

## CHAPTER 4 (VALIDATION)

### **‘The Introspective Professional’: Corning Museum of Glass, Corning, New York, 1972-81**

*I do not think that change has come about through shifts in my philosophical attitude from project to project, or from changes in problem-solving methodology in the office. What has caused it, I feel, are the exterior influences—the times we live in, the society and its lifestyle, the needs of each project, the technology of the time, the availability of resources and materials, as well as changing laws.*

– Gunnar Birkerts<sup>1</sup>

*The only effective course open to architects if they want their profession to endure is to resume authority in the area which is their unique province, as makers of buildings who are also makers of form.*

– Robert Gutman<sup>2</sup>

Following the widespread recognition he received for the Federal Reserve Bank of Minneapolis building, Gunnar Birkerts found himself increasingly in demand not only as a designer, but also, unexpectedly, as a commentator on contemporary architecture. Beginning in the mid-1960s but with more frequency in the early 1970s, he spoke at professional conferences and was invited to publish reflections on current trends in trade journals. In March 1972, for example, he shared a bill at the University of Michigan with architectural historian Sir Nikolaus Pevsner during that year’s Raoul Wallenberg

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<sup>1</sup> Gunnar Birkerts, “Defining a Design Methodology,” *Architectural Record* 161, no. 2 (February 1977): 91.

<sup>2</sup> Robert Gutman, “Architecture: The Entrepreneurial Profession,” [1977] in *Architecture from the Outside in: Selected Essays*, ed. Dana Cuff and John Wriedt (New York: Princeton Architectural Press, 2010), 42.

symposium, titled “Architecture as a Humane Art” (Figure 4.01).<sup>3</sup> Alongside fellow architects, educators, and a philosopher, Birkerts presented his design for the FRBM and other projects. The panel’s reaction is unrecorded, but his talk was a version of his career history prefaced by a general description of his theory of architecture. This format was typical. Birkerts’s lectures, commentaries, and publications of the 1970s were often introspective exercises in self-fashioning—identity, influence, and intention were predominant as his personal image became increasingly refined and his positioning within architectural discourse became increasingly entrenched.

This entrenchment manifested in Birkerts’s defensiveness about aspects of architecture that he felt were under attack, particularly his firm belief that architecture was primarily a form of artistic expression. In his two major position statements of this period—“Design: The Critical Years” of 1974, and “Defining a Design Methodology” of 1977 (Figure 4.02)—Birkerts reminded his readers that despite growing interest in adjacent disciplines, architects should not forget that they must strive to be artists rather than mere service providers. In the earlier text, Birkerts registered his fear that artistry was degrading from lack of attention, but emphasized that it nevertheless remained the common denominator among architects with different intellectual projects and ideologies:

The architectural profession is now being challenged by some to become a political force. This means that the architect is expected to assume roles for which he is neither talented nor educated . . . The architect is expected to be partially a social scientist, economist, speculative builder, developer, construction manager, energy conserver, ecology protector, etc. *No one challenges the artist in the architect.*<sup>4</sup>

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<sup>3</sup> Raoul Wallenberg was an alumnus of the University of Michigan’s architecture program who as a Swedish diplomat during WWII managed to save the lives of several thousand Hungarians of Jewish descent. Events dedicated to Wallenberg’s humanitarian legacy are held at Michigan on an annual basis.

<sup>4</sup> Gunnar Birkerts, “Design: The Critical Years,” *The Canadian Architect* 19 (June 1974): 48. His emphasis.



And in the latter, he carefully split the difference between mannerisms on the one hand and pragmatisms on the other:

I avoid participating in academic arguments, debating the value of eclecticism, historicism, estheticism—the stylistic debates which, to me, try to find mannerisms for our time ... At the same time I want to distinguish myself from those directions in architecture which only admit talk about practicalities, facts, the given conditions; which insist that design is and should be only a synthesis of the given constraints. People's real lives are made of not only their present conditions but their ambitions and dreams. I try not to forget beauty in times of social change, economic pressure, ecological and energy concerns. For me architecture will always be an art form.<sup>5</sup>

Common to both articles is the idea that the artistically inclined architect must avoid adopting rigid dogmas or falling into academic cliques.<sup>6</sup> As Birkerts later put it, “One of my biggest challenges is to be aware of the theories, but keep them away from myself.”<sup>7</sup> His goal, therefore, was to remain conversant but aloof. This guided him through the 1970s, when he served as an outspoken advocate for the artist-architect or atelier model of practice. If Birkerts had a cohesive “theory” of architecture of his own, it was that fiercely individualistic artistry was the only way to create it.

A sense of anxiety is palpable in these two texts, perhaps resulting from the uncertain position practicing architects held in the intellectual arena of the 1970s. Indeed, by the time these articles were published, architectural theory had begun to emerge as a specialized realm populated by academics and critics while the practicing architects who once occupied the disciplinary center found themselves pushed to the margins of many

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<sup>5</sup> Birkerts, “Defining a Design Methodology,” 91.

<sup>6</sup> Birkerts was already excluded from such cliques because his education was at a foreign institution, not an East Coast university like Princeton, Harvard, or Yale. See William Marlin and Yukio Futagawa, eds., *GA Architect 2: Gunnar Birkerts and Associates* (Tokyo, Japan: A.D.A. Edita, 1982), 215–16.

<sup>7</sup> Gunnar Birkerts, undated typescript, Professional Papers, Writings, Miscellaneous, ca. 1980s-1990s, GBP, BHL, University of Michigan.

academic debates.<sup>8</sup> Birkerts perhaps felt as if this once-solid place in the landscape of architectural debate was eroding beneath him. Still, he remained committed to defining the architect on the terms by which it had historically been understood: as a maker of buildings who is also a maker of form, to paraphrase Robert Gutman.

Hand-in-hand with his conception of the architect as artist came the belief that authorial signature was perceptible in completed buildings despite the kind of complex realities of administration and construction discussed in Chapter 3. Asserting that the core of architecture was located in the indissoluble artistic contribution made by firm figureheads illustrates this retrenchment in conventional understandings of the architect and the profession.

Birkerts did at times waver from this conception of the architect, when catering to particular audiences or differentiating himself architects he saw as naïve. In a 1977 response to Paul Heyer for the book *Architects on Architecture*, for example, he wrote, “With certain lessening in the glorification of the master Architect, the individual creator, we are beginning to seek more effective ways to serve the user.”<sup>9</sup> He claimed, in this comment and in lectures, to have sought “an architecture of response,” that found “appropriate” solutions rather than asserting an individual vision. This, he may have

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<sup>8</sup> Examples of this marginalization include many of the architects Birkerts most admired and placed within the “establishment,” including Paul Rudolph, who was increasingly isolated after leaving the deanship at the Yale School of Architecture in 1964. See Timothy M. Rohan, *The Architecture of Paul Rudolph* (New Haven: Yale University Press, 2014), 170–79. Critical to Rudolph’s decline were the invectives against his architecture in Robert Venturi, Denise Scott Brown, and Steven Izenour, *Learning from Las Vegas* (Cambridge, Mass.: MIT Press, 1972). Rohan also observes that books on Rudolph’s work “lacked theoretical insights, a lacuna particularly notable in the years following the publication of *Learning from Las Vegas*, when theory and theoretically driven accounts dominated architectural thinking,” and that in the 1970s, Rudolph “retreated from the center of architecture into an interior world of his own making.” (178-179).

<sup>9</sup> Gunnar Birkerts, “Where Have We Come since the Mid 60s? [Response to Paul Heyer]” (Typescript, Undated). See Paul Heyer, *Architects on Architecture: New Directions in America* (New York: Walker, 1978). This was the second volume in a series edited by Heyer that began with volume 1 in 1966 and concluded with volume 3 in 1993.

believed, would prevent him from alienating clients. And yet, by contrast, he intentionally avoided most residential commissions because “To do an appropriate house for the clients and not stuff them into one that really is designed for you, you have to give up a lot of ego.”<sup>10</sup> For non-residential commissions, he strove to balance his ego against the functional needs and symbolic desires of the client.

Birkerts’s dalliance with user-focused rhetoric shows a prevalent but short-lived perspectival shift in mainstream architectural thinking driven by various factors—pressure from the cultural upheavals of the late 1960s, a rapid decline in demand for architectural services during the recessions of the early and mid 1970s, and an oversupply of graduate architects caused by the massive enrollment numbers of the “baby boom” generation. Sociologists have studied how this shift affected the profession as a whole during the 1970s and 1980s, but few scholars have addressed how these shifts affected the thoughts and ideas of individual architects who were responsive to cultural trends.<sup>11</sup> How did this play out for those who, like Birkerts, were committed to a conventional artist-architect mode of practice?<sup>12</sup> At issue is how Birkerts could simultaneously seek an

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<sup>10</sup> Gunnar Birkerts, *Process and Expression in Architectural Form* (Norman: University of Oklahoma Press, 1994), 35.

<sup>11</sup> See Chapter 3 for discussion of sociological studies of architectural practice.

<sup>12</sup> Art historian Ross Elflin has recently characterized architects’ turn toward the engagement of users and away from ideas of individual expression and genius as one among several trends associated with “conceptual architecture.” Elflin asserts that conceptualism questioned the core of the discipline by experimenting with radical ways of undermining architecture’s authorship, permanence, and materiality. Ross Elflin, “The Dematerialization of Architecture,” *Journal of the Society of Architectural Historians* 75, no. 2 (June 1, 2016): 201–23. Among the proponents of this conceptual approach were the several members of Viennese collective Haus-Rucker-Co, with whom Birkerts corresponded in 1970–71. Three letters from the group are preserved in “Personal Correspondence + Files, 1970–1979,” Gunnar Birkerts Papers, Bentley Historical Library, University of Michigan. Birkerts must have encountered their 1970 exhibition at the Museum of Contemporary Crafts in New York, but it is unclear what his opinions were when he did. The letters indicate that he provided contacts at the Detroit Institute of Arts (DIA) and the Contemporary Arts Museum (CAM) in Houston, Texas. Birkerts designed an addition to the DIA (1963–64) and a building for the CAM (1969–72). He may also have connected Haus-Rucker-Co with the Walker Art Center in Minneapolis, which hosted their *Food City I* event in June 1971. Birkerts was in frequent touch with Minneapolis institutions at this time as he travelled there regularly to supervise construction of the Federal Reserve Bank of Minneapolis building.

“appropriate” architecture that responded to client needs and reassert his conception of the architect as artist.

Exploring this contradictory confluence of ideas in this chapter, I outline the unusual form and outsized importance that authorial signature accrued in Birkerts’s practice of the late 1970s and early 1980s. Along the way, I untangle the chronology of various GBA projects in Corning, New York while placing them in an atypical aesthetic context, review Birkerts’s pedagogical activities of the 1970s and 1980s, and consider the increasing importance he attributed to hand sketches as evidence of his authorship. Throughout this chapter, we will see how Birkerts attempted to resolve these conflicting desires—appropriateness and individual expression—through a peculiar mapping of personality onto architecture. It will become clear why Birkerts felt that his personal philosophy should remain unchanged despite the shifting cultural landscape around him—because he alone could establish continuity between and among the diverse commissions awarded to his firm.

Perhaps the most important factor in the evolution of the architectural profession during the 1970s was economic recession. The years between 1973 and 1979 saw drastic declines in demand for architectural services, and the timing was far from opportune. Concurrent increases in the number of trained architects meant high under- or unemployment in the profession. Many firms failed, particularly those that had specialized in particular building types like hospitals or multi-family housing.

One might expect to hear that Birkerts’s firm was able to survive by “going lean” and by seeking out patronage relationships with major corporations—IBM and Corning in particular. But, as Judith Blau concluded in her book *Architects and Firms*, offices that

had adopted business practices that might prime them for success in normal market conditions—such as adopting the organizational characteristics of their corporate clients—seemed particularly vulnerable. Blau concluded that the flexibility of small design-focused firms allowed them to turn the contradictions of entrepreneurial practice to their advantage in the abnormal economic conditions of the 1970s—these firms were small and could either get smaller if necessary or risk their very survival in order to continue growing.<sup>13</sup> Some artistically inclined architects like Birkerts were perceptive enough to take ownership of this economic uncertainty, justifying their “lean years” as a conscious retreat into a form of practice that allowed them more authorial control. GBA seems to have succeeded in doing so because of its figurehead’s success with relatively patient institutional clients like Thomas S. Buechner of Steuben Glass and the Corning Museum of Glass. Buechner and other such clients gave him freedom from the demands for efficiency and productivity that made the Tougaloo and FRBM projects so difficult.

In addition to anxiety about the state of the artist-architect in an uncertain economy, one also finds in Birkerts’s 1970s writings a critical attitude toward the other artist-architects he saw remaining—particularly those who split their time between academic and professional pursuits, like he did. For example, in the same response to Heyer quoted above, he observed that “There are fragmented groups of professionals, however, who elect to forget these realities and are building their images and practices,

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<sup>13</sup> Judith R. Blau, *Architects and Firms: A Sociological Perspective on Architectural Practice* (Cambridge, Mass.: MIT Press, 1984), 131. Blau writes that “[Normal] advantages for growth and healthy commerce are contrary to the nature of a disordered and backsliding economy . . . Architectural firms that enfold and emulate the character of corporate capitalism, it can be concluded, are enfeebled when reliable markets begin to disintegrate.” Eccentrically organized firms that maintained their integrity and distinctiveness teetered on a “fulcrum of risk”—both more likely to thrive and more likely to fail than established large firms that were buffered from the effects of the recession. Blau also found that a corporate clientele did not necessarily lead small, entrepreneurial, design-focused firms to success: “The design office is . . . vitalized by corporate clients but at the same time rendered vulnerable by them.” (127)

helped by a few affording, consenting, martyr clients upon whom they can exercise their ideas.” Birkerts’s main objection to this cohort was their ignorance of “the economic situation,” which he believed should bring about “greater emphasis on reality ... a certain conservativeness,” and “frugality, saneness.” These “fragmented groups” were instead bringing about a new architectural pluralism, which he believed would, unfortunately, come to be “the mark of the 70s.”<sup>14</sup> He saw this as an unfortunate development because in his opinion the crises of the 1970s called for deep thinking about what architects had in common—specifically, their artistry—rather than what made them different.

By the end of the decade, however, Birkerts himself might have been counted among this pluralist group. The support of one “affording, consenting” client in particular—Buechner—helped Birkerts’s firm weather the economic hardships of the 1970s and kept his artistic convictions from wavering. Still, the tension between a desire for appropriateness and the impulse to remain autonomous from dogmas or styles or mannerisms remained. Ultimately, Birkerts’s seemingly outmoded convictions about authorship were validated by a retrenchment of the artist-architect in disciplinary discourse and public perception during the 1970s and 1980s—a situation that, at least in retrospect, makes his convictions appear cleverly pragmatic, if not cynical.<sup>15</sup>

We are presented with a paradox, in that the validation Birkerts experienced was accompanied by a collapse of Modernist conviction and a return to what he perceived as shallow pluralism. These developments spurred an intensive interrogation of Birkerts’s “architectural self” during the 1980s, through the self-reflection allowed by three

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<sup>14</sup> Birkerts, “Response to Paul Heyer,” 2–3.

<sup>15</sup> Mary McLeod, “Architecture and Politics in the Reagan Era: From Postmodernism to Deconstructivism,” *Assemblage*, no. 8 (1989): 23–59.

distinguished teaching appointments.<sup>16</sup> He increasingly found his beliefs about architecture validated by circumstance. His philosophy seemed to be in ever-closer alignment with the demands of “the times”—until it wasn’t.

### **The Road to Corning**

Though Birkerts’s signature building of the 1980s—the one that had the strongest impact on his subsequent career and commissions—may have been his addition to the University of Michigan Law Library (1974-81, Figure 4.03), the project that had the most significant effect on his ideas about architectural form and the design process was his addition to the Corning Museum of Glass in Corning, New York (1976-81, Figure 4.04).<sup>17</sup> It was during the early stages of design for this building that he found a way to position himself as the primary actor in the process. Unlike FRBM, where almost no sketches documenting the design are extant, for Corning he produced numerous variations of *parti* sketches before settling on the final scheme. A far cry from the deliberative and complex FRBM process or the many detours and reiterations GBA produced for Tougaloo, deciding the final *parti* for the Museum seems to have rested solely with him.

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<sup>16</sup> A phrase used by philosopher David Goldblatt, “The Dislocation of the Architectural Self,” *The Journal of Aesthetics and Art Criticism* 49, no. 4 (1991): 337–48.

<sup>17</sup> The success of the University of Michigan Law Library addition led to commissions for underground additions to libraries at Cornell University, the University of California at San Diego, Duke University, and the University of Utah. Birkerts saw these projects as respites from the need to conform to Postmodernist trends that were dominant at the time—he said, simply, “There is no Postmodernism underground.” Birkerts and Schwartz, *Metaphoric Modernist*, 123. On the necessity to conform to market demands for Postmodernist ornament with a focus on larger firms, see Martin Filler, “Hierarchies for Hire: The Impact of the Big Firms Since 1976,” in K. Michael Hays and Carol Burns, eds., *Thinking the Present: Recent American Architecture* (New York, NY: Princeton Architectural Press, 1990), 23–44.

Concurrent to the commission for the project was a six-month stay as Architect in Residence at the American Academy in Rome.<sup>18</sup> Because he was in Italy during the early conceptual stages of the design process, he was free to experiment with form without contamination by circumstance or contingency. Isolation from the day-to-day activities of the firm allowed him to purify the design process. He would try to recreate this isolation for subsequent projects and felt that this was a major factor in allowing distinctive design solutions to emerge—he was at the center of the project, synthesizing the requirements into an “appropriate” form. He increasingly positioned himself, we might say, as a kind of bottleneck in the process.

Many of GBA’s projects at this time were subject to radical redesigns that were well documented, so much so that they were presented independently in monographs. But these redesigns were conducted at the clients’ behest—changed circumstances necessitated new designs. The Museum of Glass was unusual in that the various iterations documented in Birkerts’s sketches were produced purely for his own satisfaction. And unlike Eero Saarinen, whose labor-intensive “testing” process he watched carefully in the early 1950s, Birkerts’s process did not depend upon subordinates to play out alternatives. He did all the iteration himself. Based on the extent of Birkerts’s formal experimentation phase, it’s clear that Buechner allowed for a lengthy gestation period, or he would not

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<sup>18</sup> The 1970s found Birkerts spending more time on his home continent of Europe, but these visits were far from a homecoming. With Latvia under Soviet rule and the Iron Curtain firmly in place, only rarely was he able to visit his home city of Riga or his mother who still resided there. When he was able to visit Riga, it was via Moscow. Birkerts spent a substantial amount of time at the Italian hill town Civita di Bagnoregio, where he bought a centuries-old house in 1967. Civita became an outpost for American architects during the 1970s at the behest of his former collaborator of Yamasaki and Associates days, Astra Zarina, who was a fellow Latvian expatriate. Zarina eventually settled in Italy full time to teach and administer the University of Washington’s Rome and hill town programs. At Civita, Zarina worked to restore and renovate houses owned by Birkerts and others. The town eventually became home to the Civita Institute, which Zarina established with her husband Tony Costa Heywood. For Birkerts, his wife Sylvia, and their three children, Civita remained a frequent vacation destination from the 1970s through the 2000s. The house at Civita is still owned by members of the Birkerts family.



have stayed with Birkerts. Buechner's allowance for and appreciation of his architect's experimentation was likely one of the reasons for their rapport.

Work on the initial version of the Museum project began in December 1972, about six months after the town had suffered extensive damage as a result of flooding caused by Tropical Storm Agnes (Figures 4.05 & 4.06). Local elites and Corning executives saw the flood not only as a tragedy from which their institution would have to recover, but also an opportunity to rethink the Museum of Glass and Glass Center. Confusingly, the Corning Museum of Glass was a separate entity contained within the larger Corning Glass Center complex.<sup>19</sup> Buechner, the principal client for the project and earlier the founding director of the Corning Museum of Glass, had recently returned to Corning after 11 years as Director of the Brooklyn Museum.<sup>20</sup>

The original Glass Center had been designed in a Miesian mode by architects Harrison & Abramovitz to accommodate about 60,000 annual visitors. This original incarnation of the complex contained the not-for-profit Corning Museum of Glass, the for-profit Corning Glass Center, and a small Steuben Glass factory. By 1972 when it was forced to close temporarily following the flood, the Center was receiving about 800,000 visitors every year. The main problem Buechner hoped to address through an architectural intervention was, therefore, the increasingly crowded visitor experience.

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<sup>19</sup> A background document given to the architects explained the Center and Museum thusly: "The original museum opened in 1951 as part of the Corning Glass Center. Built in celebration of the 100<sup>th</sup> anniversary of Corning Glass Works, the Center also contained the Hall of Science and Industry, the Steuben Factory, and various recreational facilities including a summer theater, pool hall and nine bowling alleys ... The Corning Museum of Glass was – and is – separate [*sic*] legal entity chartered by the Board of Regents of the State of New York, accredited by the American Association of Museums, and dedicated to the art and history of glassmaking." Thomas S. Buechner, "The New Corning Museum of Glass," Undated, 1, Corning Museum Historical + Background Information, Box 63, Gunnar Birkerts and Associates Records, Bentley Historical Library, University of Michigan.

<sup>20</sup> Upon his return, he also served as President of Steuben Glass, an artisanal subsidiary of Corning that produced hand-blown housewares.

The project's scope evolved in many stages over nearly a decade. At its outset in 1972, Birkerts's project included a comprehensive plan to restructure the experience of Corning visitors beginning with the moment they entered town. Because of the town's small size and the waves of visitors arriving every day, the problem was as much one of urban design as it was architecture. Buechner's first concern was to transform the Center's unbecoming entry sequence from the "sea of parking" that surrounded it.<sup>21</sup> Buechner and the Center's board were enthusiastic about installing a monorail system to shuttle visitors from parking lots to the Center, then to the factory on the south side of the Chemung River for tours, and finally to downtown Corning.<sup>22</sup> The board expected that federal funds from the U.S. Department of Housing and Urban Development would be available to install such a transit system if it incorporated the town as well as the Center.

Moving visitors from parking to the Center wasn't the only priority, however. Buechner also hoped to overcome the perception that the Center primarily communicated to visitors an understanding of the varieties of glass in both artistic and industrial terms, which the architects described as an "object-product" emphasis. A GBA document summarized these goals as such:

The objective of the new Glass Center itself would be different from the existing object-product emphasis. The emphasis would shift and become broader. The Glass Center would concern itself with the whole industrial relationship – not just with what is produced, but with the effects on society of product and process. The new Center would deal with people as inventors, producers, consumers. It would have to explain the process and evolution of the industry and, as an example, the ever-changing nature of the sponsoring company, Corning Glass Works.

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<sup>21</sup> Over two decades of growth, more visitors had resulted in the unsystematic addition of more and more lots. The more far-flung lots meant more walking to reach the Center, feeding dissatisfaction among visitors.

<sup>22</sup> Enthusiasm for such transit systems was widespread in the early 1970s, and was fed by research studies conducted at the behest of the Urban Mass Transportation Administration (UMTA, now the Federal Transit Administration). These studies were summarized in Office of Metropolitan Development, Urban Mass Transit Administration, *Tomorrow's Transportation: New Systems for the Urban Future* (Washington, D.C.: U.S. Department of Housing and Urban Development, 1968).

The main objective, then, of the new Glass Center program is to convey and display the attitude of the glass manufacturer, where people and process interact to make a product. The manufactured object and the place of process would be continually juxtaposed.<sup>23</sup>

Buechner and the Glass Center's leadership described the goal of their new center as "putting contemporary industry on display," a goal based on their belief that contemporary industrial production was perhaps the crowning achievement of human civilization to date. It would be a place, Buechner said, "where people can come to see for themselves the phenomenon that has a greater impact on their lives than any other single facet of our society ... It is certainly the most complex, and it is probably the least visible and the least understood."<sup>24</sup> The new "process" emphasis proposed for the Glass Center paralleled Birkerts's professional and academic ambitions—to make his process transparent and didactic as a roundabout form of marketing and a pedagogical project.

Though the commission for the Glass Center didn't arrive until 1972, Birkerts had in fact by then been working with and for institutions in the city of Corning since 1966.<sup>25</sup>

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<sup>23</sup> Gunnar Birkerts, untitled typescript, "Personal Project Files, Corning Glass Center," Gunnar Birkerts Papers, Bentley Historical Library, University of Michigan, 2.

<sup>24</sup> Thomas S. Buechner, *Description of New Corning Center*, Cassette recording, 1972, Box 62, Gunnar Birkerts and Associates Records, Bentley Historical Library. Buechner believed this would distinguish the Glass Center from attractions like Disneyland, Colonial Williamsburg, or the Hershey Chocolate Factory because it would be, in Buechner's words, "a real experience ... attempting to show them what really exists. We're not trying to pretty up our factories." After an honest look at the production process, the visitor would "treat himself to a good lunch or dinner, after buying a rack full of Corning products, and go home." The center's new emphasis on unveiling industry would be achieved through nine basic units of display: orientation, the history of glass, the history of Corning Glass Works, the science of glass, the art of glass, a studio/laboratory for visiting artists and researchers, the Steuben Glass factory, Corning Glass Works itself, and finally, a transportation system to shuttle visitors through the facility and the town.

<sup>25</sup> It is unclear how he was initially connected to Corning Glass Works, but J. Irwin Miller, discussed in Chapter 2, likely enabled that connection through the network of corporate and philanthropic power players into which he plugged Birkerts. Arthur A. Houghton, Jr.—who as head of Steuben Glass (a Corning subsidiary) co-founded the Corning Museum of Glass in the late 1940s—was during this time president then chairman of the Metropolitan Museum of Art in New York, to which Miller was a significant donor. Amory "Amo" Houghton, Jr., Arthur's cousin, was chairman and CEO of Corning Glass Works from 1964 to 1983, concurrent to Birkerts's involvement with the Glass Center and Museum. Arthur A. Houghton Jr. (whose middle name was Amory) served as the Met's president from 1964 to 1969, and chairman from 1969 to 1972. He had first become a member of the Met's board in 1952. He was also chairman of the New

Many of these projects remained unpublished because Birkerts purged the record, perhaps in order to make the Corning Museum of Glass appear as a natural evolution from carefully selected sketches. Disentangling the many iterations and variations of the Corning projects will allow us to see the building that resulted not only as a singular formal statement (as Birkerts intended) but also as the culmination of more than a decade of unrealized work.

GBA's Corning work began with an unpublished study for the main Corning Glass Works plant, at that time located on the south bank of the Chemung River adjacent to the city's small downtown (Figure 4.07).<sup>26</sup> As documented in perspective drawings and model photographs, Birkerts proposed to line the unruly southern side of the plant with a terraced ten-story building clad in dark tinted glass (Figures 4.08 & 4.09). He envisioned this sloped structure as the first step in a comprehensive redevelopment of the Chemung's southern bank, comprised of a raised highway running above the downtown's main automotive artery Corning Street, and a series of covered arcades running perpendicular underneath.<sup>27</sup> Corning Glass companies were the city's largest landowner and its most politically influential body, and GBA's plan would have consolidated the companies' land holdings into a "three-dimensional pedestrian circulation grid" with the terraced

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York Philharmonic Symphony Society from 1959-63 and a member of the committee to create Lincoln Center, to which the Philharmonic moved during his chairmanship in 1962. The Houghton family patriarch, Amory Houghton Sr., founded the Corning Glass works in the mid-19<sup>th</sup> century. His great-grandson Amory Houghton was president of Corning at the time of the Glass Center's founding and is considered its co-founder. Amo Houghton was the latter Amory Houghton's son. After retiring from Corning Glass Works, he served as U.S. Representative for the Corning area from 1986 until 2005.

