraries, California.

I.4
Installation view of the exhibition, *Bauhaus: 1919–1928*, MoMA, New York City, December 7, 1938–January 30, 1939. Photographic Archive, Museum of Modern Art, New York City, IN82.9.



Rohe, who had previous associations with the Bauhaus, the fabled art school that operated in Germany from 1919 to 1933.

Central to the Bauhaus ideology was the reintegration of the arts, alongside craft and design, with architecture and, more broadly, modern society (figure I.4). As Walter Gropius, the school's founder, wrote in conjunction with a major exhibition about the school and its philosophy held at MoMA in 1939, "The Bauhaus strives to bring together all creative effort, to achieve, in a new architecture, the unification of all training in art and design. The ultimate, if distant, goal of the Bauhaus is the collective work of art—the Building—in which no barriers exist between the structural and the decorative arts. The guiding principle of the Bauhaus was therefore the idea of creating a new unity through the welding together of many 'arts' and movements: a unity having its basis in Man himself and significant only as a living organism."¹⁴ The school may not have survived the rise of the Third Reich in Germany, but its spirit of connectivity and collaboration proved tremendously influential as its students and faculty dispersed during the midcentury, especially across the Atlantic.

Many émigrés, like Kepes and Josef Albers, took positions in higher education, transforming vaunted universities like Massachusetts Institute of Technology (MIT) and Harvard in Cambridge, Massachusetts, and Yale in New Haven, Connecticut, or helped to establish more specialized or experimental ones like Black Mountain College in North Carolina or the Cranbrook Academy of Art in Michigan. Gropius, for example, joined the faculty of the Harvard Graduate School of Design as the chair of the Department of Architecture in 1937. The same year, Moholy-Nagy established the New Bauhaus in Chicago, and one year later, Mies van der Rohe also settled in Chicago, becoming the head of the Department of Architecture at the Armour Institute of Technology. Both of these institutions would later merge and become the Illinois Institute of Technology. After arriving from Hungary in 1937, Kepes initially taught in Chicago at the New Bauhaus (later the IIT Institute of Design), before accepting an invitation from the MIT School of Architecture and Planning in 1947 to start a program dedicated to art and design, which eventually became the MIT Center for Advanced Visual Studies (CAVS) in 1967.¹⁵

The influx of Bauhaus ideology at institutions and in professional life in the United States during the mid-twentieth century impacted the pedagogy of art and architecture, but also directly reshaped the country's urban landscape. Many architectural projects, like the Four Seasons Restaurant or the Gropius-designed Harvard Graduate Center (1950), combined a multiplicity of works and aesthetic strategies to establish extensive arts programs within a single structure. In the case of the Harvard Graduate Center, Gropius and his firm, the Architects Collaborative, commissioned Lippold to create an outdoor sculpture, *World Tree* (1950) (figure I.5). He also incorporated other, mostly two-dimensional murals or reliefs by Josef Albers, Jean Arp, Herbert Bayer, and Joan Miró throughout the building's interior.

As MoMA curator Arthur Drexler stated in the catalogue for the exhibition *Buildings for Business and Government* (1957), the United States underwent a tremendous building boom that gave architects, both those who had emigrated from Europe and the younger, emerging generation of modernists they had instructed, a “new freedom.” As Drexler noted, however, this growth in modern architecture was not just because of new aesthetic approaches or functional needs, but was also crucially a “new kind of patronage.” He wrote, “Business and government alike are rediscovering the rewards of fine building, and the results can be seen not only in individual works of great beauty but in a generally higher standard of excellence.”¹⁶ Modernism, whether expressed via the visual arts or architecture, proved a perfect vehicle for a projection of the principles of American democracy and corporate ambition.

Modernist architecture quickly became the preferred style for high-profile public projects like embassies and civic centers during the postwar period. The private sector, however, emerged as the dominant patron and driving force of this surge in building, leading to what became referred to, often derogatorily, as corporate modernism. As art historian and editor of *Harper's* magazine Russell Lynes wrote at the time, “The corporation has, in fact, become one of the most powerful and conscientious art patrons of our day, and has established itself not only as a purveyor of tasteful objects but as an arbiter of taste as well.” Whether because of “sound public relations,” tax benefits, or altruistic humanism, Lynes continued, American business in the postwar period was “playing an increasingly important role in the support of cultural activities.”¹⁷



I.5
South-facing view of the Harvard Graduate Center main quadrangle with Richard Lippold's *World Tree* (1950) and partial exterior of Harkness Commons in the foreground. Historical & Special Collections, Harvard Law School Library, Cambridge, Massachusetts.

The scope of patronage, however, was also radically changing. Skyscrapers, company headquarters, and suburban campuses materialized, and with them new spaces for modern art. A significant effort, however, also went into building corporate art collections, featuring fine art in advertising and on packaging, and establishing a broad array of philanthropic sponsorship opportunities. Management at major American companies, including figures like Walter Paepcke at the Container Corporation of America, Thomas Watson at International Business Machines (IBM), and, slightly later, David Rockefeller at Chase Manhattan, not only collected artwork, but also launched significant arts initiatives. Lynes commented that while “patronage of the arts can never be more than peripheral concern of the corporation,” figures like Paepcke or Arthur Houghton Jr. of Steuben Glass Works were “deeply, although sometimes it seems naively, concerned with trying to elevate the standards of what they hope is the public’s inherent ‘good taste.’”¹⁸

Numerous other individuals at companies like Abbott, CBS, Connecticut General Life Insurance, Corning Glass Works, and General Motors, devoted substantial resources to determining how art could be utilized in every facet of operations, hiring modernist architects to construct their buildings. They also contracted practitioners like Alexander Girard, Florence Knoll, George Nelson, and Eliot Noyes to formulate or reimagine their corporate images, and design every detail of workplaces, including executive suites, communal employee areas, and public-facing spaces like lobbies. As architectural historian Joan Ockman writes, “the hand of managerial capitalism became increasingly visible and munificent” during the immediate postwar years with art and architecture emerging as a central part of a much larger public relations operation.¹⁹

At best, the efforts of corporate architecture and image making contributed to a campaign for the principles of democratic humanism and sincere cultural reformation. At worst, they represented a savvy, manipulative strategy to heighten public prestige and propagandize American economic and political interests around the world via — “a network of networks” set against the “backdrop of multifarious international modernism,” which architectural historian Reinhold Martin has called the “organizational complex.” Regardless of intent, new modes of corporate patronage resulted in a profound exchange between industry, architecture, and the visual arts during the postwar period. Projects, in concept and form, further reflected an interconnected approach deeply informed by the activities and philosophies emerging across the sciences, the humanities, and the arts.²⁰

Decorative Function

Large-scale commissioned sculptures from the immediate postwar period, though prevalent and widely covered by the press at the time, have received inconsistent scholarly attention. Harry Bertoia and Richard Lippold, whose careers were predominantly established through such work, have become largely forgotten figures.²¹ Of the four, Alexander Calder and Isamu Noguchi were the most well

known during their lifetimes, and, with the help of robust estates, maintain blue-chip standing within the art world. While they continue to generate copious amounts of scholarly and curatorial attention, however, information on their commissioned work, especially that made for interior spaces, remains scant. If addressed at all, such projects are often glossed over, mentioned as a curiosity, or dismissed as minor works. Commissioned sculptures are far more likely to appear in studies of the architectural projects for which they were made. Even in these cases, however, they are often included only as an illustration rather than a critically analyzed entity in its own right. As a result, this study relies heavily on primary or contemporaneous source material, especially architectural criticism, related to these projects.

One reason for this marginalization is that commissioned artwork inherently possesses a function and connection to decoration. A contested term since the turn of the twentieth century, the decorative occupied a simultaneously fragile and contentious place within both fine art and architectural discourse at the mid-twentieth century. There may have been a widespread interest in collapsing disciplinary boundaries during the postwar period and continuing the “egalitarian aspirations” that originated in early twentieth-century modernism, but, as curator and art historian Lowery Stokes Sims suggests of the immediate postwar years, the “lines of demarcation between ‘art’ and ‘craft’ or ‘art’ and ‘design’ in critical and theoretical circles, particularly the most advanced modernist ones, only solidified.” In the subsequent decades, a pernicious narrative emerged: vanguard art should be separate from the world, invested in interrogating its own specific characteristics and the transcendent, intimate power of self-expression. Within this framework, there was little room for functional applications or public use value.²²

The suspicion, abhorrence, or outright rejection of decoration within modern art, especially during the postwar period was largely driven by the dogma of the influential art critic Clement Greenberg, though his actual writing on the subject from the period reveals far more nuance. Although Greenberg’s critical writings generally gave far less attention to sculpture than painting, in the 1950s he did see tremendous potential in the defining forms and uses of industrial materials by the best emerging sculpture. He noted in “Sculpture in Our Time,” a piece for *Arts Magazine* from 1958, that the medium had taken on a language of “construction,” being “built, assembled, arranged” rather than sculpted, and in the process had “acquired a new flexibility.” Perhaps surprisingly given his later codification around medium specificity, in 1946 he wrote that “painting, sculpture, architecture, decoration and the crafts have under modernism converged once again in a common style.” He further stated that “the new sculpture,” “like architecture,” was “immersed in its physical means,” and beginning “to make itself felt as most *representative*, even if not the most fertile, visual art of our time,” concluding without any sarcasm, “Certainly, of all arts, the new pictorial or constructivist sculpture relates best to American décor, understands it best, and would affect it most directly.”²³

As the stalwart champion of artistic autonomy and “art for art’s sake,” however, Greenberg would also later fret over the influence of “Good Design” in the field of the fine arts. The phrase appeared frequently in cultural criticism and media coverage of the postwar period, but became codified through the curatorial vision of architectural historian and critic Edgar J. Kaufmann Jr. and his work with MoMA beginning in 1950. *Good Design* was an ambitious collaboration between art and commerce, presented through the staging of semiannual exhibitions at the museum in New York City and at the Merchandise Mart in Chicago, which was then the nation’s largest wholesale marketer (figure I.6). Between 1950 and 1954, these exhibitions highlighted modern design, including textiles, furniture, and household objects. As architect Terence Riley and architectural historian Edward Eigen wrote, “The ultimate goal of this complex strategy . . . was to inform consumers and manufacturers about modern design products and to ensure that these products were made widely available through retail markets.” For Greenberg, such initiatives confused the boundaries between kitschy, functional interior design, and fine art, with the result that the “infiltration of Good Design into what purports to be advanced and highbrow art now depresses sculpture.”²⁴

Another art critic, Hilton Kramer, proffered similar concerns about functionalism and decoration. In a review of Lippold’s sculpture and commissioned projects from the previous decade exhibited at the Willard Gallery, New York City in 1968, Kramer excoriated the artist, calling him “our foremost public decorator.” While beginning with a pithy acknowledgement of Lippold’s heightened status among “elegant” contemporary powerbrokers and tastemakers, Kramer decried the “superficialities,” “pretensions to cosmic ‘meaning,’” and “costume jewelry effects” of his work. Kramer saw Lippold’s sculpture as a “slick and easy simulacrum” of art, and concluded his review with a curious, if not unsurprising, assurance to his readers about where they could go for the antidote. “Anyway, we can go to the museums for the real thing, can’t we? And isn’t that where the real thing



I.6
Installation view of the
exhibition *Good Design*,
MoMA, New York City,
September 22–November 29,
1953. Photographic Archive,
Museum of Modern Art, New
York City, IN542.3.

belongs? It is something to think about the next time you encounter one of Mr. Lippold's glittery creations."²⁵

Underlying both Kramer and Greenberg's distaste for the decorative was both an assumption that it lacked rigor and a fear that it polluted the rarefied sphere of high art with lowbrow functionalism. Work like Lippold's was not "the real thing," but a shiny, superficial bauble masquerading as art. As art historian Richard Meyer writes, "The practice of interior decoration connotes ornamental rather than structural alteration, a reworking of surfaces, textures, fabrics, and finishes, rather than a construction or substantial reshaping of space. Where the word 'design' suggests both conceptual and practical expertise ('to plan and execute [a structure, work of art, etc.]), the term 'decorate,' conveys an almost literally superficial endeavor ('to furnish or deck with ornamental accessories')." For Kramer and Greenberg, the issue went far beyond "elegance" or functionality. Equally affronting was the artist working outside the rarified boundaries of the studio or the exhibition space of the gallery, creating artwork made not just to "decorate," but to decorate architecture.²⁶

In taking on the challenges of collaborating with architects, however, artists like Bertoia, Calder, Lippold, and Noguchi presented a model of decoration that could be aesthetically ornamental while also structurally reshaping space. A well-conceived and installed tapestry or mural also has the ability to add texture and color, to activate or alter space, but its spatial orientation will almost always be flat, frontal, and bound to the surface of a wall. Large-scale sculptures like those realized by Bertoia, Calder, Lippold, and Noguchi, encroached into the space and material language of architecture itself, and, as a result, the sculptures enlivened and were enlivened by the built environment in a more physical or structural manner. These exact qualities made their work attractive to so many modernist architects at the time; however, they were also what proved detrimental to their status as fine art objects. Such transactional relationships may not have been celebrated within the formalist dogmas of Greenberg's modernism, but they were not anathema for artists like Bertoia, Calder, Lippold, and Noguchi. As the latter wrote in 1949, "It is a pity when art is to be found only in museums and in the private possession of a few individuals. After all, culture is the integration of art and life."²⁷ These four artists did not want their work to be autonomous—created as a closed, medium-specific circuit—but intimately and materially connected to the inhabited world.