<sup>26</sup> This is now the site of the low-lying, gabled-roofed headquarters complex of Corning Incorporated, designed by Kevin Roche John Dinkeloo Associates and completed in 1993.

<sup>27</sup> Though details are no longer extant, this raised highway was likely thought of as a branch of the Southern Tier Expressway, which was at that time in the planning stage. This highway—Interstate 86—was eventually located on a less disruptive path north of town along the existing State Route 17. State Route 352, which approximates the location of Birkerts's proposed raised highway, was widened to become the grade-level Dennison Parkway to provide easy access to Corning glass facilities from the Southern Tier Expressway.

central building standing conspicuously at its center, the “king of urban glass mountain.”<sup>28</sup>

GBA’s “circulation grid” was intended not only for plant workers and corporate executives, but also for visitors to the Corning Glass Center, which was located across the river on the Chemung’s north bank. The Glass Center offered regular factory tours of the main plant, cementing the connection between the industrial enterprise and the institution it funded.<sup>29</sup> Later studies proposed incorporating the Glass Center into a perpendicular “circulation grid” running north to south. Importantly, these images suggest that the Corning Glass Works redevelopment would have raised the town’s commercial center—though not the existing plant—above the river’s flood plain. This proved prescient because of the catastrophic flood of 1972.<sup>30</sup>

Less auspicious in this regard was GBA’s second Corning project, a 1969 design for the city’s public library that proposed to bridge the Chemung just east of the Main Glass Plant (Figure 4.10). This imaginative design consisted of tapered, sky lit, single-story spaces on either bank leading to an enclosed bridge spanning the river’s deepest

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<sup>28</sup> Gunnar Birkerts and Associates, “Main Plant Study, Corning Glass Works, Corning, New York 1966,” n.d., 1, Gunnar Birkerts Papers, Personal Project Files, Folder: Corning Glass Works Main Plant Study, 1966, Bentley Historical Library, University of Michigan. This “glass mountain” may have been an indirect reference to the ideas and imagery developed in the German Glass Chain writings of 1919–20 initiated by the architect Bruno Taut. This imagery would return to Birkerts’s architecture in an even more overt way in the Latvian National Library design, which took the shape of a mountain and was inspired by a Latvian folk tale, “The Golden Horse.”

<sup>29</sup> Accommodating ever-increasing visitor numbers continued to drive construction and restructuring at the Corning glass complex until the 1990s, when two additions to the Glass Center (1998-2001) were designed by Smith-Miller + Hawkinson Architects, incorporating a “people mover” to transport visitors from parking lots on the north end of the complex to the entrance. This transport concept was first proposed for Corning in the mid 1970s as part of Birkerts’s first project for the Glass Center (1974-76). A second Museum building was added to complex more recently, designed by Thomas Phifer and Partners (completed 2015).

<sup>30</sup> A short video documents Corning’s recovery after the flood in 1972. “Tropical Storm Agnes Destroys Corning, New York in 1972,” Youtube video, 10:27, posted by Bright Entertainment, February 14, 2013, <https://www.youtube.com/watch?v=5P6TPT14yBs> (Accessed February 2, 2018). The original museum was housed in an L-shaped Miesian building designed by Wallace K. Harrison and Max Abramovitz, completed in 1951.

channel. The library's form and planning prefigured some of GBA's later designs, and he revisited its planning strategy—combining circular and triangulated shapes within a rectangular structural grid—many times over subsequent decades. Though it was ostensibly raised above the river's flood plain, the unprecedented 1972 flood would have proved disastrous for a library built this way.

This bridging design was set aside when city authorities concluded that the library could in fact not be built overtop a public waterway. The site was switched to a city-owned block along the Chemung west of downtown and the Corning plant. GBA prepared an equally visionary design in which a semicircular administrative wing and a leaf-shaped public area were joined together by a glazed arcade (Figure 4.11). This design even more clearly foreshadowed later Birkerts designs, particularly the Boyd Law Building at the University of Iowa (1982-86, Figure 4.12) and the floor plans of additions to the Main Library at University of California, San Diego (1987-93, Figure 4.13) and Marriott Library at the University of Utah (1992-1996). In this Corning Library design, geometric and chromatic rigor was balanced with naturalistic irregularity (Birkerts referred to this irregularity as “informal” and “prismatic”). This was an attempt to make use of the exterior environment to transform interior atmosphere.<sup>31</sup> Trees were placed close to the public area's glass walls not only for shade but also—as revealed in section drawings of the design—as an ever-changing wall-size tableau (Figure 4.14).<sup>32</sup>

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<sup>31</sup> Marlin and Futagawa, *GA Architect 2*, 136.

<sup>32</sup> This design was perhaps influenced by a proximate work by Birkerts's Saarinen and Associates colleague Kevin Roche: the Power Center for the Performing Arts at the University of Michigan (1966-71), which similarly drew interior and exterior atmospheres together through a clever use of mirrored glass. The Power Center is located across Ann Arbor's Huron Street from Birkerts's University Reformed Church, which is discussed in Chapter I.

Among the casualties of Corning's 1972 flood was the city's only fire station. A prompt replacement for this essential amenity was one of its most urgent needs. GBA was hired soon after the flood to design a new facility located on high ground north of the Chemung (Figure 4.15). The tight time frame challenged Birkerts, who was at that time growing increasingly convinced that his intuitive design process shouldn't be rushed. He wrote of the fire station's design:

It is my belief that in the process of conceptualization the synthesizing phase should be given ample time before the creative act takes place. Contrary to that, I was forced to conceive the fire station in the shortest possible time. As I look back, maybe my familiarity with the City of Corning and with its urban vernacular made this "compression" possible.<sup>33</sup>

Despite familiarity with Corning, the resulting design was a simple triangular box outfitted with elements appropriated from the design of the building's mechanical occupants, fire engines. An equilateral shape was selected for the plan in order to accommodate the varying length of firefighting apparatuses—shorter vehicles near one corner, longer ones at the opposite end—and the exterior was clad in bright red metal panels with stainless steel "checkerplate" near the base of each wall (Figure 4.16). This material selection mimicked the conventional design of fire engines, an analogy (perhaps not quite a metaphor, as Birkerts claimed) that was extended to the building's detailing.<sup>34</sup> Ventilation ducts, lighting fixtures, pipe fittings, doors, and windows were each treated as they might be on a large firefighting apparatus—pieces and parts affixed "as found" rather than incorporated into a design. Their small size meant the desired larger effect of the building—"the ancient symbol for fire ... allowed to be articulate and assertive"—was undisturbed by their presence. Still, this piecemeal approach was liberating for

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<sup>33</sup> Marlin and Futagawa, *GA Architect 2*, 170.

<sup>34</sup> He claims metaphoric content for the Corning Fire Station in Birkerts, "Defining a Design Methodology," 94.

Birkerts and his firm's designers. Instead of an architectural "synthesis" operative only at the scale of the building, GBA here pursued a visual affinity with vehicle design.<sup>35</sup>

While certainly evident in some of the firm's previous designs including the Duluth Public Library (1969-79, Figure 4.17), the Contemporary Arts Museum in Houston, Texas (1970-72) and IBM's Corporate Computing Center in Sterling Forest, New York (1970-72, Figure 4.18), it was in the mid-1970s that this affinity with industrial design took hold. In the Dual Mode Transportation Study for General Motors (1973-74, Figure 4.19), IBM Office Building in Southfield, Michigan (1974-79, Figure 4.20) and projects for the Corning Glass Center, glossy materials, bold colors, and surface continuity became defining characteristics.

Compounding this change in formal strategies was a change in the use of materials. Gone was the exaggerated sense of honesty associated with late modernist trends like Brutalism. In its place was a renewed attention to innovations in building skin systems, particularly those made of metal.<sup>36</sup> The development and uptake of insulated aluminum skin systems at this time furthered the longstanding association of aluminum with progressiveness or modernity.<sup>37</sup> Never one to embrace purely aesthetic reasoning, Birkerts recognized the importance of material innovation in his text "Design: The Critical Years," predicting that "severe energy problems will make us look very carefully

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<sup>35</sup> Differentiating "synthesis" from "compression" in his design process, Birkerts was also referring to the relative time set aside for his own contribution. His preferred method of "synthesis" was required an open-ended block of time for his unconscious processing. "Compression," on the other hand, was what occurred when time pressure forced a quick resolution.

<sup>36</sup> Cf. Sylvia Lavin, "Metal Fatigue," in Michael Bell and Craig Buckley, eds., *Post-Ductility: Metals in Architecture and Engineering*, Columbia Books on Architecture, Engineering, and Materials (New York: Princeton Architectural Press, 2012), 33–40. Lavin argues that by the late 1960s, aluminum and other metals were freed from providing evidence of structural honesty and came to be understood as materials one could use to create special architectural effects.

<sup>37</sup> Lavin, "Metal Fatigue." For a brief history of aluminum's functional and symbolic uses, see Theodore Prudon, "Metallic Reflections: The Rise and Fall of Aluminum," in Bell and Buckley, 49–57. Prudon recognizes Harrison & Abramowitz's Alcoa Building in Pittsburgh, Pennsylvania (1950-53) as a key precedent for the development of aluminum curtain wall systems.



at the available technologies in the design of building skins ... there is a genuine need for a new design vocabulary which would be using available technologies, creating practical, economical and beautiful building enclosures.”<sup>38</sup> Whatever his reasoning, the result was a move away from the comforting traditional materials used by his idols Eliel Saarinen and Alvar Aalto toward a glossier aesthetic characterized by aluminum, mirrored glass, and stylized detailing.

Ground was broken for this aesthetic turn by Hans Hollein, whose Retti Candle Shop (1964-65, Figure 4.21) and Christa Metek Boutique (1966, Figure 4.22), both in Vienna, scaled up the pop colors and glossy materials of contemporaneous industrial design to the size of retail shops. These diminutive projects were widely published, including in *Progressive Architecture* and *Architectural Forum*, Birkerts’s preferred journals, where he would likely have seen them.<sup>39</sup> Unlike other architects including Hollein, however, these materials and material systems acquired meaning for Birkerts through his affinity for gravity-bound automobiles rather than their similarity to the Space Age aesthetic developed in comic books or in the design of actual rockets and space capsules during what Reyner Banham referred to as the “Second Machine Age.”<sup>40</sup>

This shift in architectural materiality was paralleled in the buildings of others active at the time. In the work of Birkerts’s Saarinen and Associates’ coworker Cesar Pelli, it came between his Worldway Postal Center at Los Angeles International Airport (completed 1968, a collaboration with Anthony Lumsden while both were employed at Daniel, Mann, Johnson, and Mendenhall [DMJM], Figure 4.23), a design characterized

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<sup>38</sup> Birkerts, “Design: The Critical Years,” 48.

<sup>39</sup> For Retti Candle Shop, see “Keyhole Shop,” *Architectural Forum* 124, n. 6 (June 1966), 33-37. For Christa Metek, see “Boutiques: A New World of Color,” *Progressive Architecture* 48, n. 12 (December 1967), 123-125.

<sup>40</sup> Reyner Banham, *Theory and Design in the First Machine Age*. (London: Architectural Press, 1960), 330.

by Brutalist exposed structural concrete and an infrastructural directness, to the COMSAT Laboratories Complex in Clarksburg, Maryland (completed 1969, also with DMJM, Figure 4.24), which was clad with anodized aluminum panels using rounded details that gave the building the appearance of an electronic appliance. Kenzo Tange, who was a key role model for Birkerts at the time, also broke free from exposed concrete and moved toward reflective surfaces: from the reinforced concrete Yamanashi Press and Broadcasting Centre in Kofu, Japan (1966, Figure 4.25) to the daring cantilevers of the steel-structured and aluminum-clad Shizuoka Press and Broadcasting Centre in Tokyo (1967, Figure 4.26).<sup>41</sup> Another reference point for Birkerts was Jacob (Jaap) Bakema, whose work underwent a similar shift in materiality between the Terneuzen Town Hall (1963-72, with his partner Jo van den Broek, Figure 4.27), which used reinforced concrete to create the effect of stacked volumes in different orientations, to the Dutch Pavilion at EXPO '70 in Osaka, Japan (1969-1970, also with van de Broek, Figure 4.28), which approached the same formal effect but was clad in metal panels with bright supergraphics in the colors of the Netherlands flag. Birkerts would have seen this pavilion when he traveled to Osaka for the expo.<sup>42</sup>

The same basic formula of metallic panels and supergraphics was used in GBA's designs for the IBM Corporate Computing Center and IBM Southfield. At the Corporate Computing Center, the lobby is clad in stainless steel with green and blue accents used to

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<sup>41</sup> Birkerts's admiration for Tange is well documented. When asked by Minneapolis elites in 1969 to refer an architect for an addition to the Minneapolis Institute of Art and a new building for the Minneapolis College of Art and Design, Birkerts listed Tange among the prime contenders, and Tange eventually won the job. Tange wrote to Birkerts to thank him for the reference: Kenzo Tange to Gunnar Birkerts, January 30, 1970, "Personal Correspondence + Files, 1970-1979," Gunnar Birkerts Papers, Bentley Historical Library, University of Michigan. Birkerts traveled to Japan in 1970 (his first and only trip to Asia) to see Expo '70 in Osaka, planned by Tange and with a main pavilion he designed. He traveled not only to see the Expo but also in order to visit Tange in person and solidify their personal connection.

<sup>42</sup> Birkerts recalled this trip as an important moment in his thinking about cities and urban transportation. Gunnar Birkerts, Interview with the author, Needham, Massachusetts, July 27, 2015.

differentiate seating areas. The exterior is primarily mirrored glass, but features a bright red stripe registering the separation between office and mainframe space. (Figure 4.29) In the Regional Office, two sides of the building are differentiated by their metallic color, and these two sides are separated by a recessed blue stripe. Perspective drawings were prepared for both projects in which bright colors were used to heighten the high-tech atmosphere of the entrance and lobby space.

This is different, one must recognize, from the brand of High-Tech pioneered by British architects like Norman Foster, Richard Rogers, and Michael Hopkins: instead of structural exhibitionism we have a suppression of structure; instead of heroic transportation infrastructure, the inspiration came instead from automotive design. This should not be surprising given Birkerts's location on the outskirts of Detroit, a global automotive hub. He had ready access to the work of leading automotive designers, whose conceptual designs were exhibited in Detroit annually at the Detroit Auto Show. Birkerts had long been an automotive enthusiast who preferred British sports cars, particularly Jaguars, to American automakers' oversized models. He spurned American "muscle cars" at least partly out of elitist attachment to European heritage. During the 1950s he frequented road-course races on summer weekends, traveling as far as Elkhart Lake, Wisconsin to do so.<sup>43</sup>

In fact, designs by the Bertone, Ghia, and Pininfarina styling houses exhibited versions of the same tropes with which GBA was experimenting in the early 1970s—particularly those aspects that differentiated his work from that of conventionally "High-

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<sup>43</sup> Birkerts and his family were accompanied on at least some of these trips by his Yamasaki and Associates coworker Astra Zarina and her then-husband Douglas Haner. See Gunnar and Sylvia Birkerts, "Astra Zarina Tribute," Civita Institute website, <https://www.civitainstitute.org/287/astra-zarina-tribute.html> (Accessed September 15, 2018).

Tech” architects like Foster and Rogers. In Bertone’s design for the 1971 Lamborghini Countach, for example, we find the angular bodywork, wedge shape, and integration of elements like venting and lighting that would become typical by the 1980s (Figure 4.30). In Pininfarina’s Ferrari 512S Modulo (1970, credited to Paolo Martin, Figure 4.31) or Giorgetto Giugiaro’s Maserati Boomerang (1971, Figure 4.32) we can detect a few formal techniques later used by GBA.<sup>44</sup> The Modulo has a continuous red beltline—continuing even overtop its wheel wells—that splits the vehicle’s top from its bottom. This technique appears in both of GBA’s buildings for IBM. The Boomerang’s steeply canted, relatively flat glass openings and unpainted stainless steel body are reminiscent of numerous GBA buildings that use metal panels, including the Corning Museum of Glass and IBM Southfield.

But the translation from one realm to another was far from direct. If the wedge-shaped bodies of these concept cars were formed by aerodynamics, GBA’s buildings were formed by their interactions with light or with users. The formal characteristics these cars have in common—sharp angles, filleted corners, canted windows, funnels and wedge shapes, the prominent and integrated use of venting—do appear regularly in GBA’s buildings, but always at an architectural scale and in ways that reinforce Birkerts’s well established principles: the suppression of structure, the stratification of walls, the simplification of detail, and the allowance of natural light.<sup>45</sup>

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<sup>44</sup> Both the Modulo and the Boomerang made the rounds of American auto shows in 1972, including the Detroit Auto Show, which was considered the most important North American showcase for new designs because of its proximity to the headquarters of Ford, General Motors, and Chrysler.

<sup>45</sup> Birkerts’s connections to the automotive industry are revealed by several of his less-heralded projects, and by personal friendships revealed in his correspondence. His first *architectural* connection with the auto industry may have been when he designed a pavilion for Ford Motor Company in 1967 for the “Hemisfair” in San Antonio, Texas. He was photographed with Henry Ford II, then CEO of Ford, when the pavilion opened (See “Photographs 1955-79,” Box 8, Gunnar Birkerts Papers, Bentley Historical Library, University of Michigan). Reinforcing his connection to leading-edge automotive design at this particular

The architectural “principles” Birkerts continued to espouse—particularly the suppression of structure—put a premium on surface continuity rather than the autonomy of individual parts one finds in other “high tech” architectures. There are no exaggerated trusses, no exposed cable-stays or ductwork in GBA’s buildings.<sup>46</sup> It was such exaggerations and forms of exhibitionism that came to characterize the High-Tech style.<sup>47</sup> There are, one might say, no differentiated parts—GBA’s buildings are designed as composite wholes, not unlike automobiles.

No projects illustrate this approach better than the various versions of the Corning Glass Center and Museum of Glass produced between 1972 and 1981. The first design for the Glass Center was guided by bad memories of the recent flood (Figure 4.33). Part of a larger master plan for the corporation’s campus and the city at a whole, this design proposed to append a raised bar to the south end of the existing Glass Center building, floating above the Center at the height of the proposed monorail (Figure 4.34). GBA’s choice of modeling materials—transparent acrylic for both building and landscape—reveals the ambition of the design to evoke a high technology future, in concert with the

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time was the fact that Birkerts was friendly with John Z. DeLorean, the visionary auto executive who was a division chief and later vice president at General Motors until 1973. DeLorean later worked with Giugiaro on the design of his DeLorean Motor Company’s only production vehicle, the stainless steel DMC-12 (often simply referred to as “the DeLorean,” produced 1981-83). It was through DeLorean that Birkerts may have become acquainted with his contemporaries in European automotive design. DeLorean is often credited with the invention of the “muscle car” in 1963 because he led development of the Pontiac GTO. But in the early 1970s DeLorean was preoccupied with Chevrolet’s Vega, a European-style compact car that he hoped would transform the American automotive market. Correspondence suggests that he nearly commissioned a house from Birkerts in 1971, then changed his mind at the last minute. See John Z. DeLorean to Gunnar Birkerts, October 25, 1971, “Personal Correspondence + Files, 1970-1979,” Gunnar Birkerts Papers, Bentley Historical Library, University of Michigan.

<sup>46</sup> Where exposed in GBA’s buildings, these elements are always light-gauge and visible only on the interior.

<sup>47</sup> Birkerts believed that the origin of these tendencies in both architecture and industrial design may have been the engineered look of vehicles and apparatuses designed for the space program. See Birkerts, “Response to Paul Heyer,” 1.

transportation proposals (Figure 4.35). This crystalline vision was ironic given that the Glass Center and surrounding town had recently been inundated with mud.

While the original design called for semicircles at each end of the raised bar—similar to an elongated version of the Duluth Public Library—Birkerts’s sketches later called for an angular, prismatic form at each end, similar to faceted glass (Figure 4.36). It’s unclear when exactly this variation on the first design was produced, but its origin in a sketch suggests that Birkerts may have felt dissociated from the original design and reasserted his personal vision in the design at a late stage. The tension between rounded corners to sharp edges would persist through each subsequent Corning design.

A second, triangular scheme for the Glass Center was also produced between 1972 and 1976, though it’s unclear which design came first (Figure 4.37). Only model photographs remain of this unpublished second scheme, suggesting that it was considered less successful by the architects. At least one idea manifested in this design did, in the end, find its way into the Museum of Glass building. This was its location between the existing Glass Center and the Chemung River. Placed on massive piers, it was to sit astride the Center on one side and to stretch away from it on the other. Based on the photographs that remain, establishing a visual relationship between the Center and the Glass Works seems to have been critical (Figure 4.38).

Sometime in early 1976, GBA was informed that the ambitious scope for the new Glass Center was to be set aside, and that they should begin work on a much smaller addition for the Museum of Glass alone. As mentioned above, the concurrence of this reduced commission with time spent in residence at the American Academy in Rome allowed Birkerts to solidify his personal role in the design process and to develop a

distinctive formal synthesis unprecedented in his previous work. Absent from both schemes for the Glass Center was this later design's ambitious synthesis between rectilinear and curvilinear.

Four Birkerts sketches document the development of this formal concept. The first shows three variations on an addition composed of square modules, with the bottom variant adding semicircular protrusions on the southern end (Figure 4.39). The second shows Birkerts integrating these suggestive semicircles with the realities of a structural grid. In this version, the addition would have occupied three sides of the existing Center (Figure 4.40). The third sketch introduces two circular elements, one linking the irregular curves of the modular addition to the existing center, and another serving as an entry vestibule on the addition's edge (Figure 4.41). The fourth and final variation shows the circular elements in nearly their final location, but only a hint of the final irregular edge (Figure 4.42). It was the second and fourth sketches that seem to have been most suggestive for Birkerts, as they were published most often alongside the final design in later monographs.<sup>48</sup>

The final design struck a balance between modular and organic shapes while mimicking the fluid form of molten glass (Figure 4.43). To assert its distinctness, the addition is attached to the original building at arm's length, so to speak, with two second-floor bridges and a ramp. Except for the entry, the entire building is raised above the Chemung's flood plain on cylindrical concrete columns. The bridges lead visitors onto a

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<sup>48</sup> The second sketch (Figure 4.40) was included in both Marlin and Futagawa, *Gunnar Birkerts and Associates* and Birkerts and Schwartz, *Metaphoric Modernist*. The fourth sketch (Figure 4.42) was included in Sven Birkerts, ed., *Gunnar Birkerts: Buildings, Projects, and Thoughts, 1960-1985* (Ann Arbor: University of Michigan, College of Architecture and Urban Planning, 1985); Kay Kaiser, *The Architecture of Gunnar Birkerts* (Washington, DC: American Institute of Architects Press, 1989). Three of four are published in Birkerts, *Process and Expression*.

circular loop through the key parts of the Museum's collection—a twenty-minute tour, said a tour booklet distributed at the grand opening, that displayed the collection's key objects in so-called "masterpiece columns" located within the circular walkway (Figure 4.44). Inside this circle was the Museum's library and archive. At its outer edge were flowing galleries displaying a broader array of objects. More scrupulous visitors were encouraged to follow a ninety-minute path that took them along the serpentine outer wall.

It was along this outer wall where the building's most distinctive feature was located: two mirrored surfaces running the length of the building, in an arrangement not unlike a periscope. This was not, however, a demonstrative exhibit showing what one can do with glass. It was an apparatus developed by the architects to bring indirect light into otherwise dark galleries and illuminate the glass objects in the Museum's collection with an enigmatic glare. These periscope windows were also intended to adjust visitors' perception of the landscape surrounding the building, which, as the Museum's experience demonstrated, was a flood plain. The cumulative effect evoked, in an ever-changing visual and experiential spectacle, the characteristics of molten glass.

This was not the only experiment with glass used in the building design. Its exterior cladding, which appears at first glance to be aluminum panels, is in fact glass bonded to a stainless steel backing. The effect is richer than mere aluminum or mirrored glass. It captures reflections like glass but diffuses them like metal, lending the building an ethereal weightlessness that is appropriate to its raised posture. A thin green line marks the joint between these hybrid panels and grounds them visually. Because of the periscope windows, the panels appear to be a curtain hung along the building's edge.



Was this an appropriate solution to the unusual demands of the Museum of Glass, or an expression of Birkerts's singular design identity? The answer perhaps depends on one's desired museum experience (as the tour booklet suggests). The building's distinctive display strategies and tenebrous lighting tend to make the museum's collection subservient to an amplified architectural experience—less a space for distanced contemplation than a schizophrenic kaleidoscope. Not only capping a decade of experimentation with material systems, the Museum of Glass was also the culmination of a latent tendency in Birkerts's designs—to buffer building interiors from their contexts.

### **Introspective Buildings**

In his 1977 essay “Architecture: The Entrepreneurial Profession,” Robert Gutman asserted that what differentiated architects from other professionals was their introspectiveness, their seemingly chronic worry about the state of their chosen field. Never as well paid as medical doctors or lawyers, and less immune from economic recession as engineers or accountants, architects were prone to be highly reflective not only about their future financial prospects but also about the future of architecture's intellectual or theoretical projects. Both these forms of anxiety were prevalent during the 1970s, when economic recession greatly reduced demand for architectural services and, as Gutman observed, “the theoretical underpinnings which [had] held the field together no longer [appeared] valid.”<sup>49</sup>

As we have already seen, such anxiety typified Birkerts's lectures and writings at this time. But what distinguishes Birkerts's work from that of other “introspective professionals” is that GBA's buildings themselves took on qualities of introspection. In

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<sup>49</sup> Gutman, *Architecture from the Outside In*, 33.

the late 1970s, GBA took a turn away from Modernist transparency and materialized a turn inward in a literal sense: these were buildings that, through their design, isolated users from the outside world or altered the way they saw themselves, their communities, and their surroundings.

Buildings like the University of Michigan Law Library addition do so as a result of unusual external demands, but others do so in order to create experiential effects. At the Law Library, nostalgic donors demanded that the addition not interrupt the Collegiate Gothic quadrangle that distinguished the law school from the rest of Michigan's campus. As a result, what was in its initial incarnation a less deferential three-story design (Figure 4.45) was modified to become an entirely underground addition. An L-shaped light trench frames the existing library, and the only view available to law students at study carrels is upward toward its stone exterior (Figure 4.46). From the lowest floors, the existing library's Gothic verticality is exaggerated by this "worm's eye" view, transforming it into a kind of hyper-Gothic. This effect is heightened by mirrors installed on the structural beams supporting the light trench's curtain wall. One sees fragments of the sky and of the existing library reflected on these mirrored surfaces. The visual effect can be disorienting, but the mirrors nevertheless fulfill their primary function of distributing light into the addition's underground recesses.

This distinction between the viewing and lighting function of openings was an important one for Birkerts. He wrote that, "There is a clear distinction between bringing in light, and providing windows for looking out ... We need only so much area of opening in a wall for looking outside, but we need much more than that area to bring in

light and outside awareness to interior space.”<sup>50</sup> In his introspective buildings of the late 1970s and early 1980s, the “looking outside” function of openings was often deemphasized. Like the Law Library’s mirrored beams, these other openings diffused and distributed light while altering one’s perceptions by their size, location, or orientation.

Despite the obvious interest he and his firm took in the experiences and effects created by their buildings, Birkerts rarely wrote about the experience of architecture except in the most general of terms—he preferred to address the logic that guided these seemingly unusual design decisions. These openings, therefore, were explained by recourse to the environmental concerns of the time, or by specific functional demands. The concave reflectors and angled windows of IBM Southfield, for example, were not primarily intended to create an isolated atmosphere but to allow for increased insulation and lower the building’s energy needs.