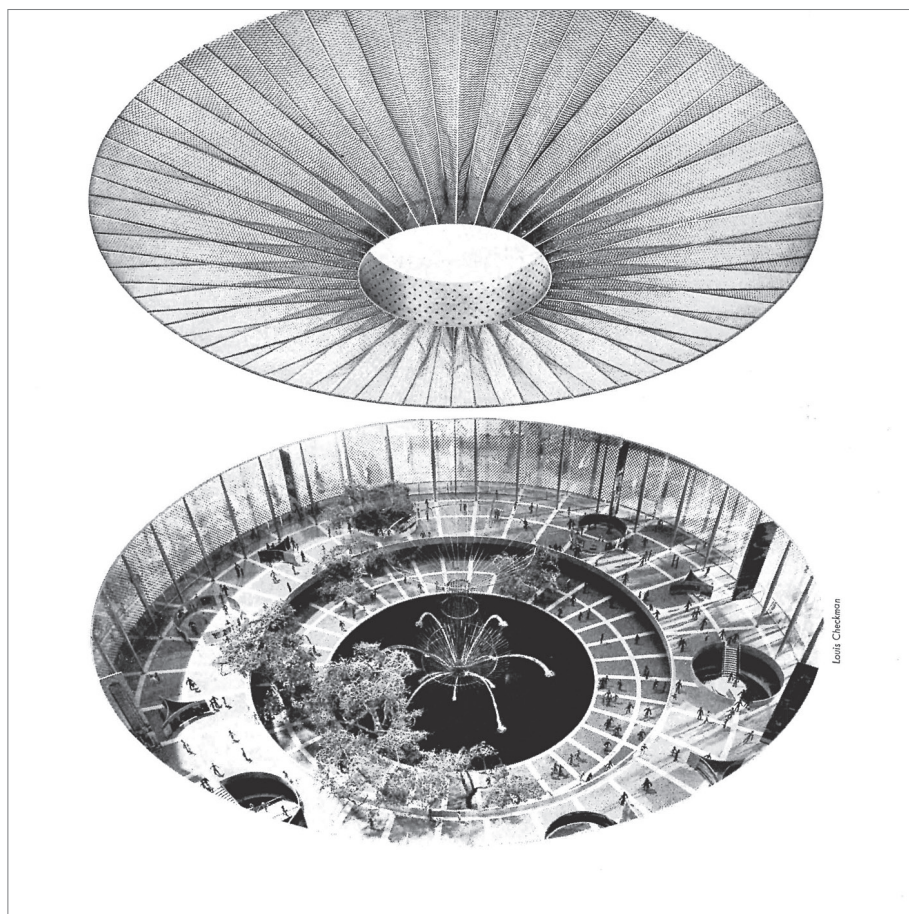
Bertoia, Calder, Lippold, and Noguchi each developed highly unique, identifiable personal styles and approaches to artmaking, but they also shared a belief that fine art had a role to play—a function—within contemporary life. Throughout their careers, they regularly accepted commissions and created work that helped reshape the built environment of postwar America. There is little historical record of the artists developing close or sustained relationships with one another, but the worlds of art and architecture were small at the time, and the overlap between them even smaller. They all knew and knew of each other. Noguchi, for example, had first met Calder while he was in Paris on a Guggenheim

Fellowship in 1927. He wrote, “I saw a lot of Alexander Calder, often helping him with his wire circus, and then going dancing.” Lippold remarked that he “knew and admired Bertoia quite a lot. Along with Noguchi, Bertoia and I were probably the first to devote a great deal of our attention to working with architecture and with sites. Bertoia had a very fine sense of architectural space.”²⁸

Galleries and museums frequently exhibited their smaller-scaled sculpture together, and on multiple occasions architects and corporate clients considered them for the same projects. For example, an early plan of Edward Durell Stone’s American Pavilion at the Brussels World’s Fair in 1958 featured a massive sculptural fountain by Lippold in the middle of the rotund space (figure I.7). The final version featured instead a selection of contemporary American sculpture, including pieces by Bertoia, Calder, and Noguchi (figure I.8). There were many instances in which more than one of them ended up contributing work to the same architectural project. Skidmore, Owings & Merrill (SOM) incorporated work by both Bertoia and Lippold in their Inland Steel Building in Chicago (1956–58), and the firm of Naramore, Bain, Brady & Johanson approached both artists to create work for their First National Bank Building (1969) in downtown Seattle. The latter project sought to “integrate the interior with the street through art,” and included over two-hundred commissioned and selected works throughout the eighteen floors the bank occupied in the fifty-story building. Pauline Anglim, the consultant who helped secure the commissions, wrote to architect Perry Johanson that “since Bertoia and Lippold have known each other for a long time, and enjoy a mutual respect,” they were open to working with the architects simultaneously or one at a time on the project.²⁹

Bertoia, Calder, Lippold, and Noguchi also shared lifelong interests in craft, engineering, and the applied arts, and none had trained, initially, to be a fine artist. Even after they committed to their sculptural practices fulltime, each maintained strong connections to design, the performing arts, and industry. Of the four, Calder arguably had the most traditional career as a fine artist. He was born in 1898 to Nanette Calder (née Lederer), a painter, and Alexander Stirling Calder, who like his father Alexander Milne Calder before him, was a well-known American sculptor. Calder attended the Arts Students League in New York City and established his artistic career among the Parisian avant-garde in the 1930s. With his prolific oeuvre of mobile, stabile, and monumental sculptures, Calder became one of, if not the most, internationally prominent American sculptors of the twentieth century.³⁰

A feature in the *Smithsonian* magazine published shortly after his death in 1976 declared him “America’s own version of Matisse and/or Picasso,” though notably also made a point to recount how Calder was frequently distinguished from fellow American sculptor David Smith, the former being framed as more “European” while the latter, truly “American.” Real differences existed in training, geography, market, and temperament, but such a statement also points to the generalized contrasts between the two sculptors that persist today: Calder as the extroverted, commercially inclined innovator; Smith as the more introverted,



I.7
Edward Durell Stone's proposed pavilion design featuring Richard Lippold's sculptural fountain featured in "The American Pavilion, Brussels World's Fair," *Architectural Record* (July 1957).