The most peculiar such explanation was provided for the Calvary Baptist Church in Detroit, Michigan (1974-77). That church's most distinctive feature is a massive wall of mirrors that reaches forward over the pews like a petrified wave (Figures 4.47 & 4.48). Faceted at three different angles, this wall of mirrors affords congregants several surreal reflections. Its topmost layer, with mirrors oriented at 11 degrees from the horizontal, gives an aerial view of the elongated baptismal pool stretching the breadth of the sanctuary, a strange and provocative form of congregational witnessing. The architects explained that the mirrored wall was created in order to allow the whole congregation to witness baptisms, but this does little to account for wall’s the large and perplexing middle facet. Oriented at 25 degrees from the vertical, this surface returns congregants a picture of themselves as part of the group that occupies this sanctuary's green-colored pews. This

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<sup>50</sup> Birkerts, “Defining a Design Methodology,” 92.

central reflective surface, we might say, instills reflection on one's participation and membership in a faith community. Calvary Baptist is introspective not at the scale of the individual but at the scale of the congregation.

At IBM Southfield, introspectiveness was explained as a strategy to reduce the energy load of conventional Modernist office buildings. With glass only making up 20% of the exterior surface area and much more insulation in the aluminum curtain wall, the result was a much more efficient building in tune with the pressures of the oil crisis during which it was designed. But illustrations of the design also show its effect on the interior atmosphere. A photomontage of the wall section, for example, illustrates not only that the building is well insulated, but also that its lighting is diffuse and consistent and that its openings offer occupants a view to the distant horizon rather than the goings-on nearby (Figure 4.49). The window design, in other words, not only increased R-value, but also disavowed distraction.

One might at first see the distinctive periscope windows of the Corning Museum of Glass in similar terms, but the difference between the figures depicted in GBA's drawings shows the key difference. In the IBM Southfield photomontage, the figure inside is focused on his work (despite the absence of furniture). In a colorized section of the Museum of Glass, a figure peers into the mirrored aperture at the picture of the landscape it offers, while also viewing the landscape between its mirrored panes (Figure 4.50). In photographs of the completed building by Yukio Futagawa, the angles of these periscopic apertures create film strip-like image sequences and seemingly a great deal of glare (Figures 4.51 & 4.52). The unobstructed perspective offered by conventional window openings was swapped out for a fragmented, funhouse quality—these camera-

like apertures reframe and offer multiple perspectives on one's own body and on one's surroundings.

What was an external demand in the case of the Law Library addition had by the late 1970s become a defining characteristic of Birkerts's and GBA's buildings. But Birkerts refused to be pigeonholed into anything that might resemble a "style." Introspectiveness, crucially, was not a process or a method, but an outcome. He might have been able to bill this distinctive outcome as a signature with which to market his firm's services, but chose to foreground his own individual creative process instead. As opposed to any formal characteristic his designs shared, Birkerts continued to put forward his design process as the distinctive aspect of his practice.

### **Artistry, Individuality, Entrepreneurship**

While "architecture culture" transformed into "architecture theory," the business of building underwent a transition from, as Jay Wickersham has put it, "disinterested expertise" to "marketplace competition."<sup>51</sup> From the perspective of the profession, the real break came not with the cultural upheavals of the late sixties, but with the recession of the mid 1970s. Like others, Birkerts made a clean break with the social agency of architecture, and retrenched himself in the belief that artistry and entrepreneurship were apolitical. He had initially formed this belief in the crucible of postwar Germany. As discussed in Chapter 1, his role model Rolf Gutbrod embodied this apolitical stance by

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<sup>51</sup> Jay Wickersham, "From Disinterested Expert to Marketplace Competitor: How Anti-Monopoly Law Transformed the Ethics and Economics of American Architecture in the 1970s," *Architectural Theory Review* 20, no. 2 (2015): 138–58. For a discussion of the transition from "culture" to "theory" see Joan Ockman, "Introduction," in Joan Ockman and Edward Eigen, eds., *Architecture Culture, 1943-1968: A Documentary Anthology*, Columbia Books of Architecture (New York: Columbia University Graduate School of Architecture, Planning, and Preservation; Rizzoli, 1993), 13–24. See also K. Michael Hays, "Introduction," in K. Michael Hays, ed., *Architecture Theory since 1968*, Columbia Books of Architecture (Cambridge, Mass.: MIT Press, 1998), x–xv.

navigating between competing factions at TU Stuttgart—the right-leaning traditionalists and left-leaning modernists. Yet it was the overall lifestyle Gutbrod embodied that interested Birkerts more than his ability to mediate between political extremes. Sven Birkerts summarized his father’s perspective on Gutbrod:

Gutbrod, then in his 30s, cut a very impressive figure. ‘He had everything,’ my father recalls, ‘a successful practice, with important commissions – he had already built office buildings – and a strong personal style. He wore tailored tweeds and he drove a Lancia.’ On top of this, Gutbrod was married and had a young attractive wife. These were all very exciting possibilities – an architect could do creative work and have an exciting life.<sup>52</sup>

For his part, Birkerts asserted his aversion to politics invading architecture in a 1970 telegram to Donlyn Lyndon, who was then in the process of organizing a group called “100 Architects For Peace”: “However sympathetic to your stated cause I shall remain **politically** inactive and stay as before committed and devoted to betterment of our **environment** through the art of building and design.”<sup>53</sup>

Birkerts’s view of Gutbrod shows how the line between personal lifestyle and public image becomes blurred in entrepreneurial businesses just as easily as in the fine arts. Entrepreneurial success and its “very exciting possibilities,” moreover, were often bound up with expression of one’s virile masculinity.<sup>54</sup> And as Robert Gutman recognized, desire could play an important role in the success of an entrepreneurial enterprise:

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<sup>52</sup> Birkerts and Schwartz, *Metaphoric Modernist*, 12.

<sup>53</sup> Telegram, Gunnar Birkerts to Donlyn Lyndon, June 16, 1970, “Personal Correspondence + Files, 1970-1979,” Gunnar Birkerts Papers, Bentley Historical Library, University of Michigan. And yet this wasn’t entirely truthful: Birkerts had in 1968 become a staunch “Nixon man” and his opinion on candidates for government appointment had even been solicited by president-elect Richard Nixon’s transition team. (Gunnar Birkerts to Office of the President-Elect Richard M. Nixon, January 20, 1969, “Personal Correspondence + Files, 1960-1969,” Gunnar Birkerts Papers, Bentley Historical Library, University of Michigan.) He was not as apolitical as he liked to portray himself.

<sup>54</sup> For a discussion of the way professionalism and masculinity became intertwined during the twentieth century, see R.W. (Raewyn) Connell, “The Big Picture: Masculinities in Recent World History,” *Theory and Society* 22, no. 5 (1993): 597–623.

[Architecture] is really more of an entrepreneurial profession than a liberal profession. The architect must ... find a way of creating a desire on the part of the public to use his services in preference to the services of another type of building designer.<sup>55</sup>

To create this desire, Birkerts didn't see fit to change the principles or method by which he worked, but instead to assert his own role with more confidence and to be more demonstrative in asserting that role. As a result, the process by which his concepts came to be materialized in buildings was increasingly distilled or purified.<sup>56</sup> Sociologist Andrew Abbott asserted that purifying one's practice is the clearest way to achieve intraprofessional status, or the esteem of one's peers. Extraprofessional status is achieved, however, through dealing with the messier aspects of a profession's expertise.<sup>57</sup> By this metric, Birkerts's increasing purification of his design process suggests he was more interested in the former than the latter—being seen as a great architect by other architects was more valuable to him than fame or fortune. This was perhaps because only other architects would be able to see how appropriateness and expression came together in his designs.

After Corning, Birkerts positioned himself as the key node within the design process; he was, in effect, a bottleneck. While he ruminated on a project's program, site, context, and concepts, a synthesis evolved in his unconscious mind. This synthesis, he believed, was not something that could be rushed. Making subordinates wait was also a way to assert authority and authorship, even as it became necessary to turn over more aspects of the design process to project architects and managers.

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<sup>55</sup> Gutman, *Architecture from the Outside In*, 36.

<sup>56</sup> Richard Pommer referred to this tendency to purify as "architectural supremacism," and associated it with the discourse of autonomy in the 1970s and 1980s. Pommer, quoted in Magali Sarfatti Larson, *Behind the Postmodern Facade: Architectural Change in Late Twentieth-Century America* (Berkeley: University of California Press, 1993), 197–202.

<sup>57</sup> Andrew Abbott, "Status and Status Strain in the Professions," *American Journal of Sociology* 86, no. 4 (1981): 819–35.

Likewise, resting a firm's signature upon personality and individual artistry was a convenient way to avoid preconditions in the design process (such as Birkerts's pet peeve of *dogma*) while retaining an easily explained firm identity for marketing purposes. A figurehead's name could serve as a critic's shorthand for the firm's identity (which, as was shown in Chapter 3, was almost always made up of more than one person's authorial intentions). The more his firm's employees could routinize other aspects of practice, the more time was available for this intellectual synthesis to take place. This open-ended, time-consuming process also required clients who were willing to sacrifice time for this "organic synthesis" to emerge.

Patronage relationships therefore reinforced the artistic mindset Birkerts increasingly espoused. More than any other client, Buechner fed Birkerts's individualistic ideas about architectural authorship. Buechner's support, as well as his own increasingly cosmopolitan lifestyle, contributed to Birkerts's growing confidence as an artist-architect, part of an international design elite. To him, this meant he transcended his peripheral location in Detroit without compromising his isolation from trends or camps or schools on the East Coast and elsewhere.

Magali Sarfatti Larson cautioned that repeat clients put architectural firms in a bind: "there seems to be a sort of trade-off between security and variety ... Repeat clients risk locking the firm into a relatively narrow (though immensely profitable) market niche."<sup>58</sup> Valuing the security of repeat clients above the uncertainty and potential variety made possible by pursuing new clients, in other words, tends to limit the range of work a firm produces. For an architect as fearful of being pigeonholed as Birkerts, repeat clients were necessary only insofar as they allowed his firm to weather economic uncertainty.

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<sup>58</sup> Larson, *Behind the Postmodern Facade*, 114.



What was more important than maintaining client relationships was to maintain a consistent design approach and philosophy. This was not only an academic pursuit. Business consultant Weld Coxe pointed out that philosophy was an effective way to differentiate oneself within a competitive marketplace:

[The] professional must actively articulate his philosophy if he is to enjoy a distinct image within his profession. The most successful professionals, almost without exception, are those who are most capable of communicating an individual philosophy.

Even if he knows his philosophy is very similar to that of his competitors, the professional should never be shy about articulating his beliefs. His competitors might not be saying it as well.<sup>59</sup>

Coxe observed that no matter the image one tries to present, “the validity ... will ultimately be demonstrated in actual practice.”<sup>60</sup> It would only be effective for Birkerts to assert that a highly individual, intuitive synthesis was the heart of the design process if it were actually true. Lectures and texts show that as marketing became a more important part of his job, Birkerts provided more evidence to support such assertions. Providing a comprehensible philosophy that accorded with “actual practice” was necessary, Coxe observed, even if Birkerts knew his philosophy was similar to many of his contemporaries. This was because the market for architectural services imposed a pursuit of individualism onto architects, making them increasingly subject to demands for difference or distinction.<sup>61</sup> Even if he was saying the same thing, Birkerts may, according to Coxe’s logic, have been able to say it better.

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<sup>59</sup> Weld Coxe, *Marketing Architectural and Engineering Services* (New York: Van Nostrand Reinhold, 1971), 44.

<sup>60</sup> Coxe, XX.

<sup>61</sup> Art historian Hal Foster asserts that this desire for differentiation was the defining characteristic not only of 1970s and ‘80s architecture, but of Postmodern culture as a whole. Hal Foster, *Recodings: Art, Spectacle, Cultural Politics* (Port Townsend, Wash.: Bay Press, 1985), 13–33. Sociologist David Gartman has gone even further in his assessment of the role economic trends play in aesthetic diversification. He writes, “[as] a rule, when an artistic field becomes highly competitive due to an oversupply of producers, there is an increase in aesthetic innovation, as individuals seek to stand out in the crowd.” David Gartman,

## Working Theory

Seemingly following Weld Coxe's advice, Birkerts disseminated his philosophy and principles of architecture widely, despite any reservations that they were derivative or common.<sup>62</sup> More than mere reflections on his experience as an architect, the texts through which he shared his ideas are nevertheless characterized by plain language and a conversational tone—a result of being compiled from lectures rather than written as complete essays. Birkerts often had his lectures recorded and transcribed, and his extemporaneous words made their way into published writings, often under the editorship of his son Sven.

In place of a comprehensive theory of architecture, Birkerts put forward ideas about what he called “design methodology” or, later, simply “process.” This, he believed, could be his unique contribution to architectural discourse. In writings, classes, and lectures, he communicated to his readers, students, and listeners a working theory or a theory of work, a guide for how to proceed as an architect. As one might expect, essential to this theory of work was an ideology of individual creativity and a faith that authorial signature could be materialized in built form. This placed him on the more conservative side of an intellectual debate within architecture.

On the one hand, architects like Peter Eisenman based their process on a displacement of “the architectural self.” (In Eisenman's case, this had the paradoxical effect of underlining his unique place in architectural theory and increasing his fame as

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*From Autos to Architecture: Fordism and Architectural Aesthetics in the Twentieth Century* (New York: Princeton Architectural Press, 2013), 323.

<sup>62</sup> According to Sven Birkerts, “philosophizing” had around this time become one of the activities his father used to unwind. Sven Birkerts, *My Sky Blue Trades: Growing up Counter in a Contrary Time* (New York: Viking, 2002), 207–9.

an individual “auteur.”<sup>63</sup>) On the other hand, dominant trends solidified the place of the individual author at the center of the discipline. Thus, as architectural drawings took their place alongside the work of artists in museum collections and gallery exhibitions, the artist-architect reemerged as the figurehead of the profession, meaning, as Larson has explained, that these few figureheads legitimated the work of the remainder of the profession and offered fantasies that inspired those less professionally fortunate.<sup>64</sup>

Birkerts was conscious that his theories were inconsistent and incomplete. He claimed to be unconcerned: “I don’t care about inconsistencies in what I have said, so much as I want to establish a few distinctions within my work which are true for me.”<sup>65</sup> This caveat, that the theory need only be “true for [Birkerts],” at once betrays his debt to Romanticism and an overt anti-intellectualism. So too does his tendency to disclaim the status of theorist. Instead of a deep or systematic thinker, he saw himself as a modest maker who “merely does” and reflects later. He sought “appropriateness” rather than expression, and spurned what he called the “mannerist” tendencies of architects like Kahn, Yamasaki, Paul Rudolph, Philip Johnson, and, by implication, Venturi and Scott Brown.

To some extent, Birkerts had learned these skeptical, intellectually modest attitudes from Eliel Saarinen. In his 1949 book *Search for Form*—a cherished volume in Birkerts’s library—Saarinen described a twofold creative process: “to create form; and to

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<sup>63</sup> The phrase “architectural self” is used by philosopher David Goldblatt in an analysis of Eisenman’s purportedly anti-humanist approach to architectural design practice. See Goldblatt, “The Dislocation of the Architectural Self,” 337–48.

<sup>64</sup> Larson, *Behind the Postmodern Facade*, 9; 139.

<sup>65</sup> Birkerts, “Defining a Design Methodology,” 94.

diagnose the created form.”<sup>66</sup> For Saarinen, this process was always internal and intuitive. In a passage quoted in Chapter 1, he wrote: “This analytic criticism has been a natural discipline springing from the work itself—**for myself only**—and not an intentional systematizing of thought for others to follow.”<sup>67</sup>

What Birkerts meant by process was very different from contemporaries, the most outspoken of whom in this regard was Eisenman, whose early building designs demonstrated the arbitrariness of any design outcome while supposedly displacing his own authorship. Over time, Birkerts came to think of the creative act as an event rather than a process of synthesis. Birkerts relied upon his personal intuition to lend his designs authority and a seeming inevitability, while Eisenman rendered the “author-function” transparent through formal evolution. With Birkerts—despite his interest in didactically explaining the process of design—the internal workings of the “author-function” remained, so to speak, cloaked within a black box.<sup>68</sup> The contents of his intuitive decision-making apparatus (i.e., his mind) were covered over with a belief in genius, though this word was rarely, if ever, invoked.

There is a further difference: Eisenman’s “process” intentionally prevented the designer from determining the outcomes in advance—an attempt to move away once and for all from architecture’s basis in humanism. Birkerts, on the other hand, was reticent to sacrifice control or even give the appearance of doing so, even if this meant his design intents became increasingly vague as his career progressed. His reticence to give up

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<sup>66</sup> Eliel Saarinen, *Search for Form: A Fundamental Approach to Art* (New York: Reinhold, 1948), vii. Birkerts’s library and portions of his professional archive are now housed at the National Library of Latvia, in a building of his design completed in 2014.

<sup>67</sup> Saarinen, vii.

<sup>68</sup> The phrase “author-function” comes from Michel Foucault’s famous essay “What is an Author?” See Michel Foucault, *The Essential Foucault: Selections from the Essential Works of Foucault, 1954-1984*, ed. Paul Rabinow and Nikolas Rose (New York: The New Press, 2003), 378–91.

control reinforced both his aversion to theory and the hierarchical relationships of subordination within his office. This may seem a fairly familiar problem, but Birkerts intended to make teachable as many aspects of his answer as possible. Birkerts's ambition, in other words, was highly pedagogical. In fact, his ideas developed in parallel to courses taught on the same subjects of the individual creative process and architectural expression (Figure 4.53).

While he had been teaching at the University of Michigan since 1960, beginning in 1977 Birkerts co-taught seminars and workshops on architectural theory with Glen Paulsen—a fellow Saarinen and Associates “alum” and former director of the Cranbrook Academy of Art—that ran on an annual basis until 1985.<sup>69</sup> These seminars with Paulsen were the culmination of his teaching career and pedagogical thinking. Based on the amount of teaching material retained in the Birkerts collections at the Bentley Historical Library, it's clear that he did not see teaching as a trivial part of his life and work, though he did at times position himself as averse to academic culture. Sven Birkerts summarizes his father's teaching as follows:

My sense is that while he enjoyed the actual in-class work ... he felt removed from academic culture. He did not go to faculty meetings, and took no role in departmental affairs. He made it clear that he was there as a practitioner. At various points, I remember, his detached style gave rise to grumbling among his teaching colleagues—as well it might have—and he would report this with a certain satisfaction.<sup>70</sup>

Birkerts's saw his approach to teaching as pragmatic, because he was preparing students to work as he worked, and, moreover, to share his beliefs about the place of individual creativity in architecture. “His mission,” Sven Birkerts writes, “was to teach his students

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<sup>69</sup> Birkerts was first hired at University of Michigan in 1960 as a lecturer, and then joined the faculty as an Assistant Professor of Architecture in 1961. By 1969, he had been promoted to full Professor on the strength of his firm's work and his studio teaching.

<sup>70</sup> Birkerts and Schwartz, *Metaphoric Modernist*, 19.

how to think like architects, how to build up a reservoir of content, and then how to begin tapping it to discover the best appropriate solutions to the problems imposed by the commission.”<sup>71</sup>

In their seminars, Birkerts and Paulsen delivered alternating lectures that outlined their philosophies and working methods under topics like “Knowing Yourself – You and Your Mind,” “Symbolism, Metaphor, Color,” “Meaning and Expression,” and “Conceptual Architecture.”<sup>72</sup> The seminar developed into a concentration in “Theory/Design” for graduate students. Birkerts and Paulsen focused on “[the] cultivation of creative insights and critical judgments,” and expanding “the student’s abilities in conceptual thought and design methodology” to “promote the holistic nature of architecture.”<sup>73</sup> Reading lists for these courses drew from recent architects’ monographs, canonical texts of modernism, and theory texts of the 1960s and 1970s. Design projects for the concurrent studios included an American pavilion for an international exposition in Montreal (based on Expo ’67), a museum for American architecture in Chicago, an American Academy in Helsinki, Finland, and, most frequently, a “personal retreat” of 3000 square feet—perhaps the “introspective architecture” par excellence—that served as an introductory experiment with form finding. Student research analyzed and compared the projects and writings of internationally renowned contemporary architects, and annual research trips often took

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<sup>71</sup> Birkerts and Schwartz, 19.

<sup>72</sup> See folders labeled “Faculty Papers, U-M Course Materials,” Gunnar Birkerts Papers, Box 2, Bentley Historical Library, University of Michigan. Lecture notes from his seminars were reused and greatly expanded when Birkerts served, first, in 1983, as the first Plym Professor at the University of Illinois at Urbana (where his frequent co-instructor Glen Paulsen was once a student), and later, in 1990, as Goff Professor of Creative Architecture at the University of Oklahoma.

<sup>73</sup> Gunnar Birkerts and Glen Paulsen, “Architectural Theory/Design Concentration,” Faculty Papers, U-M Course Materials, Architecture 672/692, 1980-81, Gunnar Birkerts Papers, Bentley Historical Library, University of Michigan.

students to Toronto to visit with architects including Barton Myers, along with Birkerts's friend and fellow Latvian Erland Gustavs.

The pedagogical goals Birkerts and Paulsen pursued were to a certain extent prefigured in Birkerts's two published statements, "Design: The Critical Years" and "Defining a Design Methodology." The 1974 article "Design: The Critical Years," published in *Canadian Architect*, outlined Birkerts's beliefs about the state the art of architecture in the 1970s as an introduction to a description of his "Subterranean Urban Systems" study.<sup>74</sup> The text was largely based on transcripts of speeches he had delivered in the early 1970s. It swings wildly between assertions of artistic autonomy and admissions of contextual influence. Birkerts asks that the artist-architect be preserved as distinct from the "architectural technician":

There may be a new role developing in the profession for this architectural technician and maybe he has to be called just that. It is quite clear that he will not be the architect in the traditional sense, but I would like to see us preserve the architect who is the artist and his creation which is an art form.<sup>75</sup>

Just who Birkerts believed would fit within this category of "technicians" was unstated, but it likely included the employee-architects who managed projects and produced construction documents for firms like his—those who filled the classic "managing partner" role within the architect's atelier. More than this, however, he thought too many architects were "responding to current issues and emphasizing the pragmatic aspects in problem solving." This antagonism toward what he saw as vulgar functionalism, the behavioral and social sciences, economics, and ecological concerns was driven by a firm

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<sup>74</sup> This study was supported by a research grant from the Graham Foundation for Advanced Study in the Fine Arts, and consisted of two seminar/workshops for select students at the University of Michigan. Birkerts essentially proposed to bury the unsightly elements of the urban landscape to beautify and to free up land for development above. See Gunnar Birkerts, *Subterranean Urban Systems* (Ann Arbor: Institute of Science and Technology, University of Michigan, 1974).

<sup>75</sup> Birkerts, "Design: The Critical Years," 48.

commitment to the moderate faction of the modern movement—those less inclined to turn away from architecture’s basis in individual artistry.

Yet he cautioned against descending into “personal mannerisms” as had the previous generation of Kahn, Yamasaki, Johnson, and Rudolph: “Today there is no need to develop mannerisms, since once again there is a genuine need for a new design vocabulary ... using available technologies.”<sup>76</sup> The rejection of “mannerism” seems to be a direct riposte to Robert Venturi, one of many that emerged in Birkerts’s writings of the 1970s. Here and in other texts, rejecting Venturi’s polemical embrace of low-tech, populist aesthetics was a way of differentiating himself from an increasingly influential strain in American architectural thought. In a way, as his essay makes clear, Birkerts was pulled in two (somewhat contradictory) directions: committed to the forward-looking technological aesthetics he associated with the modern movement, but opposed to its functionalist effacement of the artist in favor of the “technician.” He was reluctant to embrace the aesthetic characteristics of a still-emergent postmodernism, but nonetheless found that certain of postmodernism’s intellectual tendencies aligned with the individualist idea of the architect that he espoused.

In the end, this text is a plea not to forget beauty in times of social change, economic hardship, and impending ecological catastrophe. Yes, architects must respond to the context in which they find themselves, but they should do so without sacrificing their ethos in order to fit the times. In other words, internal psychology should trump contextual forces.

More thorough and more clearly stated than this earlier article was “Defining a Design Methodology,” which accompanied the publication of his *Dance Instructional*

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<sup>76</sup> Birkerts, 48.



Facility at SUNY Purchase (1971-76). As editor Mildred F. Schmertz described it, this text was “a self-searching effort to probe those forces, both external and internal to himself, which have shaped the best of his work.”<sup>77</sup> The balance of these forces had changed in the three-year interval between these two articles. Whereas the former named and itemized external forces, the latter cuts right to the heart of the matter: how Birkerts went about making architecture. Internal forces (we might simply call them *intentions*) predominate, while external influences are only broadly gestured toward.

Again, this essay is a compilation of thoughts originally developed extemporaneously during lectures, and again, it evinces a struggle to balance the technical (and technological) concerns of buildings with individual artistic goals. It illustrates a reluctant embrace of postmodernism’s preoccupation with meaning and symbolism, but does so through a rereading of already-completed projects rather than looking to the more-distant past for architectural motifs or elements.

Uncertainty about the responsibilities of the architect persists. Hence, the “architect’s will” should not overdetermine a project: “certain buildings and their accompanying polemic bring an overriding artistic or preemptively ideological position to everything. The architect’s will appears to control from the beginning and all the way through.”<sup>78</sup> In place of this willful unresponsiveness, the architect should instead strike a balance between two ways of responding to architectural needs—synthesis and intuition:

To synthesize is to consciously search for and analyze the intrinsic structure of any design problem, while intuition is the ability to subconsciously sense the intrinsic structure of the problem. One approach deals more or less with external factors, the other with internal feelings, but both are part of the struggle to respond to human needs as they appear out of the nature of the problem.<sup>79</sup>

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<sup>77</sup> Mildred F. Schmertz, Preamble to Birkerts, “Defining a Design Methodology,” 91.

<sup>78</sup> Birkerts, 91.

<sup>79</sup> Birkerts, 91.

The balance between these two processes is perhaps the primary difference between an architect at the start of their career, and one who has matured. It was only after fifteen years of responding to project requirements and client desires more or less appropriately that Birkerts found himself able to “subconsciously sense the intrinsic structure of the problem.” This realization first came to fruition while he was conceptualizing the Corning Museum of Glass design.

Following these reflections, Birkerts revisited a set of buildings that he considered to be his most important contributions. This theory-then-works format mirrored that of his lectures, where philosophizing, sometimes meandering introductions gave way to slide shows of key influences and works. These slides were sequenced and contextualized to provide evidence supporting the principles espoused in the “theoretical” introduction. To the catalog of key works in “Defining a Design Methodology,” Birkerts retroactively introduces a fourth principle—metaphor—which, once identified, became increasingly prominent in his thinking and increasingly present in his design work. Like other architects of his generation, this principle led Birkerts to justify his design decisions, as Mary McLeod wrote of postmodernism, “not in program, function, or structure, but in *meaning*.”<sup>80</sup> Yet, unlike more unrepentant postmodernists who returned to historic sources for meaningful signs and symbols, Birkerts interpreted the materials and systems of his modernist architecture as themselves metaphoric. Thus mirrored glass, perhaps the defining material of late modern architecture was, in Birkerts’s IBM Corporate Computing Center (See Figures 4.18 & 4.29), “a symbol of the economic restraint that

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<sup>80</sup> McLeod, “Architecture and Politics,” 23. Earlier scholars also emphasized the importance of meaning for this group. See Philip Drew, *Third Generation: The Changing Meaning of Architecture* (New York: Praeger, 1972), 7. See also Charles Jencks and George Baird, *Meaning in Architecture* (New York: Braziller, 1969).

was called for ... of a particular kind of intellectual work, and of the computer itself.”<sup>81</sup>

Above all, Birkerts saw his own design decisions in symbolic terms.

And yet despite its metaphoric content, the building at Sterling Forest also follows the functionalist demand that a building’s exterior communicate its interior organization: a red line traces the “interface” between human office workers and their computer counterparts.<sup>82</sup> This registered a “danger zone” for Birkerts, because it was “important that men are not diminished by [computers], or mistaken for them, or confused by them.”<sup>83</sup> The path of this “danger zone” echoes the continuous loop of window in earlier buildings like Birkerts and Straub’s People’s Federal Savings & Loan Building discussed briefly in Chapter 1 (See Figure 1.23). In earlier buildings, a glass ribbon separated wall from roof, dissolving the structural elements in light. Rereading this design motif as an interface that might protect workers from diminishment or confusion, Birkerts renders it opaque, registering a conceptual rather than a structural separation. The spaces behind, however, were not as different as the strict line may have suggested.

Elsewhere, the Corning Fire Station (See Figures 4.15 & 4.16) “carries a much simpler kind of one-to-one metaphor ... I wanted the fire station to be like a fire truck.”<sup>84</sup> This crude and unsophisticated “one-to-one metaphor,” almost seems an ideal illustration of Venturi and Scott Brown’s “duck.” And yet, some of Birkerts’s principles—suppression of structure, simplification of detail—contradict the qualities that Venturi and Scott Brown found objectionable in “heroic and original” late modernism. There is

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<sup>81</sup> Birkerts, “Defining a Design Methodology,” 93.

<sup>82</sup> On the design of IBM’s corporate identity and its architecture, with particular emphasis on the role of such “interfaces,” see John Harwood, *The Interface: IBM and the Transformation of Corporate Design, 1945-1976* (Minneapolis: University of Minnesota Press, 2011).

<sup>83</sup> Birkerts, “Defining a Design Methodology,” 94.

<sup>84</sup> Birkerts, 94.

very little exaggeration in Birkerts's Fire Station, and the symbolism is located on the building's surface. This "shed decorated to look like the thing it contains," cleverly folds Venturi and Scott Brown's distinction on itself.

"These symbols or metaphors," Birkerts wrote, "don't have to be complex or even necessarily 'elevating'; they can be obvious and, I hope, fun."<sup>85</sup> Fun was not a word readily associated with Birkerts's architecture prior to this article. His seriousness, perhaps a result of the personal bearing associated with Latvian *izglitiba*, discussed in Chapter 1, was infamous amongst his students and employees. This uncharacteristic embrace of "fun" was likely a nod to architecture's dalliance with popular culture that culminated with *Learning From Las Vegas*.<sup>86</sup>

Birkerts's use of metaphor (he eventually dropped the word symbolism) in this early iteration was crude and simplistic, despite his call for architects to keep in mind that "People's real lives are made of not only their present conditions but also their ambitions and dreams."<sup>87</sup> But his embrace of metaphor illustrates that he did not resist the linguistic turn associated with Postmodernism. He was merely interested in different aspects of language than his contemporaries. He saw metaphors as more open-ended than crude symbolism and as leaving more room for authorial agency than discussions of grammatical structure allowed. Metaphors were therefore a good match for the kind of "organic synthesis" he pursued in projects after Corning Museum of Glass (Figure 4.56).

While in the 1970s Birkerts shared his ideas through texts that purported to outline the design methodology but in fact reframed already existing design projects through concepts like metaphor, later years would find him more adept at explaining his

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<sup>85</sup> Birkerts, 94.

<sup>86</sup> Venturi, Scott Brown, and Izenour, *Learning from Las Vegas*.

<sup>87</sup> Birkerts, "Defining a Design Methodology," 91.

process in written and drawn form.<sup>88</sup> By the end of the 1980s, both the forms of his design projects and the process by which he arrived at those forms approached the character of “organic synthesis.” He was only able to arrive at this correspondence between form and process after two decades of speaking and drawing.

### **Sketching and the *Non Finito***

This “organic synthesis” had sketching at its heart and, according to Birkerts, took place within his unconscious mind. He considered this synthesis a solitary process that might take hours, days, or weeks. Desire for the qualities captured in these sketches—unfinished and lacking detail (which they make up for in personality or intuition)—has its origins in an intentionally unfinished form of art-making which Rudolf Wittkower associated with the rise of individualism among artists in the late 19<sup>th</sup> century. This tendency toward the “*non finito*” found artists asserting their individuality by adopting “a new form of self-analysis and introspection, for the artist has to develop a sophisticated control of the act of creation.”<sup>89</sup> The translation of this tendency into architecture took more than a generation. Perhaps the first of the Modernist architects who began publishing rough, *non finito* sketches was Erich Mendelsohn, who, like Birkerts, was said to work late into the night developing sketches from which his assistants and associates would develop a building design.<sup>90</sup> With Mendelsohn as an exception that proves the

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<sup>88</sup> See: Birkerts, *Buildings, Projects, and Thoughts*; Birkerts, *Process and Expression*.

<sup>89</sup> Rudolf Wittkower, “Individualism in Art and Artists: A Renaissance Problem,” *Journal of the History of Ideas* 22, no. 3 (1961): 302. While some artists also have ateliers, it’s commonly understood that the figurehead completes the work after “roughing out” by apprentices. The process is almost the opposite with architects, where finish work like detailing or construction administration is often delegated.

<sup>90</sup> Regina Stephan, ed., *Eric Mendelsohn, Architect 1887-1953* (New York: The Monacelli Press, 1999), 152–53. Stephan writes in her essay “Mendelsohn and his assistants in the 1920s and early 1930s” that Mendelsohn was a cantankerous boss who could consign well-developed drawings to the wastebasket on a

rule, architects' sketches don't often hold an innate value the way artists' sketches do, because the "hand of the architect" is not as connected to its creative outcome as artists' are to paintings or sculptures. Architects' sketches are often retained as records of the design process, over which architects are understood to have more control than completed buildings (Figure 4.54). They provide evidence of an architectural idea's conception through the mind, hand, and eye of a single individual.<sup>91</sup>

Prior to the 1970s, architectural drawings accrued value not as records of paths not taken during the design process but instead from the fidelity with which they recorded the concept or idea that came to be materialized in a building. They were not seen as valuable autonomous objects in their own right. As Jordan Kauffman has asserted, in the late 1970s drawings began to be understood as "a viable end result of architectural explorations."<sup>92</sup> We must recall, however, that Birkerts himself did not produce artful presentation drawings in his own hand. From the beginning, he depended upon subordinates or specialists (or on scale models) for presentation and publication. He primarily sketched floor plans unless a project required a strong profile in elevation.

The particular formal vocabulary of angular and free-flowing lines he used in the 1980s and 1990s meant his sketches often resembled microscopic organisms or embryos. An "organic" theory of architecture coalesced alongside this formal vocabulary—that form, like living things, evolved through an unconscious "natural selection" within the architect's mind. It was only once reproduction technology enabled Birkerts to easily

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whim. Mendelsohn primarily made small sketches in low-angle perspectives and expected that his associates and assistants would be able to translate these into detailed building designs.

<sup>91</sup> Birkerts referred to the interaction between these three elements as the "1-2-3 approach": "The hand draws, the eye sees and evaluates, and then coaches the hand to make corrections and adjustments – a process that can be repeated until a solution emerges." Birkerts and Schwartz, *Metaphoric Modernist*, 19.

<sup>92</sup> Jordan Kauffman, *Drawing on Architecture: The Object of Lines, 1970-1990* (Cambridge, Mass.: MIT Press, 2018), 50.

capture the quality of these sketches in published form that he began to see them as worthy of dissemination. This came to full fruition in his 1985 book *Buildings, Projects And Thoughts, 1960-1985*, in which sketches predominate and completed buildings are relegated to a timeline of small images at the end (Figure 4.55). Still, despite his rhetoric to the contrary, sketches for buildings like the Corning Museum of Glass demonstrate that his design process was characterized by false starts. These “thoughts left visible” manifested the creative process of an individual in a way construction documents or completed buildings could not.<sup>93</sup> They were, after all, the only proof he had of his individual contribution to the complex projects undertaken by his firm.

To emphasize sketches was therefore nothing less than an effort to fortify the authority traditionally vested in firm figureheads like himself. Birkerts’s bet on self-expression was a good one, because, as the experience of the 1980s would demonstrate, this was a highly marketable idea. Gutman observed, for example, “autonomous architecture ... gets a lot of attention because of mass society’s fascination with new ideologies of self-expression.”<sup>94</sup> One such ideology, with which Birkerts at times flirted in his lectures, was Ayn Rand’s heroic image of the architect as individualist archetype. Birkerts was far from the only architect to take Rand’s *Fountainhead* protagonist Howard Roark as an example. The 1980s were characterized by what Suzanne Stephens called the “Fountainhead Syndrome”—reputation building based on ego instead of judgments on architectural quality.<sup>95</sup> In this sense, Birkerts was symptomatic rather than singular.

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<sup>93</sup> Kelly Baum et al., eds., *Unfinished: Thoughts Left Visible* (New York: The Metropolitan Museum of Art, 2016). For a contemporary perspective on the function of sketches in architectural practice, see Yeoryia Manolopoulou, “Unformed Drawing: Notes, Sketches, and Diagrams,” *The Journal of Architecture* 10, no. 5 (November 1, 2005): 517–25.

<sup>94</sup> Gutman, *Architecture from the Outside In*, 41.

<sup>95</sup> Suzanne Stephens, “The Fountainhead Syndrome: The Skyline’s the Limit, Says Suzanne Stephens, When Architects Build Reputations on a Foundation of Ego,” *Vanity Fair*, April 1, 1984, 40–47.

The psychologized way Birkerts discussed the unconscious process of design may have been informed by 1920s writing by his estranged father, who was known, according to Sven Birkerts, “for his ambitious syntheses of important trends in European and American intellectual life ... he published some of the first Latvian studies of psychology and sociology.”<sup>96</sup> The most notable of these studies for our purposes is a book that addressed artistic psychology. Latvian Art historian Stella Pelše has categorized Pēteris Birkerts’s art theory—outlined in this 1922 book, *The Psychology of Artistic Creation: The Artist’s Personality*—as traditionalist, its assertions “based on the well-established ideas on art as expression or communication,” while also highlighting “the aesthetic instinct derived from instinctive drive to play.” Pelše concludes that Pēteris Birkerts’s theory was “a rather contradictory compilation of historical elements from different periods of art-theoretical thought.”<sup>97</sup> One might say the same of Gunnar Birkerts’s commentary on creativity in architecture. Sven Birkerts has similarly noted that his father had “no developed psychological theory about the sources of his own artistic development,” but also recalls that he kept a collection of his father’s books in a glass case in his studio.<sup>98</sup>

The title of Birkerts’s father’s book suggests an affinity with an oeuvre-based, connoisseurship model of art history prevalent at the time. An “artistic personality”—as Bernard Berenson and others asserted in the early 20<sup>th</sup> century—emerged through close examination of a body of work and was therefore, one might conclude, not necessarily

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<sup>96</sup> Birkerts and Schwartz, *Metaphoric Modernist*, 9.

<sup>97</sup> Stella Pelše, “History of Latvian Art Theory : Definitions of Art in the Context of the Prevailing Ideas of the Time, (1900-1940)” (Ph.D. Dissertation, Institute of Art History, Latvian Academy of Art, 2008), 112. The Latvian title of Pēteris Birkerts’s book is *Daiļradīšanas psiholoģija I: Mākslinieka personība*. The title’s English translation is by Pelše. Aside from a single choice quote in Pelše’s text, the book has not been translated.

<sup>98</sup> Birkerts and Schwartz, *Metaphoric Modernist*, 9–10.



coextensive with an individual. This connoisseurship model of artistic study focused on authorship and attribution, or, as Gabriele Guercio puts it, on “*who* questions.”<sup>99</sup>

Connoisseurs like Berenson sought out evidence of an artistic personality in characteristics shared by numerous individual works.<sup>100</sup>

Birkerts, it seems in retrospect, was a self-reflexive connoisseur of his own work, tracing an “artistic personality” from the tracks of his sketches and the outlines of his personal history. But Birkerts’s individualism was not the celebration of consumerism and capital that is typical of its use in the US. It is instead more closely aligned with the word’s German meaning. Among the German intelligentsia, individuality was a Romantic expression capturing, as political scientist Steven Lukes summarized it, “the notion of individual uniqueness, originality, self-realization . . . in contrast to the rational, universal, and uniform standards of the Enlightenment.”<sup>1</sup> This German individualism was, as Georg Simmel wrote, “the individualism of difference, with the deepening of individuality to the point of the individual’s incomparability,” in which the individual feels “*called* or destined to realize his own incomparable image.”

Birkerts was his own staunchest critic, but not in the sense that he was unsatisfied with the results—he was critical of others perceived to be wallowing in their dissatisfaction. Of his time seated next to Robert Venturi at Saarinen and Associates, for instance, Birkerts memorably stated, “Bob was a terrible hard worker and was, I remember, never, never satisfied with what he had done. (At least he tried to create that

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<sup>99</sup> Gabriele Guercio, *Art as Existence: The Artist’s Monograph and Its Project* (Cambridge, Mass.: MIT Press, 2009), 23; 282; 285.

<sup>100</sup> Georg Simmel, quoted in Steven Lukes, “The Meanings of ‘Individualism,’” *Journal of the History of Ideas* 32, no. 1 (1971): 55.

impression).”<sup>101</sup> Birkerts, it seems, tried to create another impression entirely, not necessarily that things came easily, but that the power of his intuition readily generated architectural expressions that were at once innovative and appropriate. Despite lacking the kind of exquisite draftsmanship that made the drawings of other architects valuable on the art market, Birkerts nevertheless found a way to value the architectural drawings he produced: as evidence of the process and the expression embodied in his work as an architect.<sup>102</sup>

### **Conclusion: Resumed Authority**

After the disappointing outcome at Tougaloo College and the chaotic collective learning process of the FRBM, Birkerts found a client in Thomas Buechner willing to help him return to the ordered, individualistic design process of an “artist-architect” rather than a

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<sup>101</sup> Gunnar Birkerts, “Autobiographical Notes,” in Marlin and Futagawa, *GA Architect* 2, 218.

<sup>102</sup> The terms *process* and *expression* were, for Birkerts, almost one-to-one replacements for Venturi’s more famous pairing of late modernism, *complexity* and *contradiction*. Unlike Birkerts, Venturi never sought purity in his practice, but instead the messiness of influence, appropriation, and collaboration. Still, their formulas for architectural creativity were not as incompatible as it may seem: Birkerts’s belated 1994 manifesto was titled *Process and Expression in Architectural Form*, while Venturi reflected in 1977 that his own book had been more about architectural form than about architecture more generally: “I now wish the title had been *Complexity and Contradiction in Architectural Form*, as suggested by Donald Drew Egbert.” Robert Venturi, *Complexity and Contradiction in Architecture*, Second Edition (New York: Museum of Modern Art, 1977), 14. Venturi made this statement in his note to the second edition, dated April 1977. Cf. Birkerts, *Process and Expression*. Both Birkerts and Venturi had formative experiences at the American Academy in Rome, but Birkerts’s time there came after he had already formed strong opinions about the creative process and about what contemporary architects could learn from the past. On Venturi’s Rome experience, see Denise R. Costanzo, “‘I Will Try My Best to Make It Worth It’: Robert Venturi’s Road to Rome,” *Journal of Architectural Education* 70, no. 2 (July 2, 2016): 269–83. For a history of the American Academy in Rome’s postwar embrace of modernism, see Denise R. Costanzo, “The Lessons of Rome: Architects at the American Academy, 1947–1966” (Ph.D. Dissertation, The Pennsylvania State University, 2009). Afterward his time at the Academy, Bruno Zevi became an interlocutor and a supporter of Birkerts. An influential and well-connected voice in Italian culture at the time, Zevi linked Birkerts with Italian elites who eventually commissioned five unbuilt projects—a Humanities Faculty Building at the University of Turin (1989-90), a stadium in Venice (1989-92), and multi-use buildings at Novoli near Florence (1987 and 1993) and in Turin (1989). These comprised Birkerts’s “Italian years,” and were categorized as such in later monographs. He was perhaps willing to pursue such ambitious and ultimately doomed projects because of a desire for recognition among upper class, aristocratic Europeans, something his decades of American success did not afford. See Birkerts and Schwartz, *Metaphoric Modernist*, 168–91.

service-providing professional. Birkerts's lengthy relationship with Corning came to an end not long after the Museum of Glass was completed. He and Buechner encountered one another at a social event in June 1982, and Birkerts evidently expected that the string of commissions he had enjoyed might continue. In a letter, Buechner broke the news that this wasn't to be. "Unfortunately," he wrote, at least partly in jest, "there is no money in the 'Birkerts Account'. The balance was not carried into '82 and the situation is far too tight to risk an overrun. Let us hold on until the business situation improves."<sup>103</sup> Birkerts wrote back to plead his case for continued support:

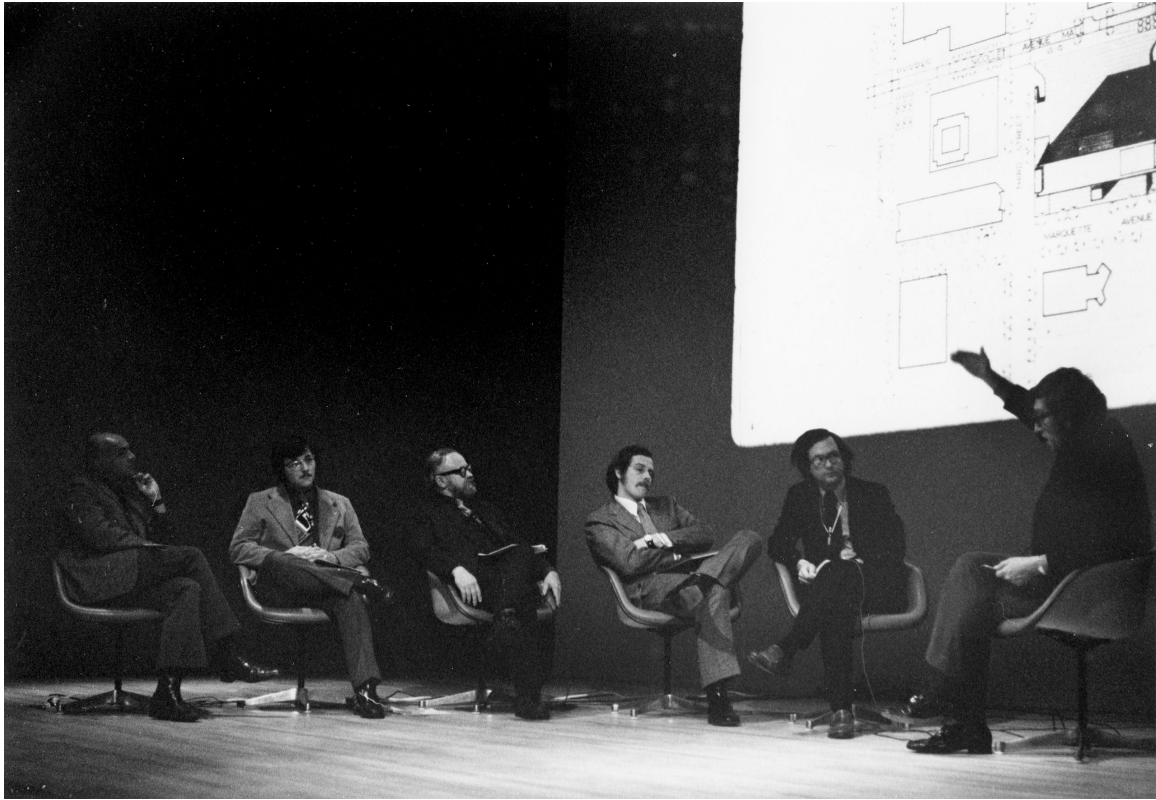
Why are you such a Jekyll and Hyde? It was so nice to see you a few weeks ago and now you send me a letter telling that the 'Birkerts Account' has been choked off. I did draw from that account as little as was possible, so we could have more beneficial use of it, but, 'do a good deed and you will be punished.'<sup>104</sup>

Buechner's mention of a "Birkerts Account" was an embellishment, but hardly an exaggeration, of the 15-year relationship between architect and client. And yet aside from a whimsical design for glass tumblers for Steuben Glass, Corning's patronage of Birkerts had truly dried up by 1982. Four years later, Kevin Roche, John Dinkeloo Associates were commissioned, in Birkerts's stead, to design a new headquarters for Corning Glass on the site of the old factory across the Chemung from the Museum. There is no archival evidence of why exactly Buechner parted ways with Birkerts, but it may have been because of Birkerts's own "Jekyll and Hyde" tendencies—at times pursuing an "appropriate" architecture fit for client needs and at others expressing personal intentions. This was, we might conclude, the territory that Birkerts explored in his writing, teaching, and practice—the uncertain, awkward space between appropriateness and authorship.

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<sup>103</sup> Thomas S. Buechner to Gunnar Birkerts, June 14, 1982, Personal Correspondence + Files, 1980-1989, GBP, BHL, University of Michigan.

<sup>104</sup> Gunnar Birkerts to Thomas S. Buechner, June 29, 1982, Personal Correspondence + Files, 1980-1989, GBP, BHL, University of Michigan.



**Figure 4.01** Gunnar Birkerts (far right) presenting his design for the Federal Reserve Bank of Minneapolis at “Architecture as a Humane Art,” a symposium at University of Michigan, with keynote by Sir Nikolaus Pevsner (not pictured). Other speakers included Abraham Kaplan, Leonard K. Eaton, and Walter Creese, March 16, 1972. Box 15, GBP, BHL.

## Defining a design methodology

RECORD asked Gunnar Birkerts to jot down some notes on his philosophy of design as it related to his work on the Dance Instructional Facility. What follows is what he gave us instead—a self-searching effort to probe those forces, both external and internal to himself, which have shaped the best of his work.—M.F.S.

Noticing some recent directions that architecture has taken, it is clear to me that certain buildings and their accompanying polemic bring an overriding artistic or preemptively ideological position to everything. The architect's will appears to control from the beginning and all the way through. I think this is misplaced, and even harmful. I avoid participating in academic arguments, debating the value of eclecticism, historicism, estheticism—the stylistic debates which, to me, try to find mannerisms for our time. They are like fads or current modes, and produce cult groups. Current fashion and polemic have now become forces that single-handedly shape solutions. Unfortunately these forces often serve as an answer to a problem only for a short moment in the history of mankind.

At the same time I want to distinguish myself from those directions in architecture which only admit talk about practicalities, facts, the given conditions; which insist that design is and should be only a synthesis of the given constraints. People's real lives are made of not only their present conditions but their ambitions and dreams. I try not to forget beauty in times of social change, economic pressure, ecological and energy concerns. For me architecture will always be an art form.

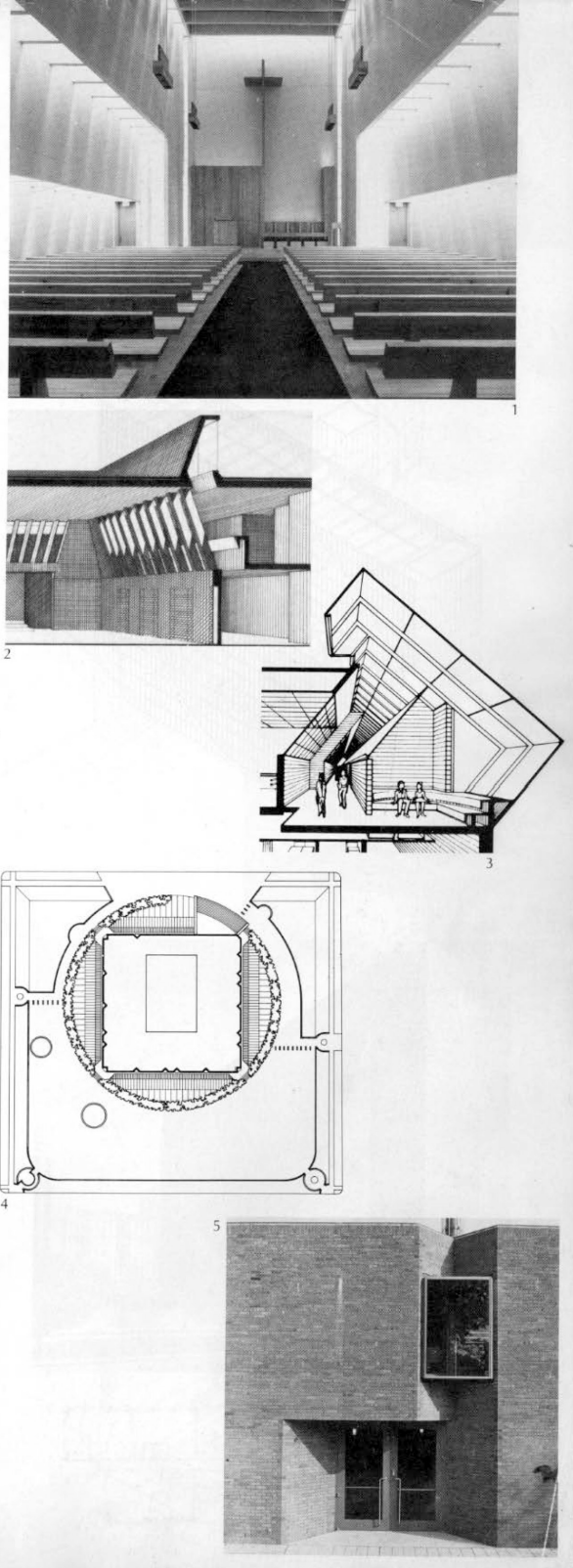
In comparing my buildings and projects from fifteen years ago and today, it is clear that they are different, that they have changed. In searching for the causes of this change, I do not think that change has come about through shifts in my philosophical attitude from project to project, or from changes

in problem-solving methodology in the office. What has caused it, I feel, are the exterior influences—the times we live in, the society and its lifestyle, the needs of each project, the technology of the time, the availability or unavailability of resources and materials, as well as changing laws.

Whatever the problem-solving method and attitude used by an architect, the most basic need of our times is for an architecture of response—response to human need. I think this response can be achieved in two ways: by the synthesizing process or by intuition. There is a real difference between these two approaches. To synthesize is to consciously search for and analyze the intrinsic structure of any design problem, while intuition is the ability to subconsciously sense the intrinsic structure of the problem. One approach deals more or less with external factors, the other with internal feelings, but both are part of the struggle to respond to human needs as they appear out of the nature of the problem.

This theory and belief, however, does not dictate form in any way; it is not a dogma, by which I mean the imposition of a set structure on any design or on the available information about it, regardless of the intrinsic structure. Dogma overrides reason; it is an over-all theory about form. I attempt to give each building its own theoretical base. I search for it during the synthesizing phase of design, both consciously and intuitively.

There are many diverse influences upon design: each site has its own conditions; each client has different needs from those of



**Figure 4.02** Gunnar Birkerts, “Defining a Design Methodology,” *Architectural Record* 161, no. 2 (February 1977), 91.



**Figure 4.03** GBA, University of Michigan Law Library, Ann Arbor, Michigan, 1974-81. Photograph by Timothy Hursley. From: Birkerts and Schwartz, 145.





**Figure 4.04** GBA, Corning Museum of Glass, Corning, New York, 1976-81. Photograph by Timothy Hursley for Korab, Inc. Box 12, GBP, BHL.