I.8
Harry Bertoia, *Untitled*, 1958. Brass, copper, and steel, 7 2/3 ft. × 6 1/2 × 4 ft. Installed at the American Pavilion, designed by Edward Durell Stone, at Expo 58, Brussels, Belgium.



quintessential artist.³¹ Calder's personality and the popularity of his work also contributed to the formation of his particular reputation, a mixture of high and low, elite and populist. This is perhaps best exemplified in his mobiles, which graced museum galleries and corporate spaces while also becoming a midcentury pop-culture phenomenon, helping dictate taste and trends in interior decoration. The dissonance also emerges through Greenberg's shifting critical stance on Calder. In the early forties, the critic spoke highly of the artist as someone making modern art "cheerful," proclaiming Calder an important figure within a new constructivist American sculpture. Greenberg praised the quality of his work alongside sculptors like Smith, but by the early 1960s, he declared Calder "overrated," and his influence never commensurate with his inflated status in American abstract art.³²

Calder's reputation within art history has also been shaped by his willingness to engage in activities beyond the rarified sphere of avant-garde modern art. Calder received his undergraduate degree in mechanical engineering, and took jobs as a hydraulic engineer, fireman, and illustrator before committing fulltime to art. Throughout his career, he continued to produce illustrations for publications, created thousands of pieces of jewelry, and maintained connections to the performing arts, whether designing stage sets or performing the *Cirque Calder* (1926–31). There were also flashy projects for Braniff International Airlines and BMW in the 1970s, which resulted in Calder-designed paint jobs for airplanes and an automobile, respectively (figure I.9).³³

Lippold and Bertoia, who were both born in 1915, also had training in the fields of design and engineering. Lippold moved from his native Milwaukee, Wisconsin, in the 1930s and completed a degree in industrial design at the School of the Art Institute of Chicago. He worked at the Cherry-Burrell Corporation, which manufactured equipment for the dairy industry, before establishing his own firm in Milwaukee. By 1941, he was teaching design at the University of Michigan in Ann Arbor. Lippold would later state that the "vast Midwestern prairies of his youth" influenced him as much as scientific innovation and cosmic exploration, even though he spent the majority of his life in New York and Vermont. Lippold's experience as a designer also impacted his sculptural output, as evident in the strong, meticulous, and mathematical precision of his preparatory drawings and the complex installation of his large-scale sculptures.³⁴



I.9 Alexander Calder,
Calder BMW Art Car, 1974.
Automotive paints on
1974 BMW 3.0 CSL, 187 in.
× 80 7/10 in. × 53 in. BMW
Group, Munich.

Not everyone saw these characteristics as an asset. Over a decade before he would lambast the sculptor as a “public decorator,” Kramer perfectly encapsulated the criticism of Lippold’s work in a review of his *Variation within a Sphere, No. 10: The Sun* (1953–56) (figure I.10). Kramer wrote, “Add to this Mr. Lippold’s background as an industrial designer, the rationale of which vocation still retains its hold on his sensibility and imparts a slick elegance to the preciousity and fussiness of his visual ‘ideas,’ and surely such a juxtaposition of proto-industrial slickness with the authentic elegance of the handmade Oriental carpets which surround *The Sun* will suggest still another approach on the ‘meaning’ of the work.”³⁵ Kramer’s assessment not only debased Lippold’s connections to design, but also suggested his work was neither authentically decorative like handcrafted rugs nor vanguard enough to be taken seriously as “fine art.”

Lippold did, however, develop strong ties with the avant-garde art scene in New York City in the 1940s and ’50s. Though critics like Kramer and Greenberg may not have celebrated it, there was a significant amount of cross-disciplinary exchange happening across visual arts, dance, and music at the time. Like Calder and Noguchi, Lippold cultivated relationships with many figures active in the performing arts. He met the dancers Merce Cunningham and Martha Graham



I.10 Richard Lippold with *Variation within a Sphere, Number 10: The Sun* (1953–56), by John D. Schiff, n.d. John (Hans) and Trudy Schiff Collection, Leo Baeck Institute, New York City.

through his wife, the dancer Louise Lippold (née Greuel), after the family moved to the city in 1944. His relationships with Cunningham and other figures like John Cage were strengthened when Lippold was invited in 1948 by Josef Albers, who was the school's director, to be a faculty member for the summer session at Black Mountain College. Lippold taught alongside Cunningham, Cage, Willem and Elaine de Kooning, and Buckminster Fuller, about whom he remarked was "like meeting Zoroaster speaking Islamic." Students that year also included Robert Rauschenberg and Ray Johnson. With the latter, Lippold would soon after enter a twenty-year romantic partnership.³⁶

Much like Black Mountain College would prove formative for Lippold's life and career, another influential postwar institution of higher education, the Cranbrook Art Academy in Bloomfield Hills, Michigan, fundamentally shaped Bertoia's path. Following his emigration from Italy to the United States via Canada in 1930, with stints in Detroit at the Cass Technical High School and the School of the Detroit Society of the Arts and Crafts, Bertoia studied and taught at the Cranbrook Art Academy from 1937 to 1943. Like Black Mountain College, the curriculum at Cranbrook was heavily influenced by the Bauhaus and shaped by European émigrés. Finnish architect Eliel Saarinen served as president between 1932 and 1946, a period during which the school gained a reputation for being a "creative center for artists, architects and designers" that encouraged experimentation and disciplinary "cross-fertilization." The mixture of strong work ethic, open exchange, and artistic exploration during the early years of the school produced a group of alumni and staff known as the Cranbrook Circle that included Bertoia, Charles Eames, Ray Eames (née Kaiser), Eliel's son Eero Saarinen, Florence Knoll (née Schust), and Marianne Strengell, among many others (figure I.11). As critic Wolf Von Eckhardt suggested, these artists and craftspeople redefined what good



I.11 (From left to right) Harry Bertoia, Marjorie Cast, Charles Eames, and Benjamin Baldwin at the Cranbrook Academy of Art, Bloomfield Hills, Michigan, 1938.

modern design in America meant through an evolutionary approach, creating “new designs not with dogmas or preconceived notions, but by almost playful experimentation with traditional craftsmanship and styles.”³⁷

While at Cranbrook, Bertoia was largely involved as a student and instructor with metalwork. He made tea sets and holloware that was exhibited at MoMA and the Metropolitan Museum of Art in New York City. Bertoia’s jewelry from the early 1940s, like Calder’s, can be seen within the broader context of artists active in the United States in the mid-twentieth century whose work became known as modernist studio jewelry. At Cranbrook, however, no course of study was isolated. Bertoia spent much of his time in the architectural department run by Eliel Saarinen. Here, he befriended and collaborated with Eero Saarinen, who officially served as an assistant and instructor, and Charles Eames, who was an architecture student and then design faculty member. Bertoia helped construct models and prototypes, including Eero Saarinen and Eames’s famous submission to MoMA’s 1940 competition and 1941 exhibition *Organic Design in Home Furnishing*, and he worked at the Eames’ studio in southern California during the mid-1940s. The relationships he formed while at Cranbrook would lead to numerous other collaborative projects over the succeeding years. Bertoia described his time there as “so important that I feel it was one of the basic periods of my life where things began really to change and happen.”³⁸