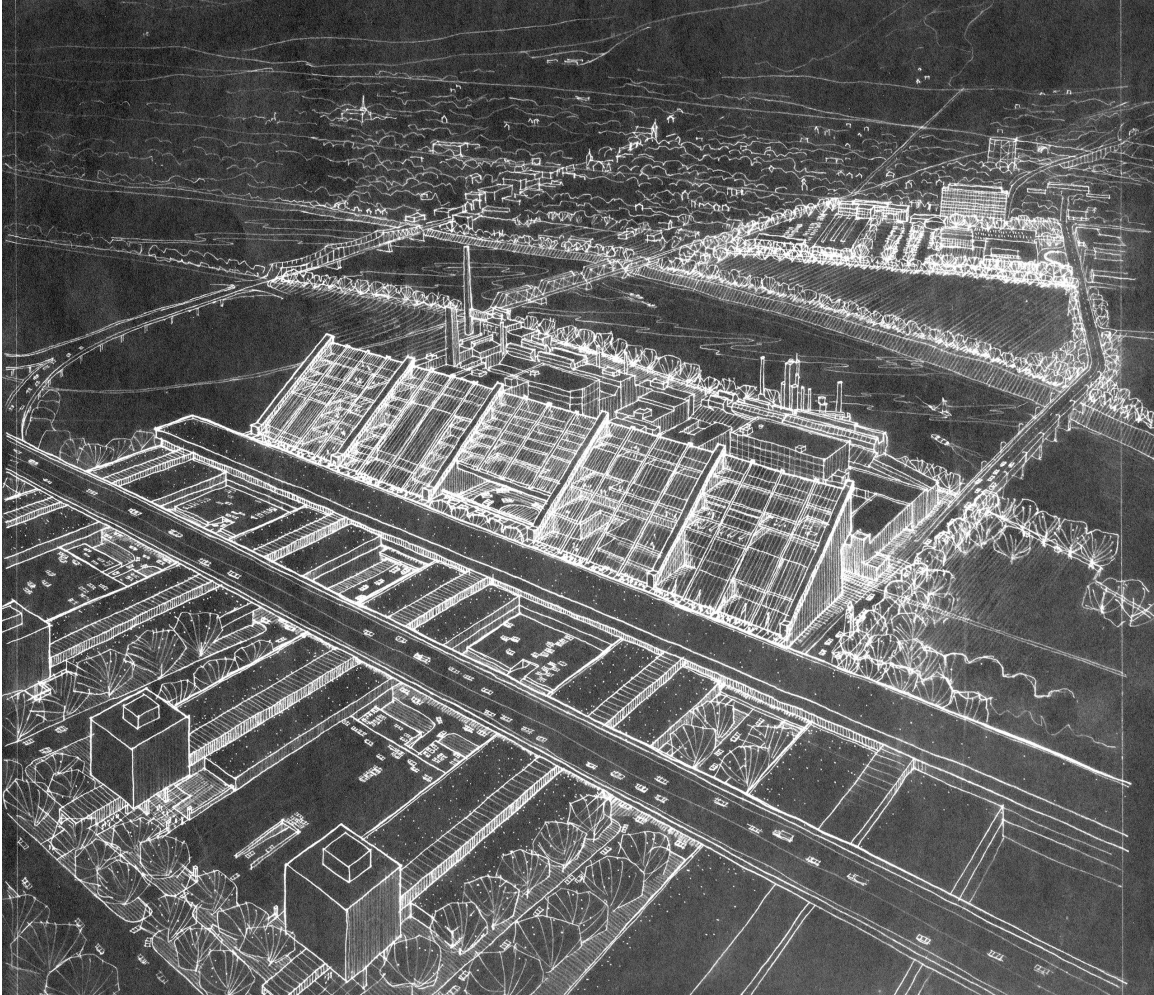


**Figure 4.05** Original Corning Glass Center, Wallace K. Harrison and Max Abramovitz, 1948-51. Colorized postcard, 3 x 5 inches. From: <https://www.cmog.org/about/architecture> (Accessed October 13, 2018).

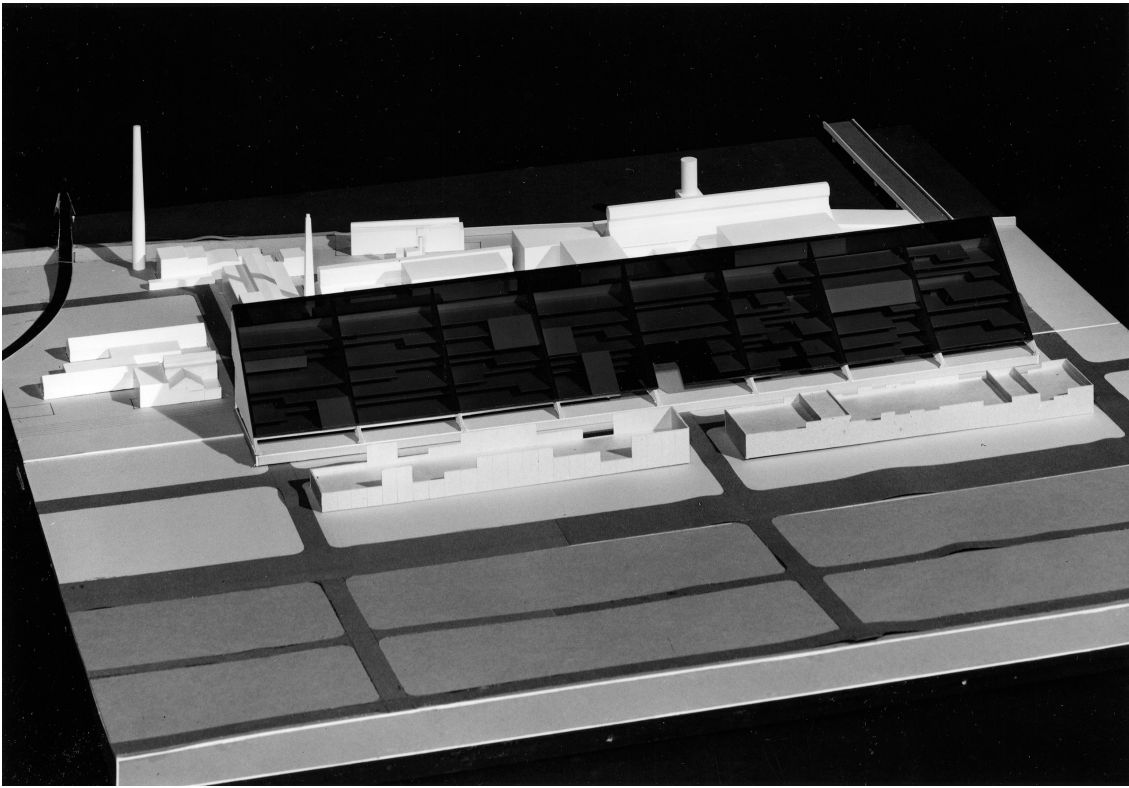
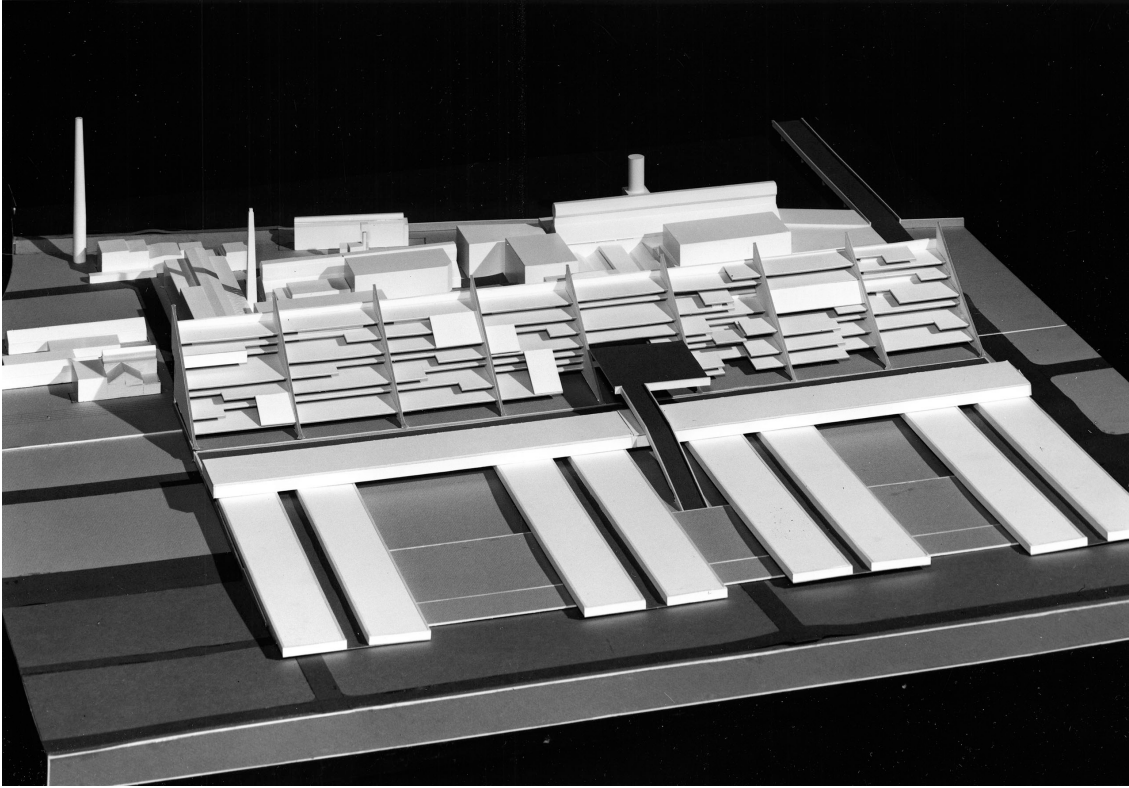




**Figure 4.06** Corning Glass Center engulfed by floodwaters, June 23, 1972. Courtesy Corning Museum of Glass. From: <https://www.cmog.org/article/flood-1972> (Accessed October 13, 2018).



**Figure 4.07** Perspective drawing of GBA's Corning Main Plant Study showing connection to Corning Glass Center across the Chemung River, mid-1960s. Box 12, GBP, BHL.



**Figures 4.08 & 4.09** Model photographs of GBA's Corning Main Plant Study, mid-1960s. Photographic prints, 8 x 10 inches. Box 12, GBP, BHL.



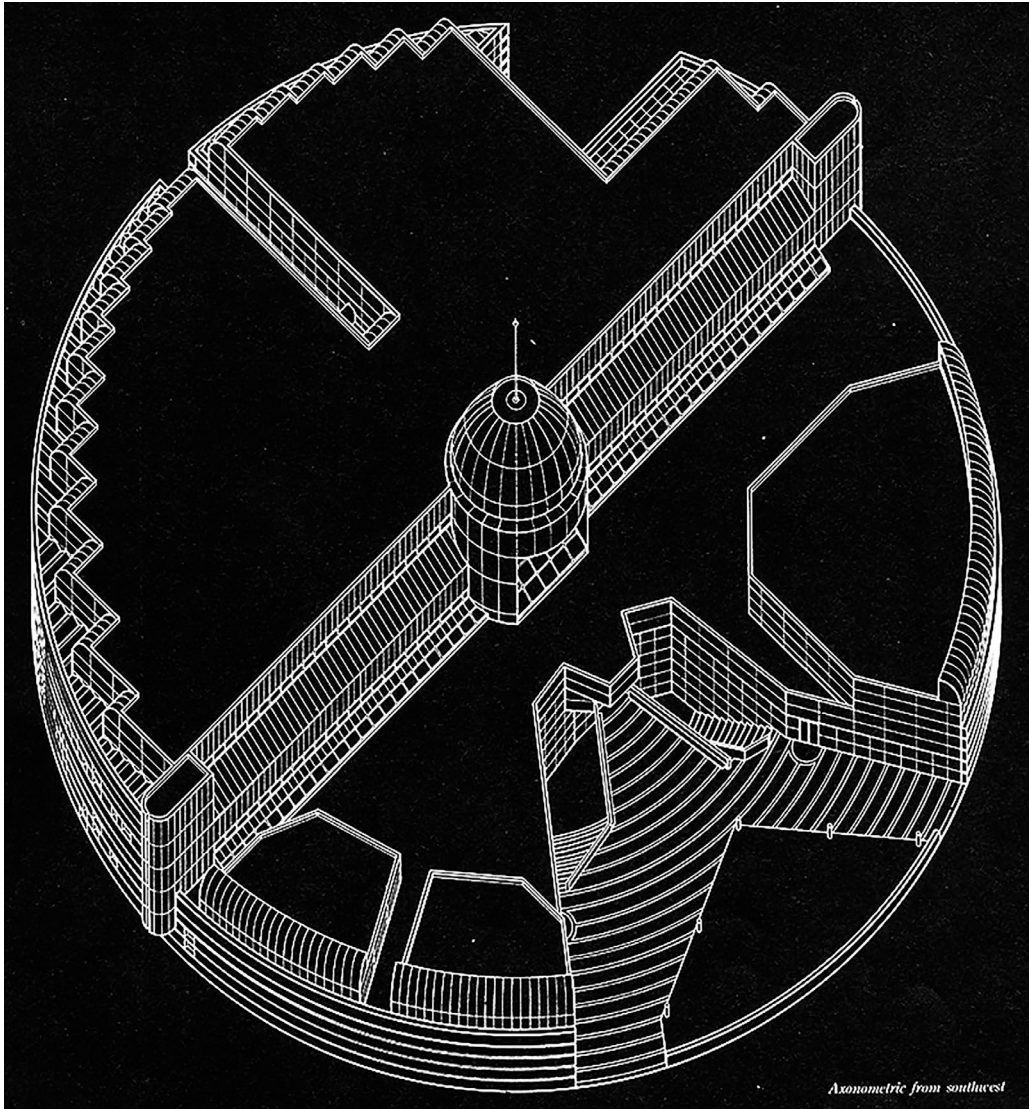


**Figure 4.10** GBA, Model view of Corning Public Library first design, Corning, New York, 1969. Photograph by Balthazar Korab, Courtesy of the Library of Congress. Box 12, GBP, BHL.

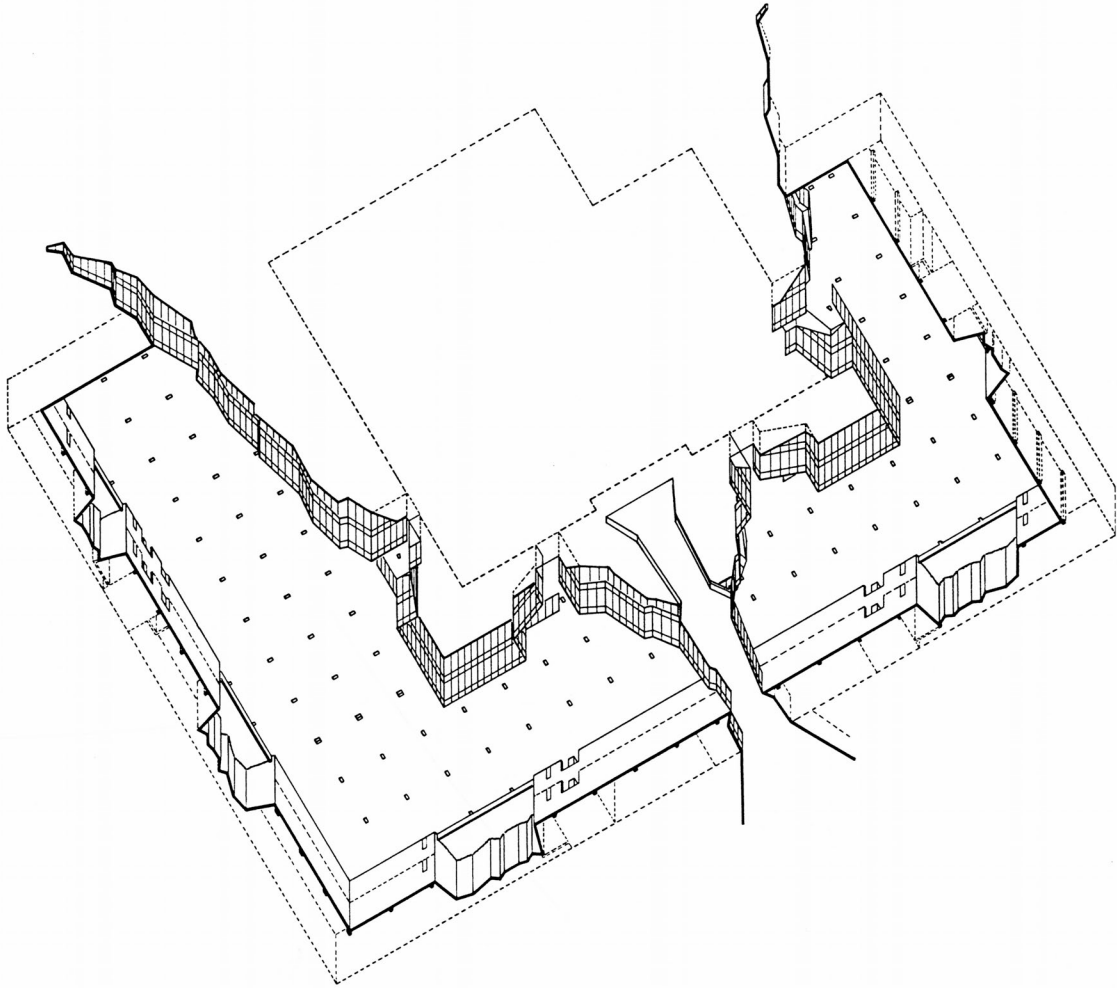


**Figure 4.11** GBA, Model view of Corning Public Library second design, Corning, New York, 1969. Photograph by Balthazar Korab. From: Marlin and Futagawa, 136.

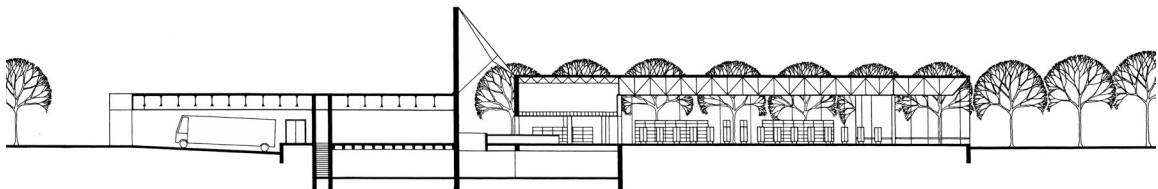




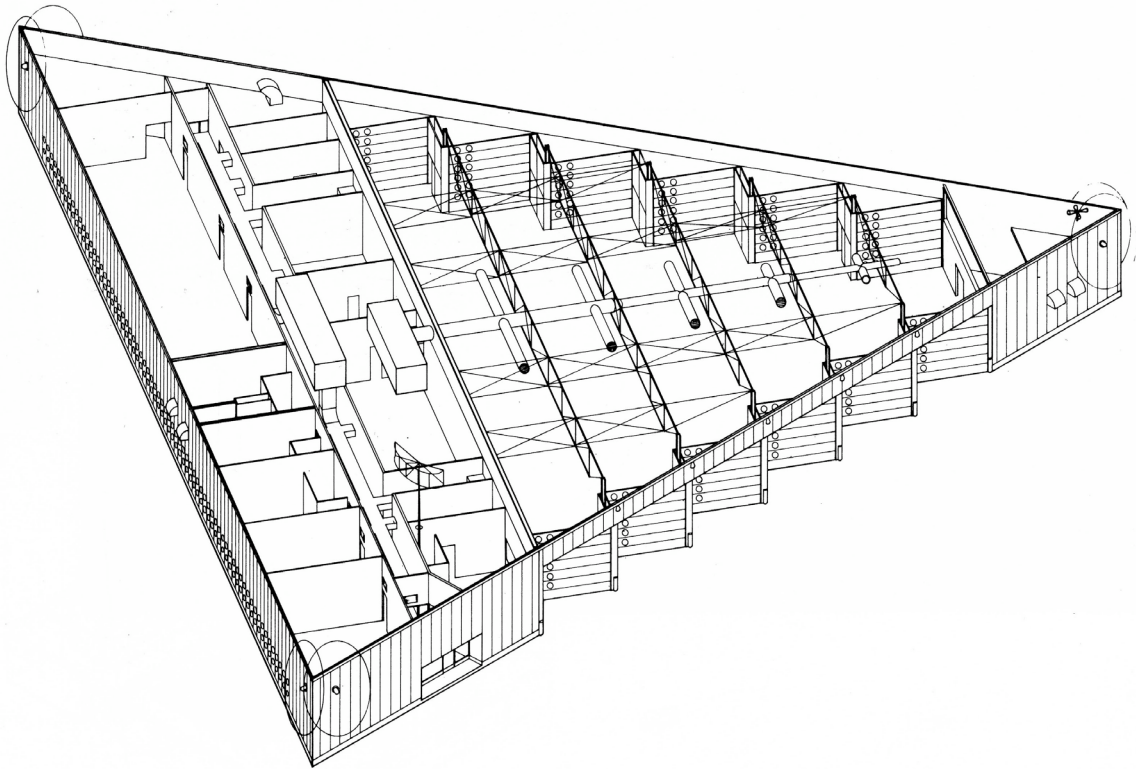
**Figure 4.12** GBA, College of Law Building, University of Iowa, Iowa City, Iowa, 1982-86. From: *GA Document 9* (1984), 98.



**Figure 4.13** GBA, Axonometric drawing of addition to Main Library (Geisel Library), University of California, San Diego, California, 1987-93. From: Birkerts and Schwartz, 164.



**Figure 4.14** GBA, Section drawing of Corning Public Library II, 1969. From: Birkerts and Schwartz, 199.



**Figure 4.15** GBA, isometric drawing, Municipal Fire Station, Corning, New York, 1973-74. From: Birkerts and Schwartz, 63.





**Figure 4.16** GBA, Corning Fire Station, Photograph by Paul Chu Lin. From: Birkerts and Schwartz, 65.

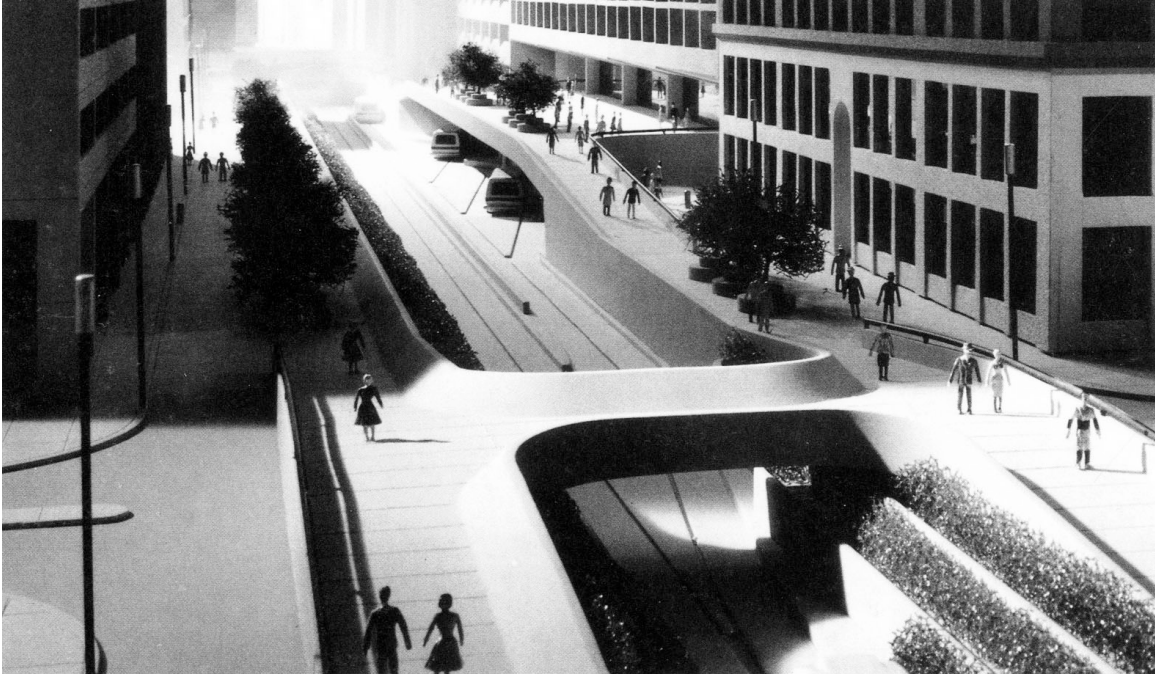


**Figure 4.17** GBA, Duluth Public Library, Duluth, Minnesota, 1969-74. Photograph by Yukio Futagawa. From: Marlin and Futagawa, 139.



**Figure 4.18** Gunnar Birkerts and Associates (GBA), IBM Corporate Computing Center, Sterling Forest, New York, 1970-72. Photograph by Toshiharu Kitajima (RETORIA). From: Marlin and Futagawa, 149.



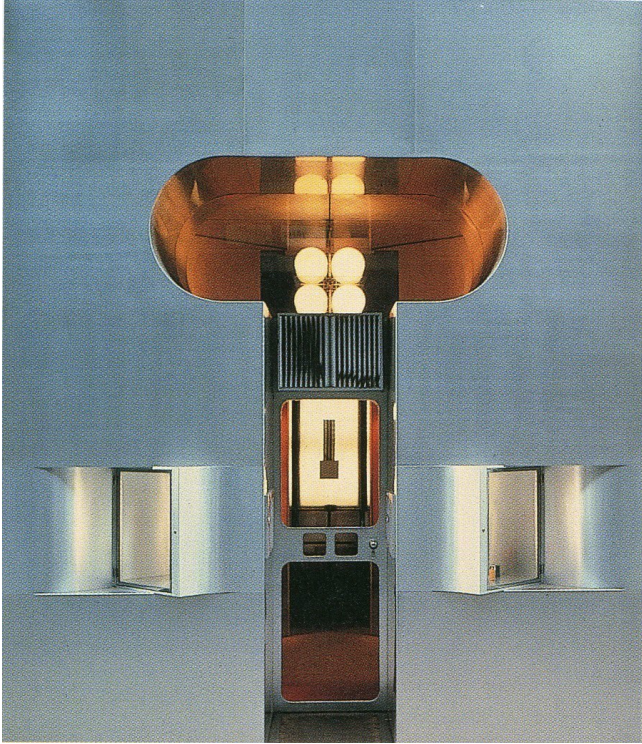


**Figure 4.19** GBA, Model of central business district layout, Dual Mode Transportation Study, Commissioned by General Motors, 1973-74. Photograph by Balthazar Korab, Courtesy of the Library of Congress. From: Marlin and Futagawa, 168.



**Figure 4.20** GBA, Perspective rendering of IBM Office Building, Southfield, Michigan, 1974-79. 35mm slide. Box 84, GBA, BHL.