In 1950, Bertoia began working for Knoll Associates in Pennsylvania after being offered a contract by Florence and Hans Knoll. The appointment resulted in the Diamond Chair, one of the most famous pieces of midcentury modern furniture that, along with a suite of related seating by Bertoia, has been in continuous production since 1952 (figure I.12). By the mid-1950s, however, Bertoia moved away from his work with Knoll to focus fulltime on his sculptural practice,



I.12 Herbert Matter, *Group Shot of Bertoia Furniture Line*, n.d. Herbert Matter papers, c. 1937–1984, Department of Special Collections and University Archives, Stanford University Libraries, California.

but on many occasions these two strands were physically reunited in the public sphere of postwar America. Knoll frequently showed and sold Bertoia's sculpture in its showrooms and helped facilitate direct sales to private clients.³⁹

Knoll also collaborated with Macy's in New York City during the 1963 holiday shopping season on an exhibition of Bertoia's work. In a commercial crossover still novel for the time, Macy's ninth-floor furniture gallery featured multiple Diamond Chairs, some hanging off the wall in an abstract formation, alongside new sculptures by Bertoia. The *New York Times* reviewed the display not only as an opportunity to reach new potential customers, but also as a "contribution to consumer education," with the belief "that the show will help people see the relationship between fine art and good furniture design, which by necessity, is functional." Macy's declared: "There are few artist-designers whose work is better suited to such a display than Mr. Bertoia's. His sculptures and his furniture are both made of metal and, sharing a common material, have similar characteristics." Such a display, perhaps, demonstrates why Bertoia did not end up in the already limited canon of modern American sculptors from the immediate postwar period.⁴⁰

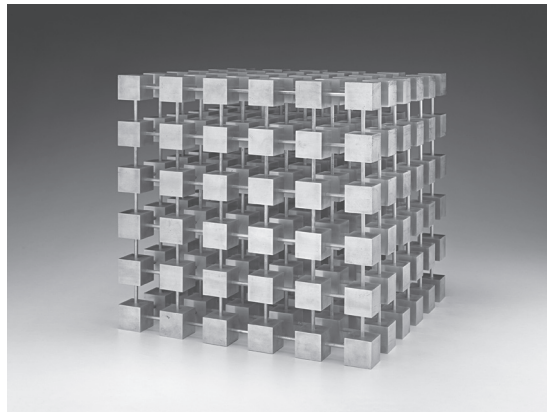
The Macy's exhibition is a perfect encapsulation of what scholar and curator Elissa Auther identified as the "subordination of the decorative arts to both" a "greater interior ensemble and commercial market in which such objects circulated," that critics like Greenberg saw as the corrupting enemy of proper modern art. Bertoia was not alone in pursuing projects or work with companies like Knoll, however. Noguchi designed the Cyclone Dining and Side Tables for the company in 1954, which often featured them alongside Bertoia's furniture in advertisements and display showrooms (figure I.13). In addition to his work for Knoll, he created other pieces of furniture, both bespoke and designs for mass production, including the now iconic Noguchi Table for Herman Miller in 1947.⁴¹



I.13 Herbert Matter, *Two Children's Chairs by Harry Bertoia with Small Noguchi Table*, n.d. Herbert Matter papers, c. 1937–1984, Department of Special Collections and University Archives, Stanford University Libraries, California.

Out of the four artists, the careers of Bertoia and Noguchi share the most parallels. Both spent considerable time during their youth outside of the United States, frequently experimented with new industrial materials, and fluidly moved across art and design throughout their careers. Each worked on significant, if niche, projects for American industry. For example, Bertoia designed a sculptural award for the R. S. Reynolds Memorial Award for Architecture in 1962, while Noguchi designed prototype Prismatic Tables for the Aluminum Company of America's Forecast Program in 1957 (figures I.14, I.15). They each created works for the Zenith Radio Corporation. Noguchi designed the *Radio Nurse*, a Bakelite baby monitor that worked in tandem with the "Guardian Ear," a separate enameled metal receiver, for Zenith in 1937 (figure I.16). Bertoia created a multipart, kinetically lit sculpture, *Sculpture Group Symbolizing World's Communication in the Atomic Age* (1959), which was the focal point of the company's Display Salon in downtown Chicago (figure I.17). Both sculptors also created numerous sculptural fountains over the course of their careers, including Noguchi's for the 1939 World's Fair in New York and Expo '70 in Osaka, Japan and Bertoia's for the Philadelphia Civic Center and the Standard Oil Building in Chicago, both of which were Durell Stone-designed projects. While Bertoia and Noguchi did not have much, if any, direct contact with

I.14
Harry Bertoia, *Cube*, 1962.
Aluminum, 18 1/8 in. ×
18 1/8 in. × 18 1/8 in. Virginia
Museum of Fine Arts,
Richmond. Gift of Reynolds
Metals Company.