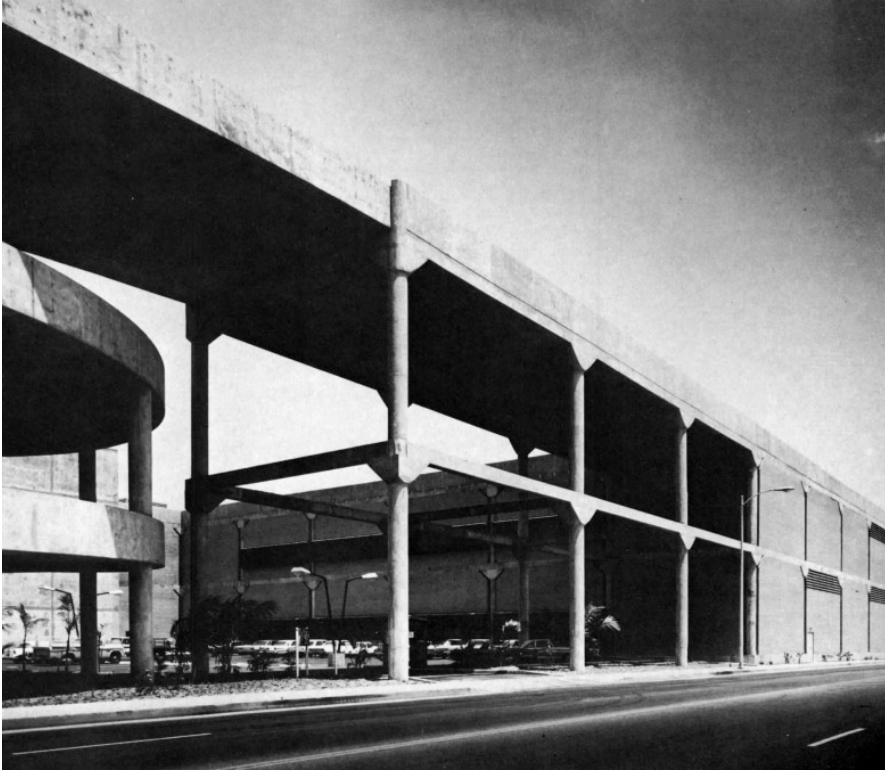




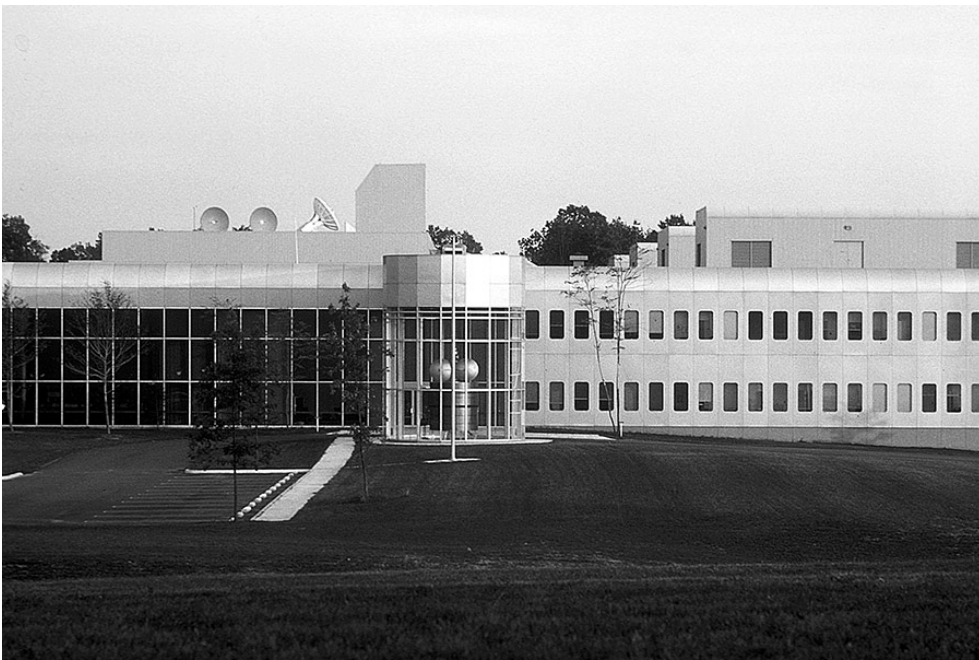
**Figure 4.21** Hans Hollein, Retti Candle Shop, Vienna, Austria, 1964-65. From: <https://www.dwell.com/article/design-icon-8-buildings-by-hans-hollein-99e06b82/6133463465294893056> (Accessed October 13, 2018).



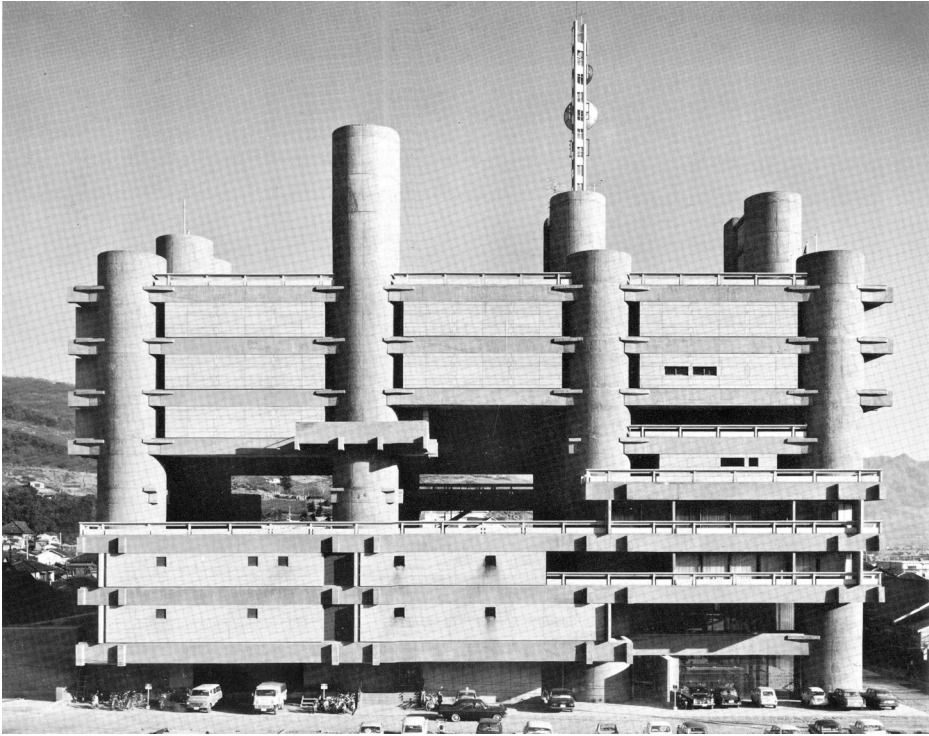
**Figure 4.22** Hans Hollein, Christa Metek Boutique, Vienna, Austria, 1966. From: <http://www.hollein.com/eng/Architecture/Nations/Austria/Christa-Metek-Boutique> (Accessed October 13, 2018).



**Figure 4.23** Daniel, Mann, Johnson, and Mendenhall (DMJM), Cesar Pelli and Anthony Lumsden, designers, Worldway Postal Center, Los Angeles, California, 1968.



**Figure 4.24** DMJM, Cesar Pelli, designer, COMSAT Laboratories, Clarksburg, Maryland, completed 1969. From: <https://archpaper.com/2016/02/where-my-comsat/> (Accessed October 13, 2018)

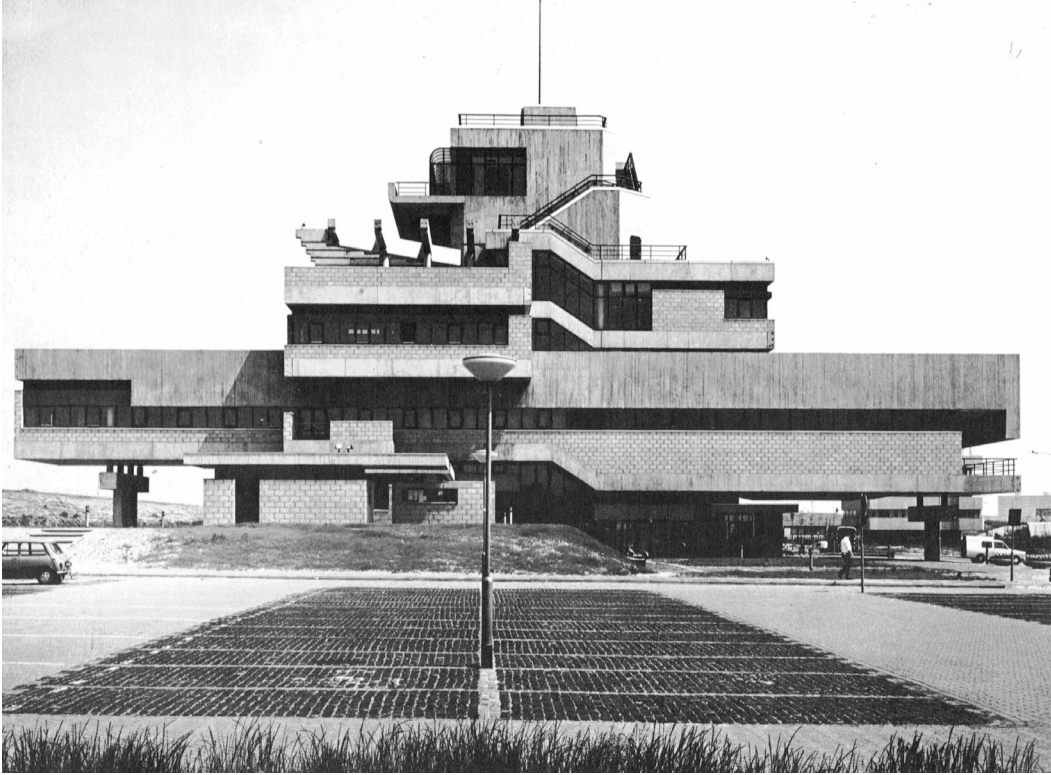


**Figure 4.25** Kenzo Tange & URTEC, Yamanashi Press and Broadcasting Centre, Kofu, Japan, completed 1966.



**Figure 4.26** Kenzo Tange & URTEC, Shizuoka Press and Broadcasting Centre, Tokyo, Japan, completed 1967.





**Figure 4.27** Van den Broek and Bakema, Town Hall, Terneuzen, Netherlands, 1963-72.



**Figure 4.28** Van den Broek and Bakema, Dutch Pavilion, EXPO '70, Osaka, Japan, 1969-70.





**Figure 4.29** IBM Sterling Forest with red “interface” between humans and computers. 35mm slide. Box 84, GBA records, BHL.



LAMBORGHINI "COUNTACH"

**BERTONE** 

**Figure 4.30** Lamborghini Countach, Design by Gruppo Bertone, Promotional brochure distributed by Bertone, 1971.

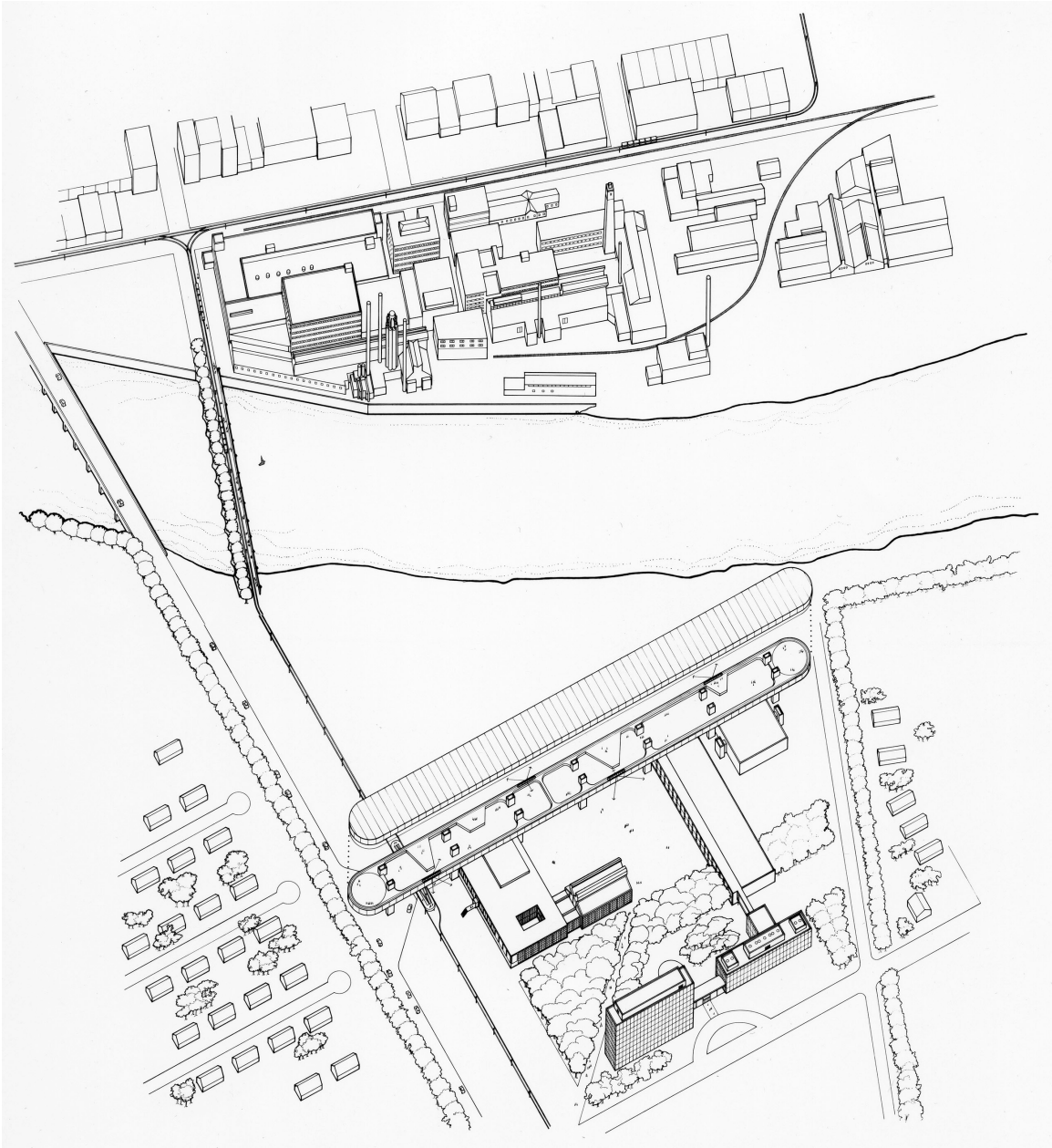


**Figure 4.31** Ferrari 512S Modulo, Design by Carrozzeria Pininfarina, credited to Paolo Martin, 1970.

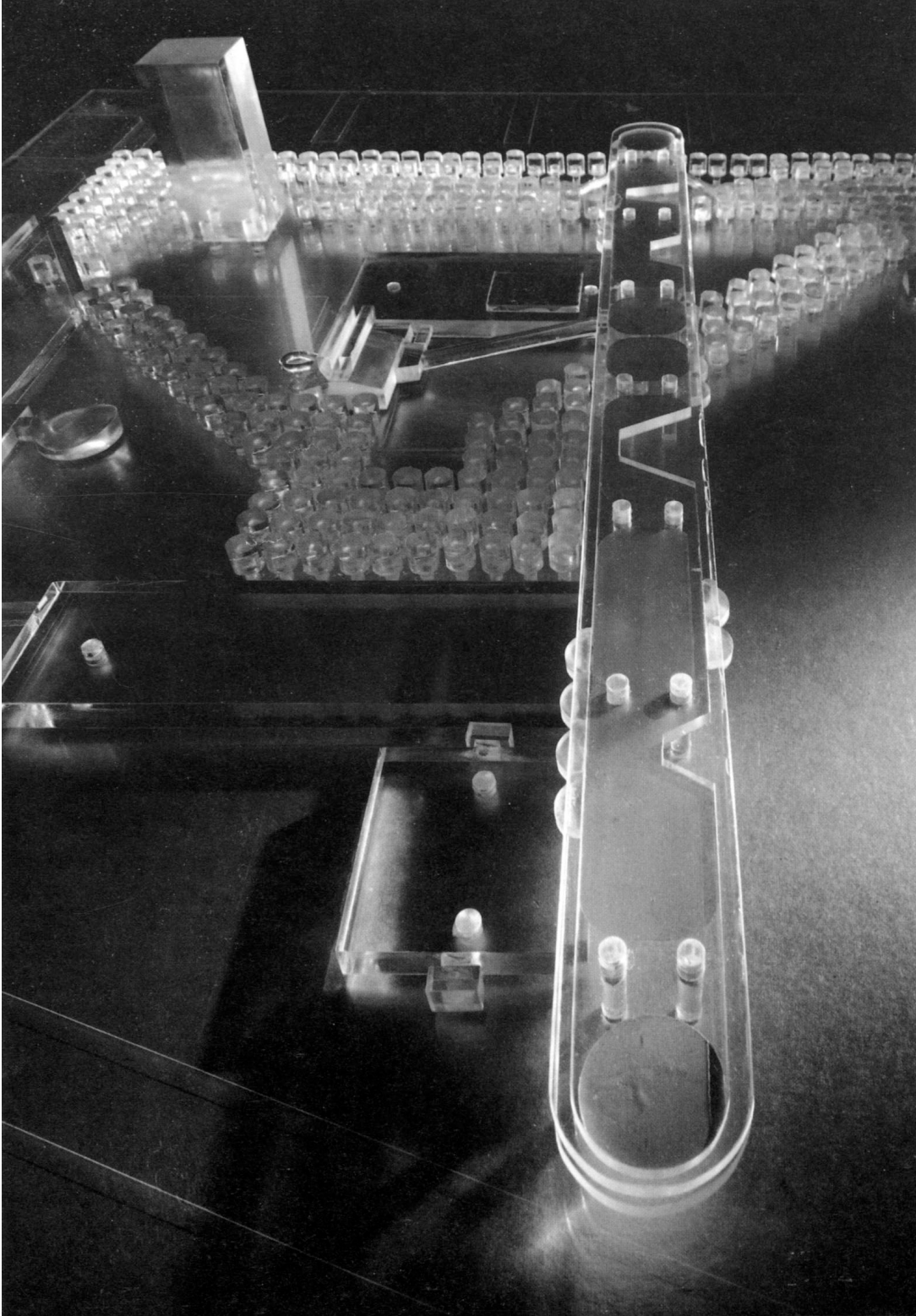


**Figure 4.32** Maserati Boomerang, Design by Giorgetto Giugiaro / Italdesign Giugiaro, 1971.

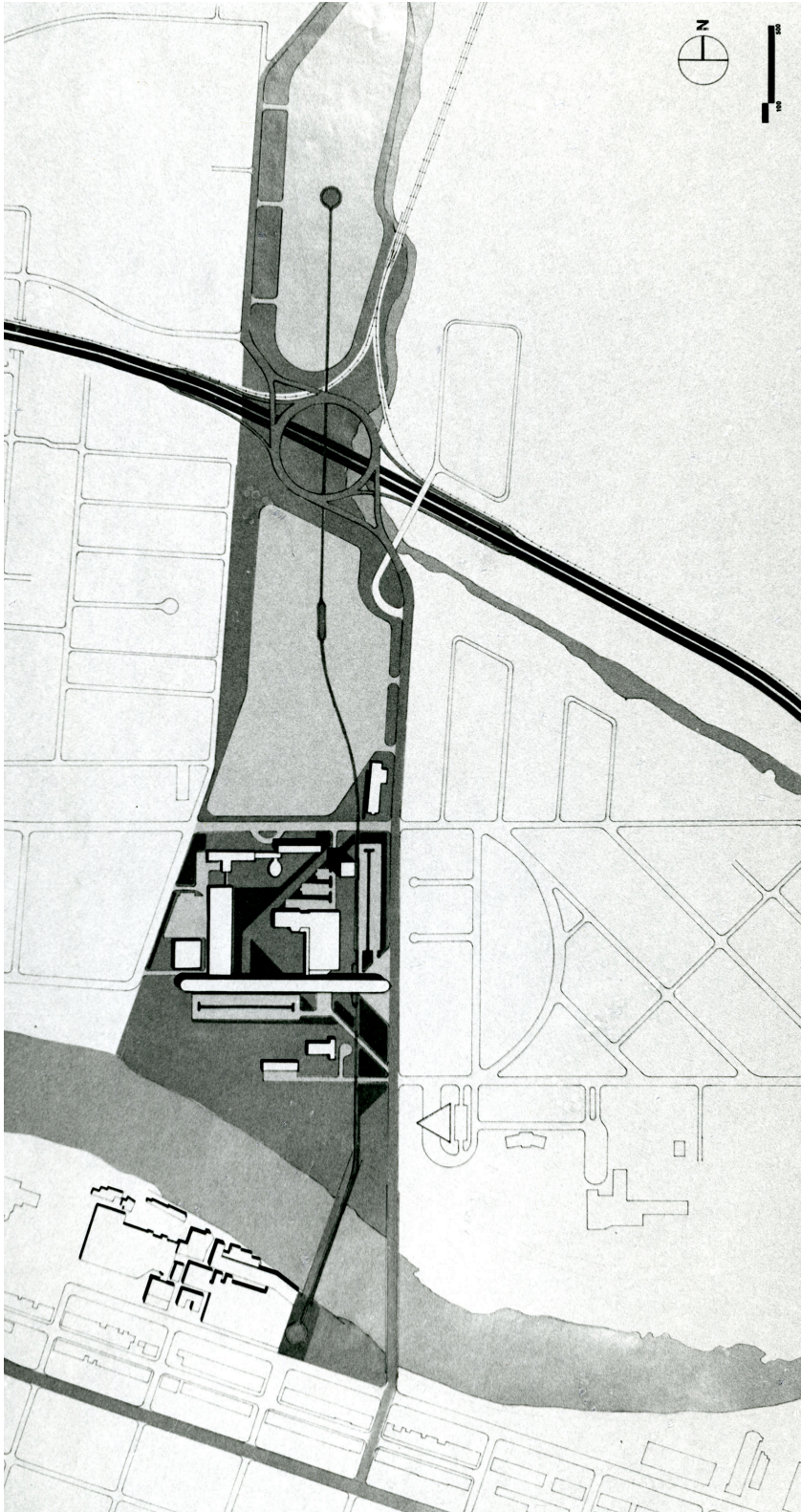




**Figure 4.33** GBA, Axonometric drawing of Corning Glass Center rounded-end bar scheme, Corning, New York, ca. 1972-76. Black and white print, 8 x 10 inches. Box 12, GBP, BHL.

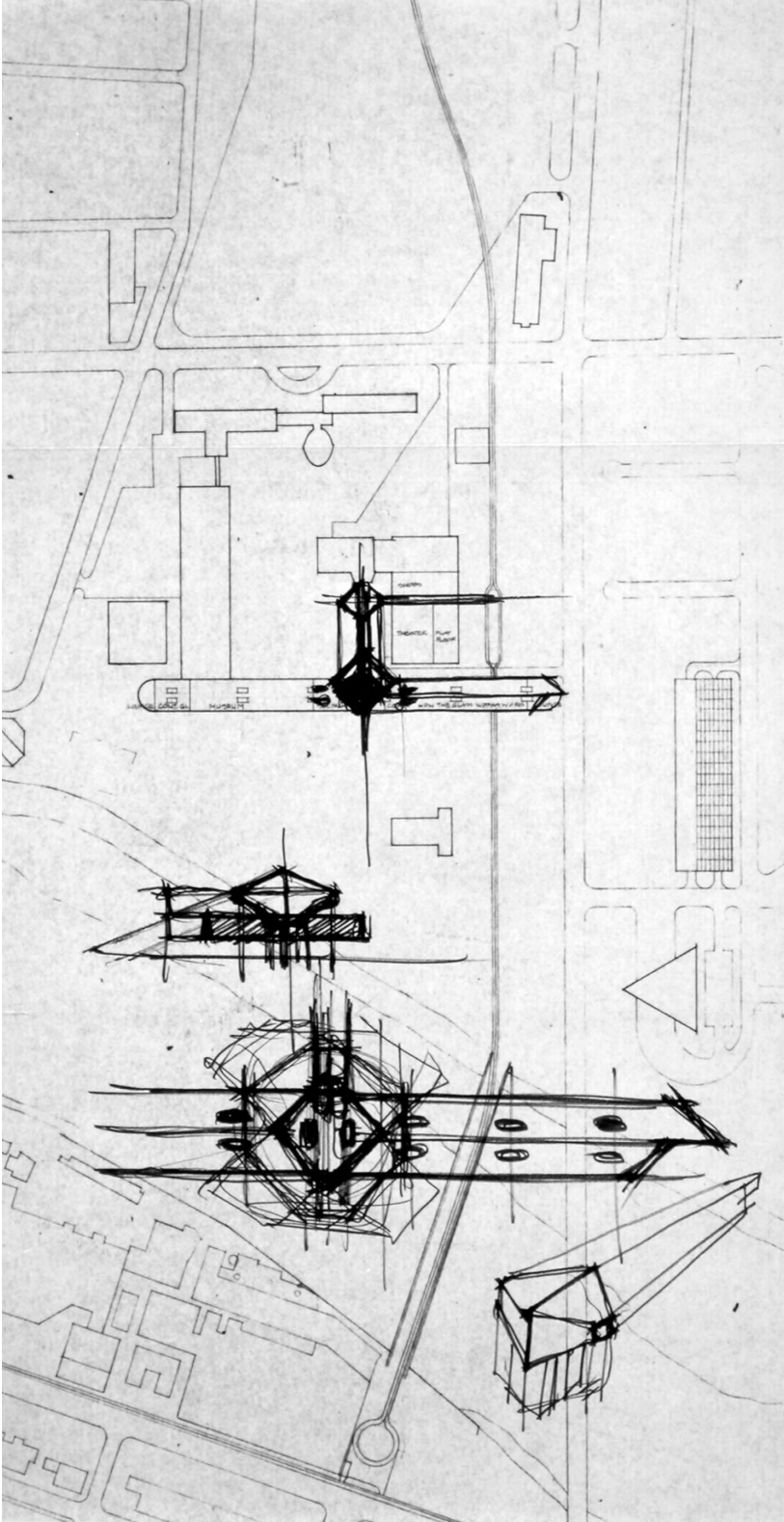


**Figure 4.34** GBA, Corning Glass Center, rounded-end bar scheme, ca. 1972-76. Schematic design model built of transparent plastic. Photograph by Balthazar Korab. From: Marlin and Futagawa, 199.



**Figure 4.35** Site plan for Corning Glass Center rounded-end bar scheme, showing monorail system running from parking lots to the east across the river to the Corning Glass Works on the west, ca. 1976. Color print, 8 x 10 inches. Box 12, GBP, BHL.





**Figure 4.36** Sketches for Corning Glass Center pointed-end bar scheme, on top of site plan for rounded-end bar scheme, ca. 1974-76. Ink sketch on blue-line print, 9 1/2 x 18 1/4 inches. GBP, Bentley Image Bank, © Regents of the University of Michigan.