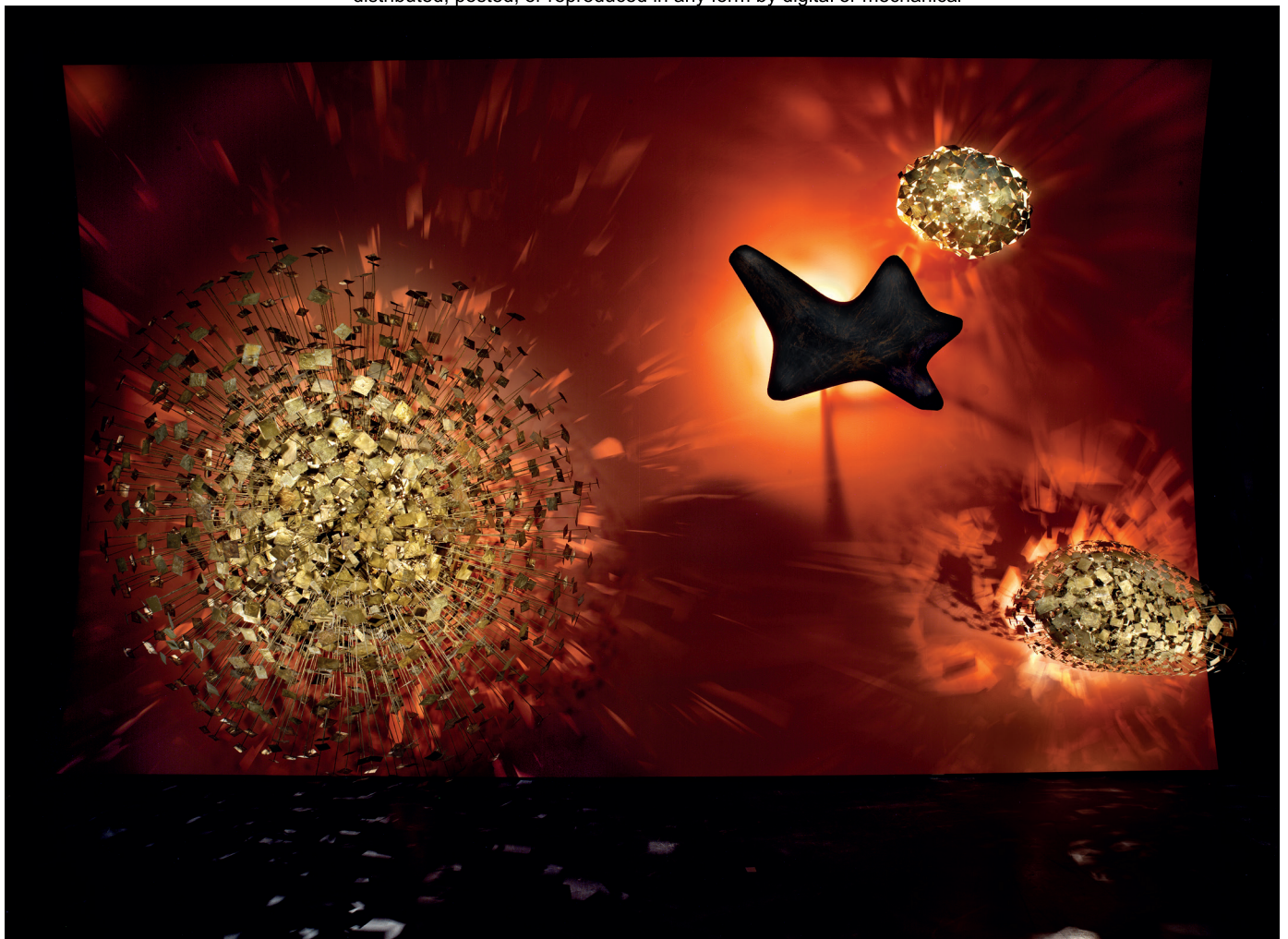


I.15
Isamu Noguchi, *Prismatic
Table*, 1957. Aluminum,
anodized, 14 3/4 in. × 18 1/2 in.
× 16 in.



I.16
Isamu Noguchi, *Radio Nurse*,
1937. Bakelite resin, h. 8 1/4 in.,
diam. 6 1/2 in. Manufactured
by Zenith Radio Corporation,
Chicago.





I.17
Harry Bertoia, *Sculpture Group Symbolizing World's Communication in the Atomic Age*, 1959. Brazen and welded brass and bronze, dimensions variable. Smithsonian American Art Museum, Washington, DC. Gift of the Zenith Corporation, 1979.107A-D.

I.18
Louise Dahl-Wolfe, *Isamu Noguchi, New York*, 1955. Gelatin silver print, 14 in. x 11 in. Cheekwood Estate & Gardens, Nashville, Tennessee. Gift of the Artist, 1984.24.22.

one another, they were, like all four artists, aware of each other and their work, with Noguchi for example describing Bertoia as a “talented artist.”⁴²

Noguchi’s design activities were particularly extensive, not limited by medium or to any one decade, but closely related in form and approach to his sculptural work. He, like Calder, created stage sets, including over twenty for Martha Graham. He designed numerous gardens, landscapes, and playscape designs during the postwar period. In 1951, after a visit to the Japanese town of Gifu, Noguchi designed his first Akari Light Sculptures, lamps made of *washi* paper over now-patented metal-wire stretcher and support systems (figure I.18). As contemporary artist Josiah McElheny has written of Noguchi, he created “sculptures that look like furniture,” “sculptures that function architecturally in space,” and “works that suggest they can be things other than sculpture, even if that’s what they are.”⁴³

This boundary fluidity is visible not only across Noguchi’s design and commissioned projects, but also in those of Bertoia, Calder, and Lippold. While such work was only one aspect of their multifaceted practices, each strove to make sculpture that was useful and publicly visible in contemporary society. As Noguchi wrote, “For a sculptor to merely say ‘I’m a sculptor and I’m making pure sculpture’ (or impure, whatever it is) and that the architects can use them or not as they wish, and if they fit in, all right—that’s an abandonment of a whole area which I find most interesting and important as a sculptor: that is, the relationship of sculpture and the sculptor to the world we live in and how his functioning can be a necessity. Merely to decorate, does not seem enough to me.”⁴⁴

Changes occurring in architecture further complicated the issues of individual expression, autonomy, and decoration in art. One of the defining characteristics of modernist architecture had been the removal of any extraneous ornament—though there were precedents of modern architects incorporating sculpture into their projects earlier in the twentieth century. In cases like Mies van der Rohe’s installation of a Georg Kolbe’s *Alba (Dawn)* (1925) in one of the water basins of his 1929 Barcelona Pavilion, however, the art selected was “premade” and mostly figural. As architectural historian Vincent Scully writes, since Mies’s buildings were themselves “environmental constructivist sculpture,” he was content to have architecture simply contain art.⁴⁵

Why then was there such renewed interest in the relationship between art and architecture during the postwar period, and what did architectural decoration then mean? Not every modernist building or project included art, but those that did wrestled with the issue of how to use it. Though Philip Johnson had so successfully worked with and praised Lippold’s contribution to the Four Seasons Restaurant, his solution was usually to have the architect operate more as a curator than an engaged, collaborative cocreator of space. He stated, “Pick the greatest works of art you can, put them in the best place you have, and you get the type of architecture we want in this scientific age.” Outside of exceptions like Johnson, most practitioners and critics, however, concurred that simply selecting or placing a sculpture in a lobby space or in front of a building was not enough. The solution

for how to decorate architecture with art ideally required involving artists early on in the process and matching individuals who approached collaboration with mutual respect and sincerity. Bertoia, Calder, Lippold, and Noguchi preferred, or at least were open to, working in this fashion. Perhaps because of the more commercial aspects of their backgrounds, they also frequently tailored their work to the design of the architect or the client's wishes without relinquishing their artistic visions. With each project, they still realized distinct sculptures that shaped and were shaped by the specificities of a given space.⁴⁶

The most frequently touted narrative around the purpose of art as architectural decoration, however, focused on its ability to humanize and give textural richness to the cold, sterile interiors of modernist architecture. As SOM architect William Hartmann stated, "The modern architecture we identified with eliminated decoration. Basically, it was an evolution from a handicraft kind of building technology to an industrialized building technology. That was the key to it. When you gave up the handicraft part, you gave up the artisan and the craftsmen who would carve limestone and wood and these different materials that led to the expression of a building. In industrialized architecture, you were using components that were made by machine, and decoration wasn't appropriate for the machine. So, when you come to decorate an industrialized building, you decorate with an artist." The situation Hartmann described suggests art as an afterthought, a final softening touch.⁴⁷

An additional complication of how art could be used to decorate architecture became apparent by the mid-1950s, when a younger generation of architects including Johnson, Saarinen, Stone, and Minoru Yamasaki, began to veer away from the regimented dictates of modernist architecture. Architectural historian Alice T. Friedman noted the architects' shared "broadened palette of natural materialism, the introduction of craft elements, and the use of more expressive, three-dimensional forms to convey emotion or 'humanist' themes." But with their divergent styles and approaches, these architects resisted classification as a group, despite attempts from some, including Thomas H. Creighton, editor of *Progressive Architecture*, who proposed "New Sensualism."⁴⁸

Many critics at the time, including Robin Boyd and Vincent Scully, disparaged the move away from "the cube, the right angle, the glass wall, and the plain surface" that had come to define Mies van der Rohe-inspired modernist architecture. They derided the work of this so-called "second generation" as too decorative, too sculptural, or as Scully stated, too close to a flashy, superficial "package." He wrote, "It is no wonder, in consequence, that most American architecture of the 1950s and '60s became an affair of brightly colored bundles, gaudily bowed to catch the blaring eye." Much like that of the sculptors examined in this book whose work was similarly critiqued as superficial "decorative" baubles, the version of modernism offered by these architects reengaged with ideas of ornamentation, collapsing newfound artistic sensibility with functionalism.⁴⁹

Architectural critic Aline B. Saarinen noted that while some architects were indeed motivated to use art for an "esthetic or formal reason," there was another,

preferred motivation that transcended a mere contrast of color, texture, and pattern. In this approach, the goal was a shared mode of “expression” and “communication,” drawn from an “honest use of the architectural vocabulary, rather than appliqué, or extraneous devices, or falsification, or allusions and associations.” Seen in this light, the preponderance of specifically sculptural commissions, created by artists like Bertoia, Calder, Lippold, and Noguchi, becomes even less surprising. There was already a familiarity of engineering, functionality, and materials, a shared vocabulary that enabled a far more “honest use.”⁵⁰ It is also perhaps not surprising, that in turn, many of these so-called decorator-architects became the most frequent and enthusiastic collaborators of the so-called decorator-sculptors during the postwar period.

Contested Collaborations

While cross-disciplinary conversations around the use of art in modernist architecture became pronounced during the immediate postwar years, they had begun earlier in the twentieth century and were never limited to the United States. The often-idealized reference point of the “long tradition of the allied arts” stretched back even further, to classical antiquity and the Middle Ages when, as one postwar critic claimed, “sculptors were in harmony with the architects and *that* all were in harmony with their time.” Many of the issues underpinning a renewed relationship between modern art and modernist architecture, more specifically, originated in Europe prior to World War II. Conversations around the functionality of art in contemporary society shaped the ideology of the Bauhaus in Germany, as well as other early twentieth-century avant-gardes like Constructivism in the Soviet Union and de Stijl in the Netherlands.⁵¹

Le Corbusier, both as an architect and artist, wrestled with a “synthesis” of the arts, expressing a combination of optimism and skepticism. He asserted the possibility of art being utilized within architecture and stated that in the modern epoch “we no longer have the right to ‘stick’ something on something.” Le Corbusier also argued, however, that art “ought not to be combined or merged with architecture. It should retain its own character quite separate from that of its background.” Noting the immense indifference of many artists to the “contemporary architectural event,” he expressed a belief that mutual respect was crucial to the equation. “When we invite to our home a guest of distinction, of dignity, of real ability, and one whom we respect, we do not surround him with noise, we listen to him and he speaks amid the silence because he has something to say. In this collaboration of the major arts and architecture, dignity is not a vain pretension.”⁵²

As modern architecture developed on both sides of the Atlantic, debates continued through the Congrès internationaux d’architecture moderne (CIAM, or International Congresses of Modern Architecture), which Le Corbusier along with architectural historian Sigfried Giedion helped inaugurate in 1928 in Switzerland. The writings of figures like Giedion, artist Fernand Léger, and architect Josep Lluís

Sert, as well as cross-disciplinary activities at MoMA, under the curatorial auspices of Alfred H. Barr Jr., Henry-Russell Hitchcock, and Philip Johnson also drew further attention to the issue. Discussions among modernist practitioners, curators, and critics alike focused on ideas of synthesis and a reintegration of art and architecture.⁵³

Though outside the scope of this book, these international debates also resulted in a similar phenomenon in the commissioning of art, particularly large-scale sculpture, for architectural projects around the world, as Europe rebuilt its cities and modernist architecture expanded its global reach. One of the most notable, if not wholly well-received, attempts to combine art and architecture in Europe during the period, for example, was the commissioning of Jean Arp, Alexander Calder, Joan Miró, Henry Moore, Isamu Noguchi, and Pablo Picasso to create work for the new 1958 UNESCO Headquarters in Paris (figure I.19). The artists took the architecture, itself a result of a contested committee of some of the most well-known architects of the period, into varying degrees of consideration when creating their works. The majority of the resulting pieces were sited outdoors, however, and thus engaged a very different set of issues from those of primary consideration in this book, which deals predominantly with interior spaces.⁵⁴