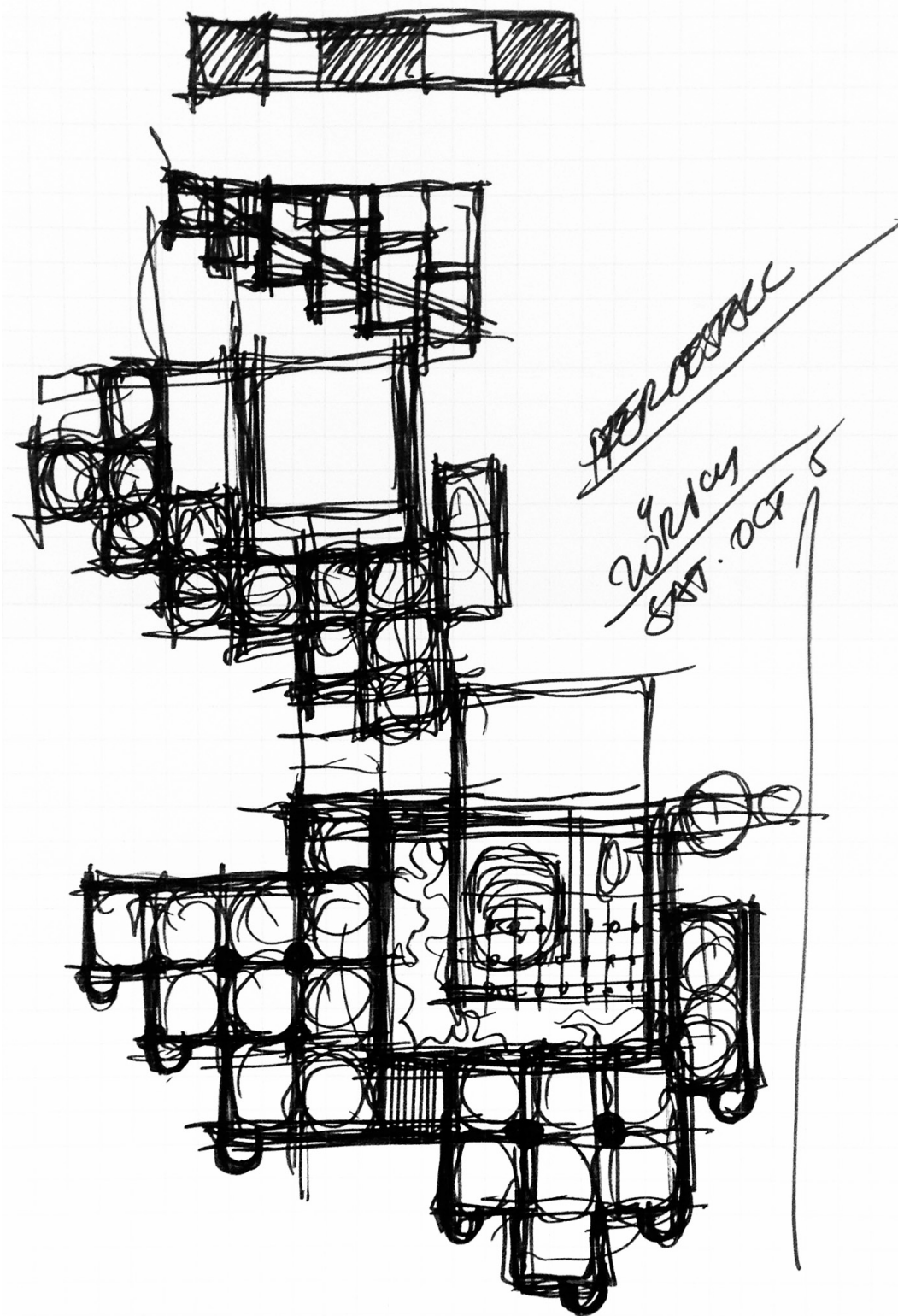


**Figure 4.37** GBA, Model view of Corning Glass Center triangular scheme, looking west from Glass Center toward Corning Glass Works. Corning, New York, ca. 1972-76. Photographic print, 8 x 10 inches. Box 12, GBP, BHL.

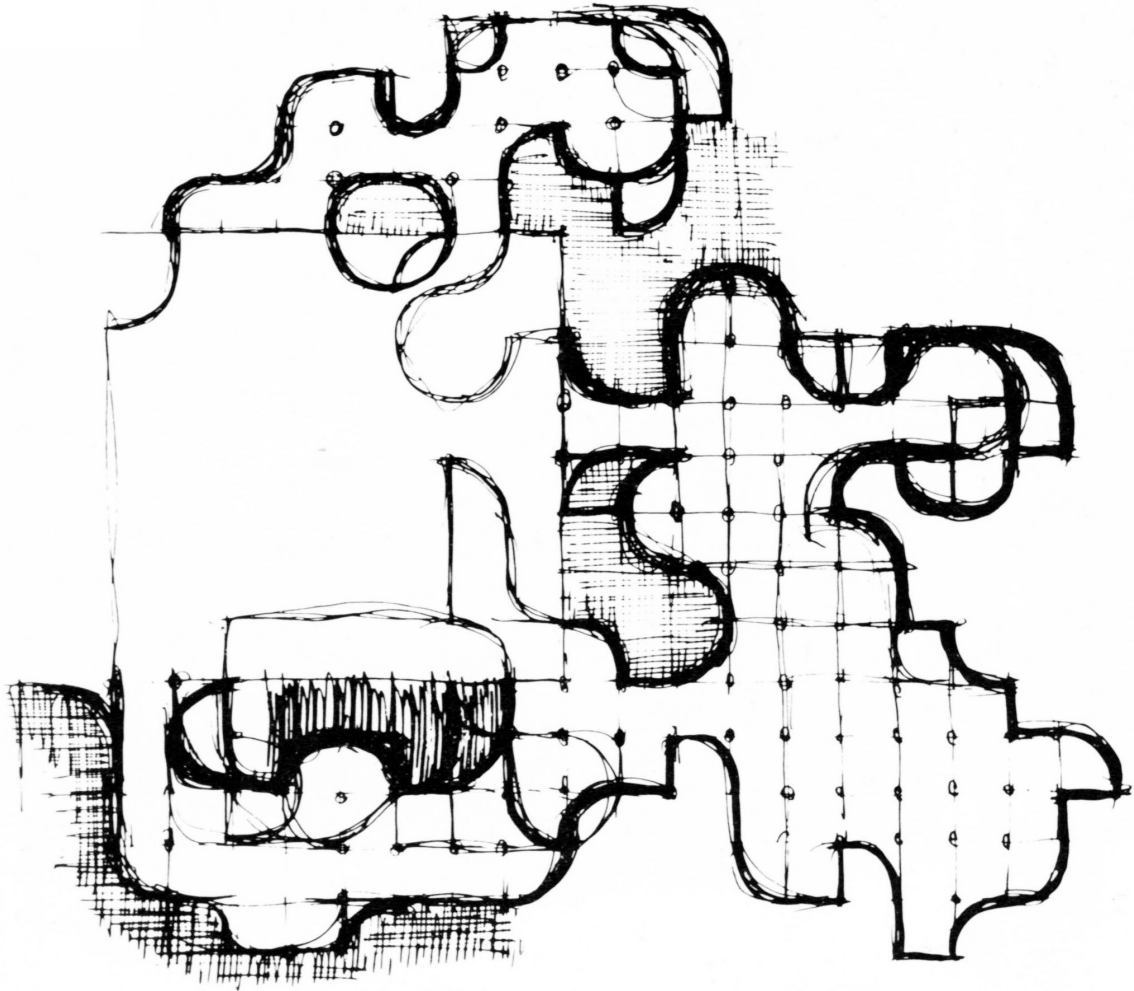




**Figure 4.38** GBA, Model view of Corning Glass Center triangular scheme, looking east from Corning Glass Works toward Glass Center, proposed monorail along bridge and parking lot in foreground. Corning, New York, ca. 1972-76. Photographic print, 8 x 10 inches. Box 12, GBP, BHL.

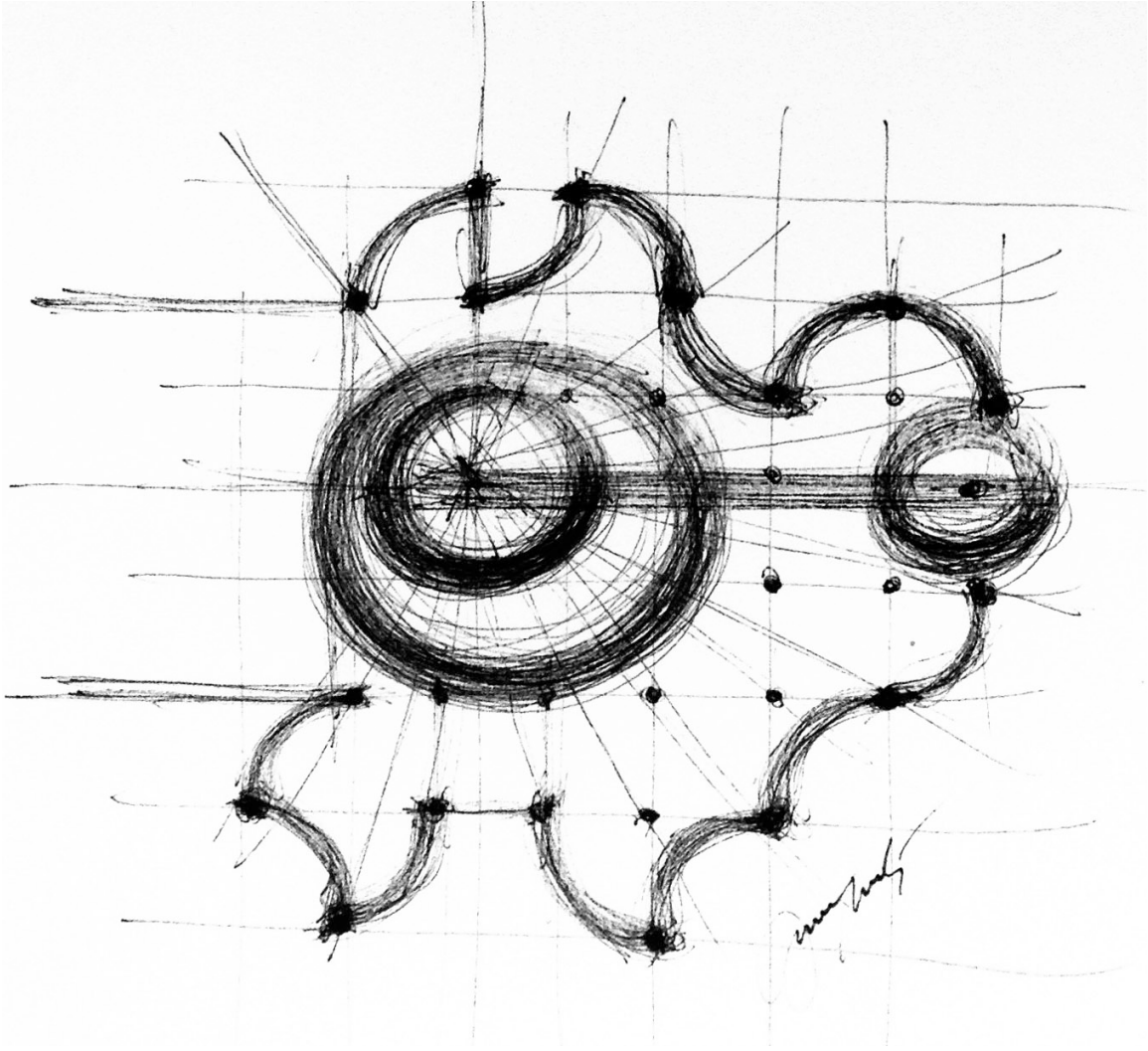


**Figure 4.39** Undated sketch of Corning Museum of Glass. Ink sketch on graph paper with notation "Pferdestall (Horse Barn Bar), Zurich, Sat, Oct 5," 8-1/2x11 inches. Drawer 3, Folder 6, GBP, BHL.

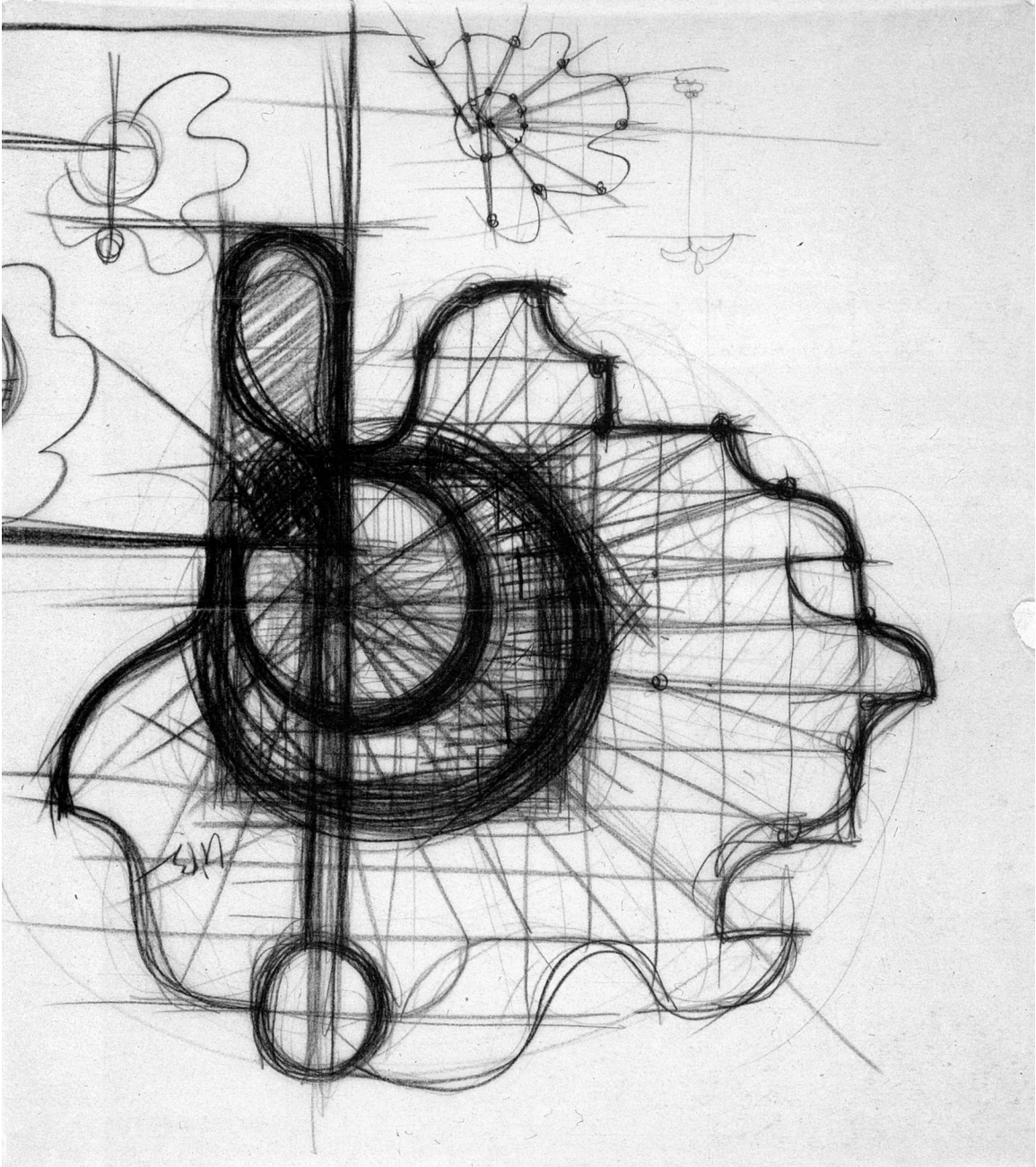


**Figure 4.40** Gunnar Birkerts, preliminary sketch for Corning Museum of Glass, ca. 1976.  
From: Marlin and Futagawa, 206.

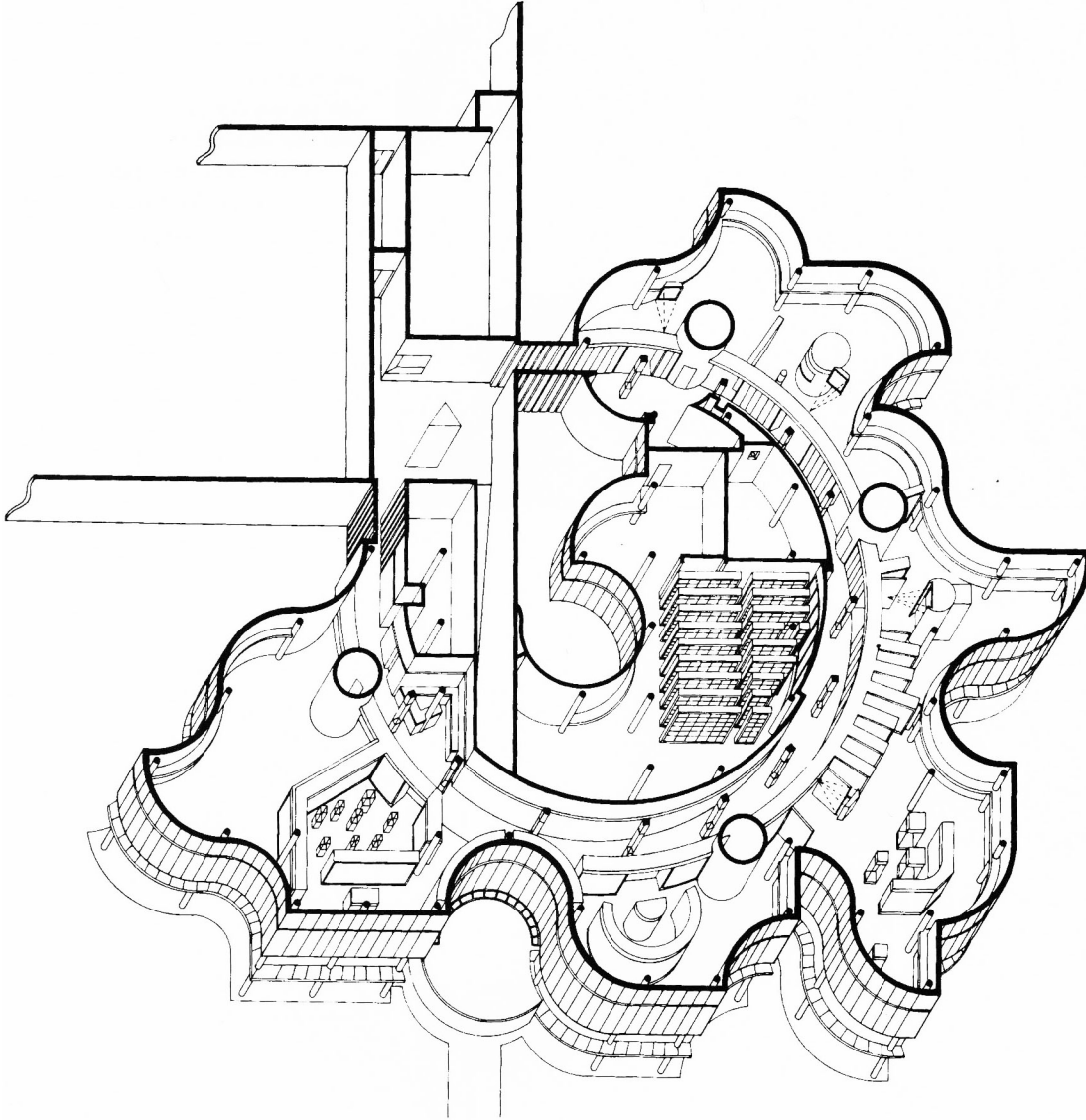




**Figure 4.41** Gunnar Birkerts, undated sketch of Corning Museum of Glass. Ink sketch on tracing paper, 18x23 inches. Drawer 3, Folder 6, GBP, BHL.



**Figure 4.42** Gunnar Birkerts, preliminary sketch for Corning Museum of Glass, ca. 1976. From: Kaiser, 104.



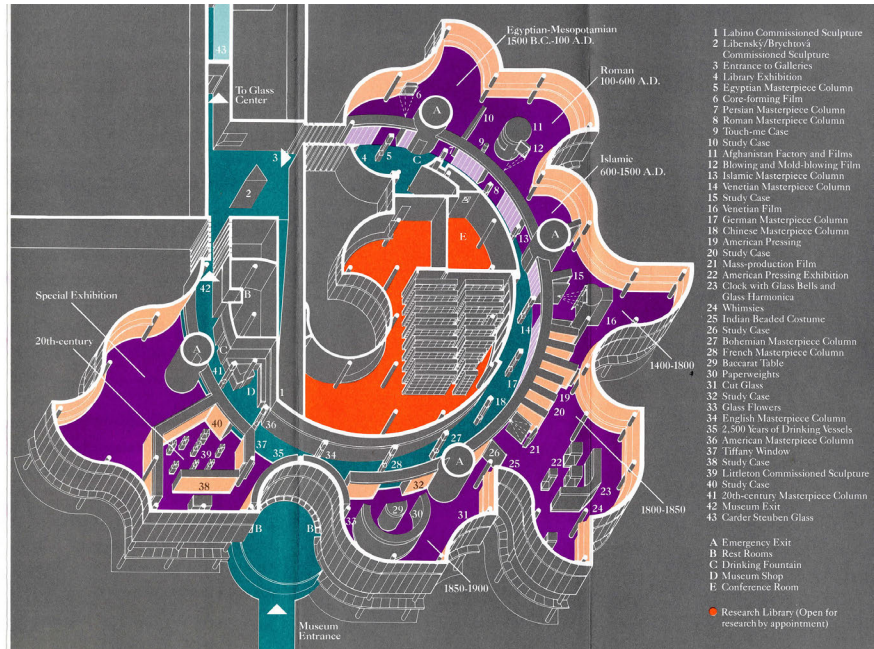
**Figure 4.43** Isometric drawing of Corning Museum of Glass, built version. From: Marlin and Futagawa, 207.

### 3 WAYS AROUND THE MUSEUM

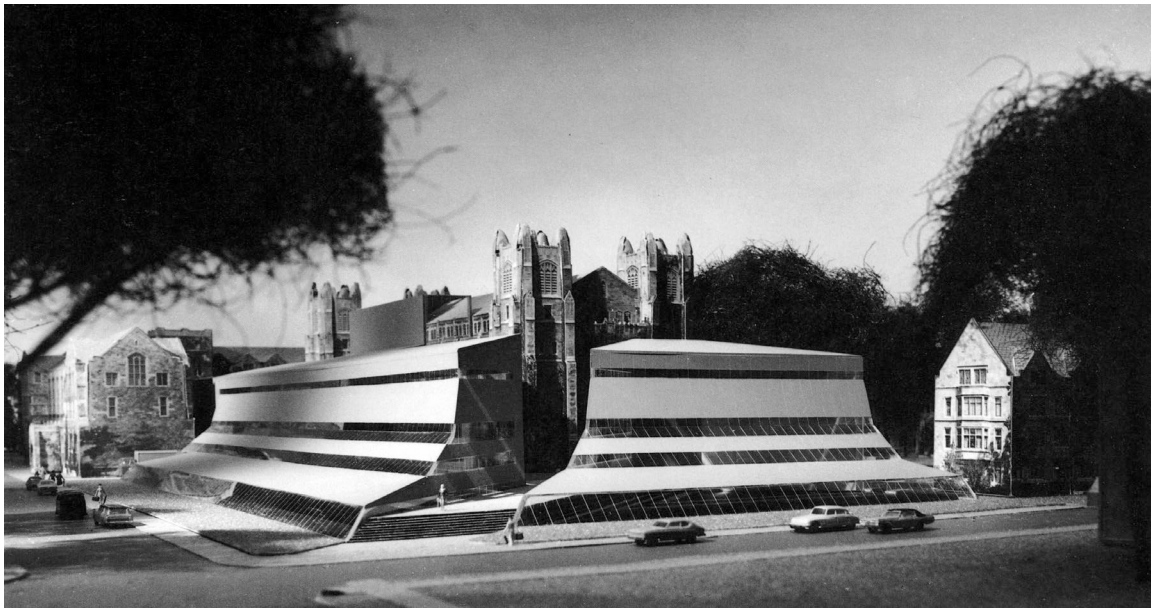
**THE TWENTY MINUTE TOUR** (blue green) focuses on the twelve masterpiece columns displaying the most important pieces in the collection; four short films (approximately three minutes each) describe great moments which changed the history of glass. (Don't miss the earliest glass sculpture in the world in the Egyptian Masterpiece Column, 5; the Tiffany Window, 37; or the Carder Steuben Glass, 43.)

**THE FORTY MINUTE TOUR** (violet) allows time to see more of the major objects in the masterpiece corridor wall and to enjoy the central displays in the seven galleries marked with a line on the plan, as well as the special exhibition which changes each summer. (Don't miss the Afghanistan Factory and Films, 11; the machines for mass production, 22; or the 20th-century gallery.)

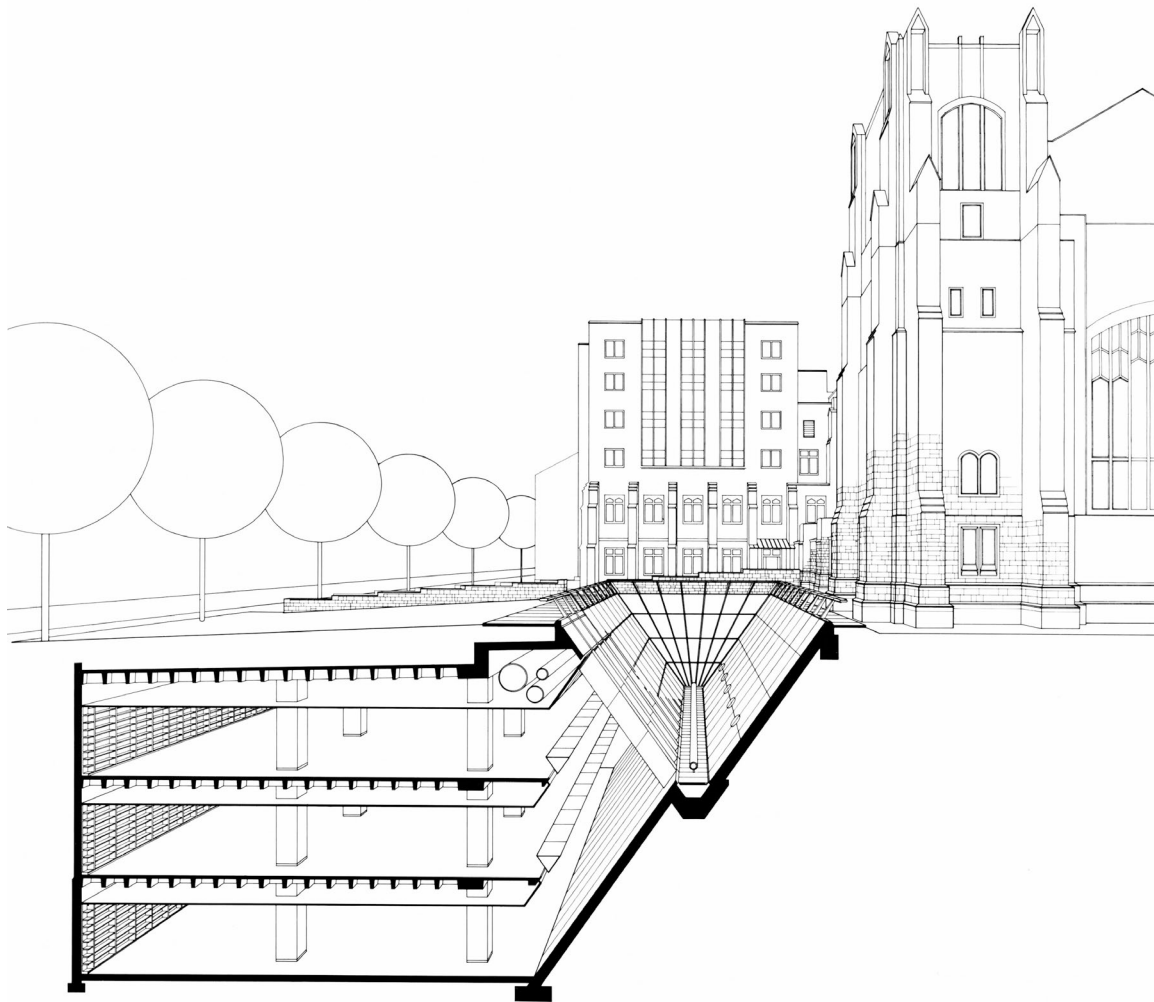
**THE NINETY MINUTE TOUR** (light orange) covers more than 100 window cases devoted to detailed stories about glassmaking—from cosmetic jars of ancient Egypt to whale oil lamps of 19th-century New England. (Don't miss the whimsies, 24; the cut glass, 31; or the glass flowers, 33.) Placed throughout the galleries are special collections—the Strauss History of Drinking Vessels, 35; the Houghton Paperweights, 30; the Beinecke German Enamelled Glass, 15; the Esterly Lacy Pressed Glass, 19; to name a few. (Don't miss the Indian beaded costume, 25; the clock with glass bells and the glass harmonica, 23; and the 'Touch-me case, 9.) In addition the vast study collections are available for those with virtually unlimited time.