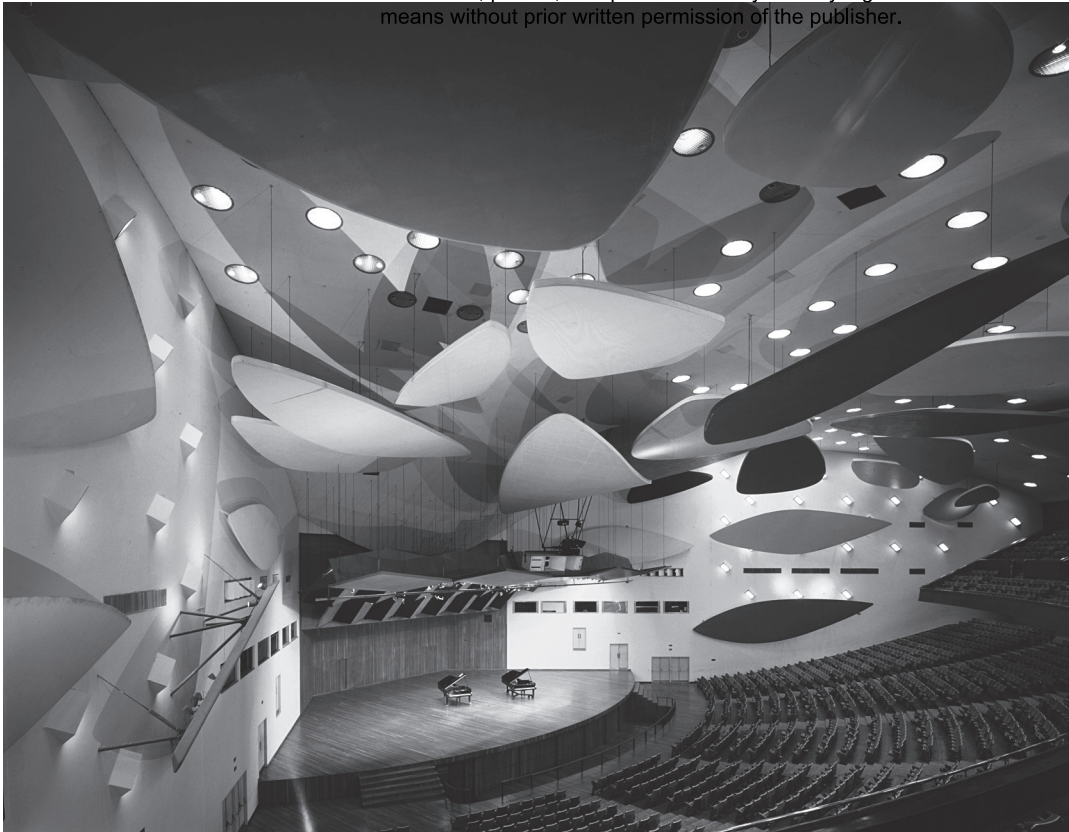


I.19
Isamu Noguchi, *Gardens for UNESCO (Garden of Peace)*, 1956–58. UNESCO Headquarters, Paris, France.

There is also further work to be done on cross-disciplinary exchange as it occurred across the Atlantic Ocean and along a Pan-American axis. In many Central and South American countries, numerous commissions were realized, and discussions around new conceptions of space echoed those occurring in Europe and North America. Figures like the Argentine-Italian artist Lucio Fontana presented his spatialist *White Manifesto* in Buenos Aires in 1946, and the Venezuelan architect Carlos Raúl Villanueva emphasized the spatial values of architecture in his writings and work. Villanueva stated that to “take possession of space is the first gesture of all living things,” and “what is of value, and the only truly new element in today’s architecture, is the real and conscious conditioning of space.” Venezuela along with Argentina, Brazil, and Mexico saw an explosion of modernist architecture, and one of the hallmarks of modern Latin American architecture during the postwar period became the incorporation of the visual arts. Caracas, Venezuela, in particular, was transformed into a modernist world capital during the 1950s, with major projects completed there by architects Wallace K. Harrison, Richard Neutra, Oscar Niemeyer, Gio Ponti, and Villanueva, among many others. In 1958, Harry Bertoia contributed a metal screen to the facade of the US Embassy in Caracas, designed by architect Don Hatch (figure I.20). Calder also realized two



I.20
Harry Bertoia, *Untitled*, 1958.
Unknown materials and
dimensions. US Embassy,
Caracas, Venezuela. Architect:
Oficina Don Hatch.



I.21
Alexander Calder, *Acoustic Ceiling*, 1954. Wood and paint, largest element: 30 ft. wide. Aula Magna, Universidad Central de Venezuela, Caracas, Venezuela. Architect: Carlos Raúl Villanueva.

large-scale projects in Caracas: a mobile for Harrison's Hotel Ávila commissioned in 1941; and his so-called floating clouds (*plátillos voladores*) or *Acoustic Ceiling* for the Aula Magna theater in Villanueva's massive new Universidad Central de Venezuela campus in 1954 (figure I.21).⁵⁵

Regardless of geography or the regional specificities of projects, however, there was a common concern among those across the globe about how true collaboration between modernist architects and modern artists could occur. Theoretical debate and a shared willingness were not enough. As the French artist Jean Gorin wrote in an open letter in 1956 referenced by Walter Gropius, "The synthesis of the arts cannot consist in putting sculpture and painting in appropriate architectural locations... because that is, when all is said and done, nothing but the program of a museum. We believe that the true synthesis of the arts is to be found in the architectural work itself and commences from the first stages of the conception." Sert was another vocal proponent for a collaborative relationship between artists and architects, which he saw not just as desirable but necessary. He wrote, "The architect, like the sculptor or painter, needs a sense of plastic values. Without them he would produce buildings, but the buildings would not be architecture."⁵⁶

Collaboration of any sort involves a negotiation of egos and aesthetic viewpoints, but under the auspices of modernism, where individuality and autonomy reigned, both sides expressed misgivings. American sculptor Theodore Roszak, who completed a number of sculptures for the exteriors of buildings during the postwar period, was far from optimistic about the contemporary situation. He wrote, "The prospect of supplementing architecture with sculpture in a way that

would permit the integration of their respective spatial orbits within a consistent community environment would be little short of miraculous.”⁵⁷

Like Roszak, fellow sculptor David Smith saw little benefit for sculptors to create functional objects or collaborate with architects. He expressed a distaste and distrust for “big architecture” that did not appropriately value, conceptually or economically, the efforts and intentions of artists. Smith noted that sculpture possessed a distinct “method of operation,” which entailed the creation of an object “for visual aesthetic response, essentially executed by one man, that serves no physical function and doesn’t have to be conceived with allowance for indoor plumbing.” He did make the distinction between artist and designer, stating that the latter was perhaps better suited to filling the needs of architects while being paid less, working faster, and “adhering to the decor. Designers can make the compromise with something that looks like art but stays with the building.” In contrast, “Good sculpture has its own form. It is based upon a different aesthetic structure.” Smith concluded by reiterating that collaborations failed because architects had limited perspectives, “until the architect gives up the preconception that sculpture is merely another of his details and accepts it on its own terms, seeks it as one contemporary autonomy meeting another in a relationship of aesthetic strength and excellence, art and architecture will remain the strangers they have been for at least the last hundred years.”⁵⁸

From the other end of the disciplinary perspective, architect and critic Peter Blake decried what he saw as the unwillingness of many artists to contribute to the “total environment,” or to “produce building elements or fabricate wall surfaces.” He wrote, “If asked to do so, they are more likely to come up with a highly individual ‘statement’ — a manifesto — rather than an object that will fit, naturally, gracefully and modestly into the building organism,” though he did cite exceptions from Bertoia, Herbert Bayer, and György Kepes. Architect Harris Armstrong similarly found much to recommend in the use of sculpture, writing that the medium “suggests itself to me more frequently than painting,” because “architecture itself is a language of form, a thing which exists in three dimensions, rather than of color and surface pattern.” Armstrong concluded, however, by acknowledging that the “rank and file of the architectural profession” were nervous to incorporate art not only for fear of an artist becoming too ambitious, but also because “it is always more trouble to work when other strong personalities are in the picture, and only the work of strong artists can make much of a contribution.”⁵⁹ Many architects and artists decided that the trouble of such negotiations was not worth the effort.

Even artists and architects willing to collaborate and approach the relationship with genuine mutual respect, faced the real, logistical, and philosophical difficulties of the complex bureaucracy involved when constructing a building, and frequently fell back into well-trodden hierarchies of architecture as the “mother of all arts.” Such relationships intrinsically assumed subservience of the artist to the total vision of the architect and the needs of the client. For example, Harrison, an early and ardent proponent of using art in architecture, noted that “functionalism imposes certain demands; it seems to me that the sculptor must harmonize his

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