**Figure 4.44** Tour booklet for Corning Museum of Glass featuring colorized version of Figure 4.45. Box 12, GBP, BHL.

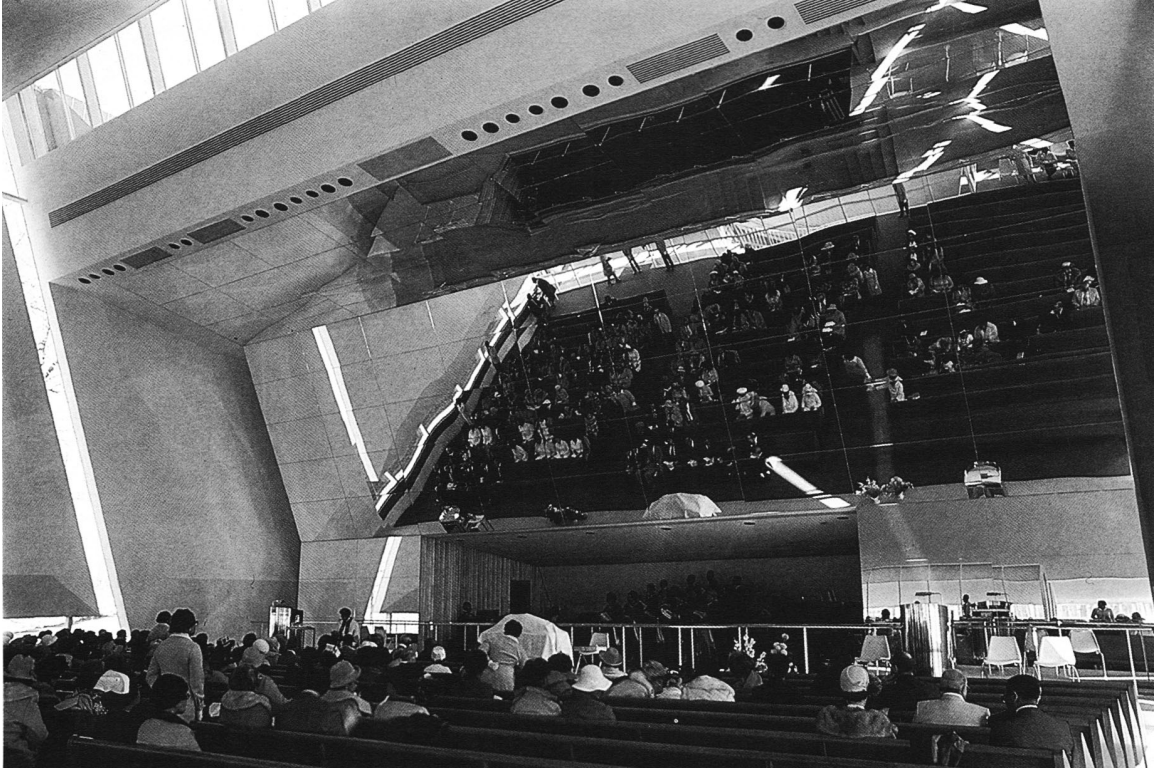


**Figure 4.45** GBA, Addition to University of Michigan Law Library, Early Scheme ca. 1974. Photograph by Balthazar Korab. From: Marlin and Futagawa, 180.



**Figure 4.46** GBA, Addition to University of Michigan Law Library, 1976-81. Section perspective drawing of realized scheme, showing relationship between underground levels and existing Collegiate Gothic library. From: Marlin and Futagawa, 182.





**Figure 4.47** GBA, interior of Calvary Baptist Church, Detroit, Michigan, 1974-77. Mirrors permit view of congregation as a group and baptismal pool from above. Photograph by Paul Chu Lin. From: Kaiser, 85.

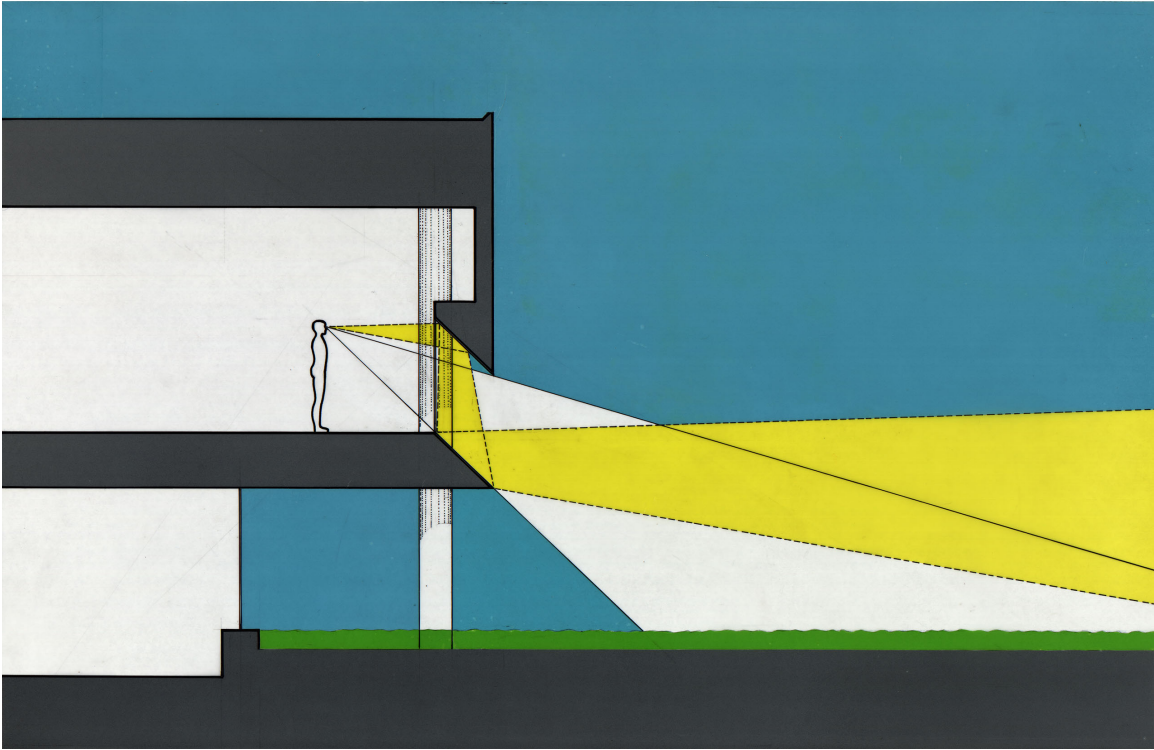


**Figure 4.48** GBA, interior of Calvary Baptist Church showing continuous windows and skylight, mirrored wall, and baptismal pool at lower right. Photograph by Timothy Hursley. From: Birkerts and Schwartz, 69.





**Figure 4.49** GBA, photomontage of IBM Regional Office, Southfield, Michigan showing concave reflectors and canted windows. Box 13, GBP, BHL.



**Figure 4.50** Section drawing showing periscope apparatus on exterior gallery walls of Corning Museum of Glass. Drawer 25, Folder 6, GBA records, BHL.



**Figure 4.51** GBA, Corning Museum of Glass, view of entrance vestibule with periscope windows above. Photograph by Yukio Futagawa. From: Marlin and Futagawa, 206.



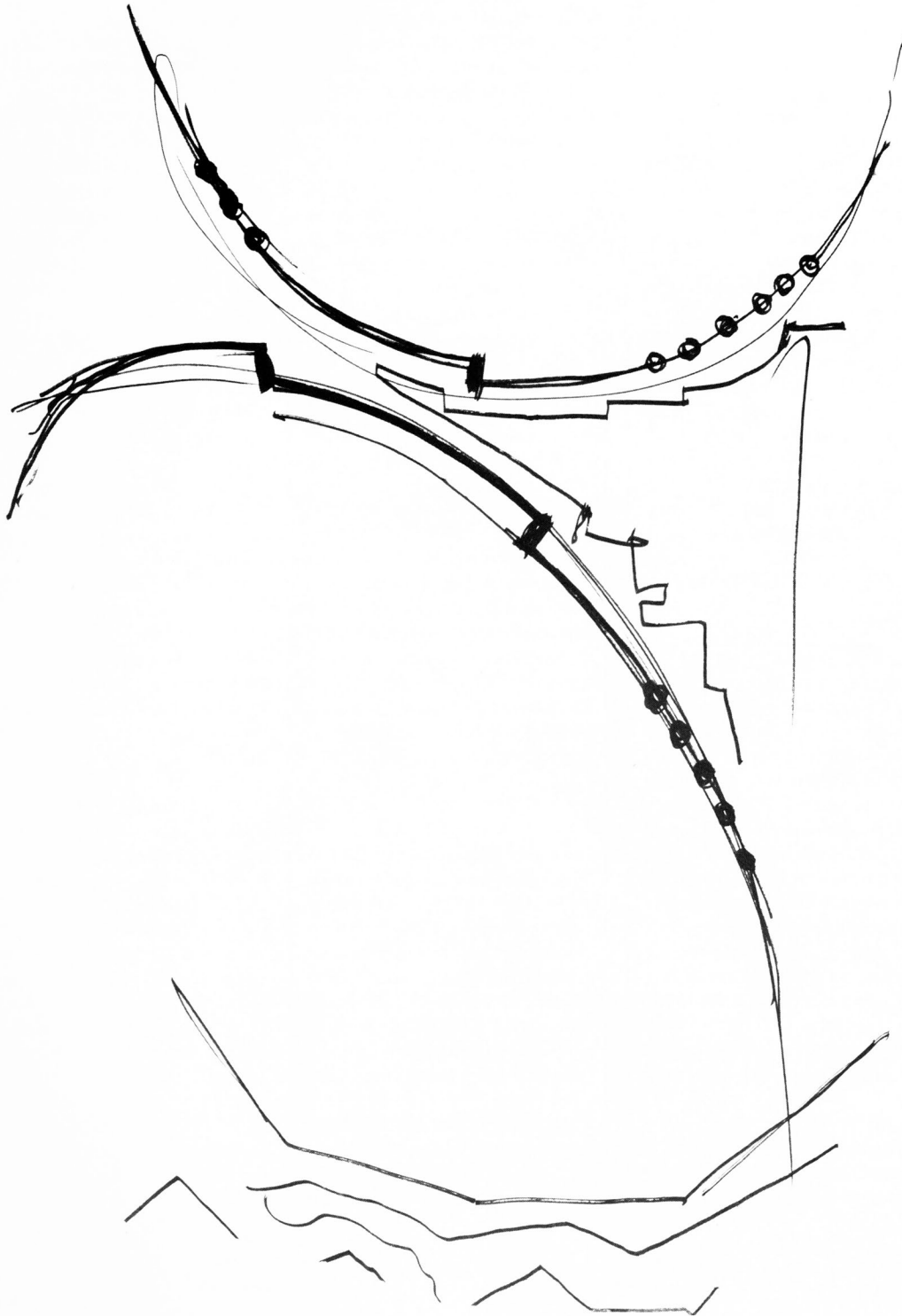
**Figure 4.52** GBA, Corning Museum of Glass, view of gallery with periscope windows. Photograph by Yukio Futagawa. From: Marlin and Futagawa, 207.





**Figure 4.53** Gunnar Birkerts conducting a desk critique in the design studio, unidentified location, ca. late 1980s or early 1990s. 35mm slide. Box 8, GBP, BHL.





**Figure 4.54** Gunnar Birkerts, preliminary sketch of Corning Public Library first design, ca. 1969. From: Gunnar Birkerts, *Buildings, Projects, and Thoughts, 1960-1985* (Ann Arbor: University of Michigan College of Architecture and Urban Planning, 1985).

**Gunnar Birkerts**



**Buildings, Projects  
And Thoughts  
1960-1985**

**Figure 4.55** Cover of Gunnar Birkerts, *Buildings, Projects, And Thoughts, 1960-1985*, featuring process sketch of Ferguson Residence, Kalamazoo, Michigan, ca. 1981-82.





**Figure 4.56** Entrance to Corning Museum of Glass addition by GBA. Photograph by Balthazar Korab, Courtesy of the Library of Congress. Photographic print, 8 x 10 inches. Box 12, GBA, BHL.

## CONCLUSION

### Signing Buildings

A few years after the Corning Museum of Glass was completed, Birkerts began the unusual practice of installing small plaques near the entrances to buildings he designed (Figure 5.01). These plaques featured his firm's logo in polished stainless steel and enamel. Consisting of stylized letters G and B interlocked to form a square with a capital A in the upper right-hand corner in a serif typeface, this logo had been in use on firm documents since 1964. While certainly not unprecedented, installing such plaques was far from normal protocol in the 1980s.

At the office building he designed for Holtzman & Silverman Developers in Southfield, Michigan (1983-89), a 6 x 6 inch plaque was placed within a small niche cast into the exposed concrete wall. This wall flanks an entry pavilion at street level that contains an elevator and little else. Descending to the main level, one emerges into a small, partially buried office—an unexpected *gesamtkunstwerk* in suburban Detroit. Outfitted with built-in furniture and wall paneling in light-stained oak, deep purple woolen carpets, faux plants, and polished stainless steel fixtures, Holtzman & Silverman is arguably Birkerts's most wholly realized project. The plan unfolds fluidly and symmetrically from the elevator toward a gently curved east-facing wall in tinted glass (Figure 5.02). Views into the adjacent Rouge River Valley are peppered with the client's

collection of folk sculpture, in jarring contrast to the rich, gleaming surfaces inside. Yet the presence of these sculptures makes clear that the clients treated Birkerts's design as a building-scale artwork to add to their collection, and the GBA plaque functioned as a literal signature to authorize their acquisition. If, as this suggests, by the late 1980s it was professionally and socially acceptable for clients to think of buildings as signed artworks, then plaques like GBA's were an understated, unobtrusive, and tasteful way to "sign" a building in perpetuity. They fulfilled, we might say, Foucault's "author-function"—legitimizing buildings as signature works of art and as part of an oeuvre.

Debates about whether and how architects should "sign" their buildings are as old as the profession itself. In the early 20<sup>th</sup> century, for example, some American architects similarly felt the need to affix a marque of some kind to their designs. The practice was permitted according to the AIA's first Code of Ethics, adopted in 1909: "The display of the architect's name upon a building under construction is condemned, but the unobtrusive signature of buildings after completion has the approval of the Institute."<sup>1</sup> But AIA approval did not mean "signing" completed buildings with a specially designed marque or plaque was implemented in any standardized form. Permanent signatures of this kind remained unusual throughout the twentieth century, perhaps because of the profession's squeamishness about self-promotion and its institutional prohibition on advertising.

In 1920, Art Deco designer Léon-Victor Solon proposed something resembling Birkerts's plaque as a standard method for registering authorship, asking in *Architectural*

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<sup>1</sup> Quoted in Weld Coxe, *Marketing Architectural and Engineering Services* (New York: Van Nostrand Reinhold, 1971), 11. For Coxe, this first Code's attitude toward advertising and publicity was evidence of "how the professional societies came to frown on conventional sales practices and adopt anti-competitive canons." (9) By 1918 the prohibition on "signing" buildings during construction was abolished.

*Record*, “[is] it not possible that our taste is offended more by the manner in which the architect’s name is sometimes affixed to his building than by its presence thereon?”<sup>2</sup> As a best practice, Solon proposed a circular seal (descended from Renaissance artisans, Figure 5.04) permanently carved or embedded into the fabric of a building, which he believed would be in accordance with “good taste and professional modesty.”<sup>3</sup> Tastefulness and modesty remained the standard by which architects’ promotional efforts were judged even after the late 1970s, when the AIA was pressured into permitting its members to advertise, and meanwhile authorial anonymity lost favor alongside the aesthetics of anonymity associated with International Style modernism.

Birkerts was no doubt aware that this debate was foundational to the profession, and that earlier artist-architects had adopted similar marques. GBA’s logo (Figure 5.05) had much in common with two earlier designs: Frank Lloyd Wright’s spiraling red square signifying the Taliesin Fellowship (Figure 5.06), and the interlocking E and S letterforms that grace the cover of Albert Christ-Janer’s 1948 monograph on Eliel Saarinen (Figure 5.07). Both Wright (1867–1959) and Saarinen (1873–1950) were two generations removed from Birkerts and were much less bashful about their cultivation of personal identity and their monopolization of credit. Mimicking their logotypes located Birkerts in eminent if somewhat unfashionable company, but “professional modesty” necessitated that the plaque credit GBA instead of Birkerts alone.<sup>4</sup>

Anxieties about authorship and attribution are recurrent because the idealist visions of architects are constantly challenged by complex realities of execution. A late

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<sup>2</sup> Leon V. Solon, “The Architect’s Signature on His Work,” *Architectural Record* 48, no. 8 (August 1920): 174.

<sup>3</sup> Solon, 176.

<sup>4</sup> Others have noted attitudinal similarities between Birkerts and Wright. See James Graham, “Usonia, Americanized: Gunnar Birkerts Goes Underground,” *Manifest*, no. 1 (2014): 134–53.

modern architect's signature, as Timothy Hyde has written, often "stands in for what is actually a complex anonymity ... an uncoupling of the consequences of authorial presence from individuated acts of authoring."<sup>5</sup> Such "consequences" include the relative value attributed to architectural services, a fact that became even more pertinent after the AIA's 1972 Consent Decree barred the distribution of fee schedules that had long standardized that value. Precisely what clients purchased when they commissioned an architect also became less standardized. Birkerts settled on process rather than style, but each architect could make their own choice based on the market niche they occupied (or wished to occupy). With his sketches as the lodestone around which projects centered, Birkerts's process emphasis was a pragmatic way of overcoming the loss of control that inevitably accompanies larger commissions.

It had taken two decades to arrive at this strategy for managing the contradictions inherent to the artist-architect approach. What differentiated Birkerts from other architects in the 1960s were his biography and pedigree. An immigrant from Europe who apprenticed under two very famous modernists, he was well positioned for success, and deployed these facts to contextualize his first independent designs. Early success brought GBA challenging commissions like Tougaloo College and the FRBM that required them to work in unfamiliar locales and adopt unfamiliar protocols. These commissions caused a slow-burning identity crisis that found its resolution during an economic downturn, when GBA was kept afloat by a stream of commissions in Corning, New York. Birkerts

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<sup>5</sup> Timothy Hyde, "Notes on Architectural Persons," *The Aggregate website*, <http://we-aggregate.org/piece/notes-on-architectural-persons> (accessed October 21, 2018). Hyde is discussing Mies van der Rohe, and specifically the unrealized Mansion House Square project in London (1958-82), which became the subject of a controversy about authorship after Mies's death.



used these less productive years to recenter his practice on design. But the resolution of this crisis could not overcome the foundational contradictions of architectural practice.

By the 1980s, Birkerts adopted several strategies to draw idealist vision and realized building more closely together and overcome anxieties about authorship and attribution. He concluded that it wasn't drawings that most clearly embodied an architectural signature, nor buildings themselves, but that the former must be linked to the latter through a methodology or process. Though useful for managing projects within a firm and as pedagogy, process wasn't quite as advantageous when it came to the reception of architecture in the media, which regularly defaults to the simplistic shorthand of a single architect and a completed building.<sup>6</sup> Outdated media attitudes were particularly pronounced when it came to architects who more comfortably navigated the shift toward Postmodernist aesthetics. An infamous *Time Magazine* cover in January 1979, for example, featured a photograph of Philip Johnson (who had, one recalls, been listed by Birkerts as one of four members of the architectural establishment in 1970) holding a model of his AT&T Building (1979-84) with the headline "U.S. Architects: Doing Their Own Thing." A peculiar photocopy in the Gunnar Birkerts papers reveals that GBA employees doctored this *Time* cover to feature their boss in place of Johnson, as if to prove that he too was "doing his own thing" (Figure 5.08), ready to take his place among the architectural establishment even though his stubborn refusal to conform made him an unlikely member.<sup>7</sup>

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<sup>6</sup> This was true even in cases like The Architects Collaborative, whose work was often credited to Walter Gropius alone. See Michael Kubo, "The anxiety of anonymity: on the historiographic problem of Walter Gropius and The Architects Collaborative," in Amanda Reeser Lawrence and Ana Miljacki, eds. *Terms of Appropriation: Modern Architecture and Global Exchange* (New York: Routledge, 2018), 24-49.

<sup>7</sup> Birkerts may also have held a bit of a grudge against Johnson, as Johnson was rumored to have removed him from the shortlist for the design of the Portland Building in Portland, Oregon for not being "postmodern enough." See: Sven Birkerts and Martin Schwartz, *Gunnar Birkerts: Metaphoric Modernist*

Unlike the trend-hopping and boosterish Johnson—who casts an unavoidable shadow in discussions of twentieth century US architecture—Birkerts’s place in the story of American modernism is far from secure. His renown reached its peak in the early 1980s, and unfortunate circumstances led to numerous projects remaining on the drawing board in the decade that followed; while Birkerts’s self-image crystallized as a process-driven artist-architect, his public image fractured as taste shifted away from the distinctive brand of Late Modernism he continued to espouse.

The idea that architects should develop a marketable authorial signature through their work has proven to be an enduring way to contend with the economic and ideological pressures of late capitalism, and eventually evolved into the figure of the globetrotting “star architect.”<sup>8</sup> The sole author remains convenient as shorthand for a complex process, and attribution likewise remains a contentious issue within architecture. Professional etiquette still dictates that architects refrain from self-promotion even as a competitive business climate requires that they carefully attend to their public image.

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(Stuttgart: Edition Axel Menges, 2009), 25. Sven Birkerts writes of his father’s “suspicion of what was clearly a powerful in-group influence-peddling, most clearly exemplified in the competition for the Portland Building . . . when of the six invited finalists, all prominent architects, Gunnar Birkerts was deleted by juror Philip Johnson (“Not enough Postmodernism,” he supposedly remarked), who then added to the list his protégé Michael Graves.” (25) There is no archival evidence to support this story. Meredith L. Clausen found that Birkerts was included on the “longlist” of 11 architects, and that Johnson was primarily responsible for selecting the competition shortlist: Michael Graves, Romaldo Giurgola, and Arthur Erickson. Meredith L. Clausen, “Michael Graves’s Portland Building,” *Journal of the Society of Architectural Historians* 73, no. 2 (2014): 253–54; 267, note 31.

<sup>8</sup> With little international work of note, few have looked to Birkerts as breaking ground for this image of the architect, but had his major projects of his later career been built, we might see this differently. The late 1980s and early 1990s have been called Birkerts’s “Italian years,” when he was commissioned to design four major projects in Italy at least partly because of the support of critic and historian Bruno Zevi. All four projects went unbuilt. These projects included two designs for a portion of the Novoli redevelopment in Florence (1987 and 1993), Sports and Civic Stadium in Venice (1989-92), and two designs for a 16-acre site on the edge of Turin—first a commercial tower (1989) and then a building for the University of Torino’s humanities faculty (1989-90). See Birkerts and Schwartz, *Metaphoric Modernist*, 168–91. His last building, the National Library of Latvia in his hometown of Riga (1989-2014) proves that he was more than able to deliver when the opportunity presented itself.



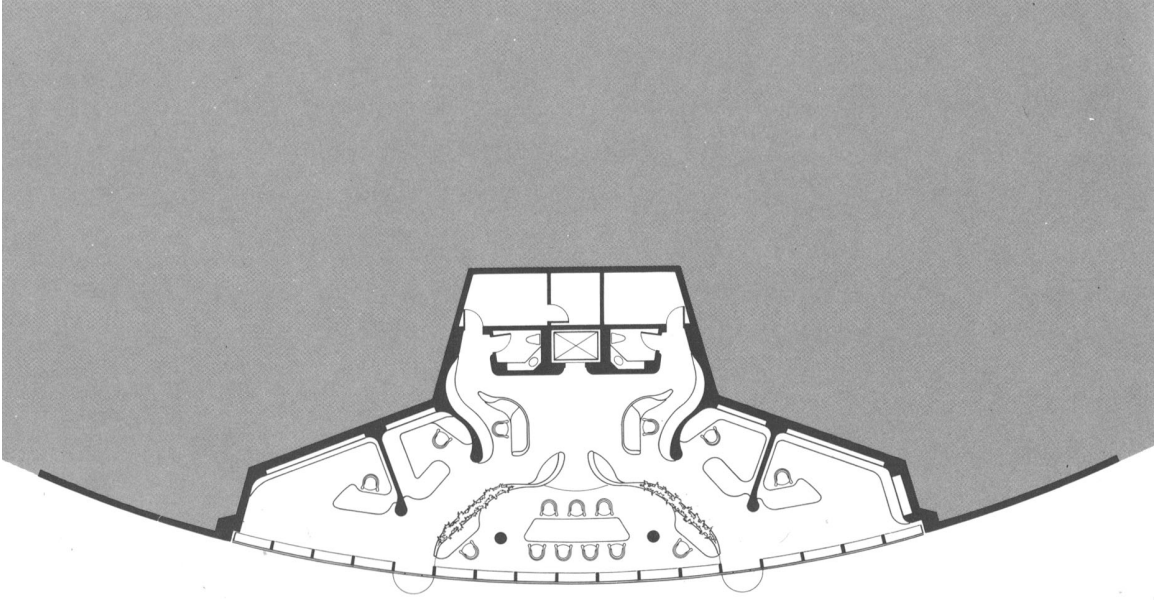
**Figure 5.01** Gunnar Birkerts & Associates plaque, installed at office building for Holtzman & Silverman Developers, Southfield, Michigan, 1983-89. Photograph by the author, 2017.





**Figure 5.02** GBA, Interior of Holtzman & Silverman Office Building. Photograph by Balthazar Korab. From: Birkerts and Schwartz, 159.

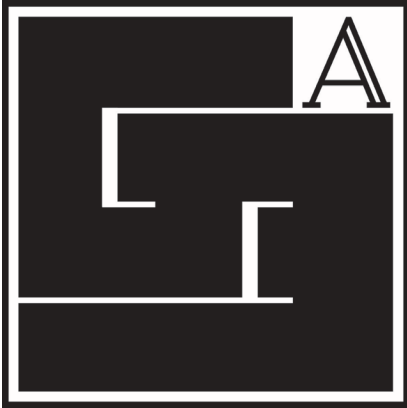




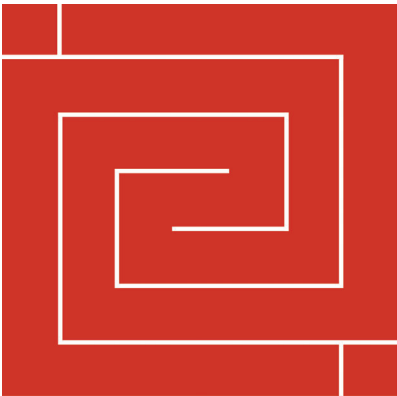
**Figure 5.03** GBA, Main floor plan of Holtzman & Silverman Office Building. From: Kaiser, 132.



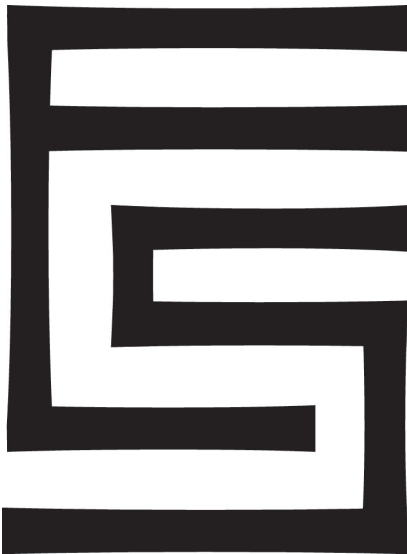
**Figure 5.04** Léon-Victor Solon, *Sigillum Architecti*, showing three versions of a circular architect's seal, from "The architect's signature on his work," *Architectural Record* 48, no. 8 (August 1920), 176.



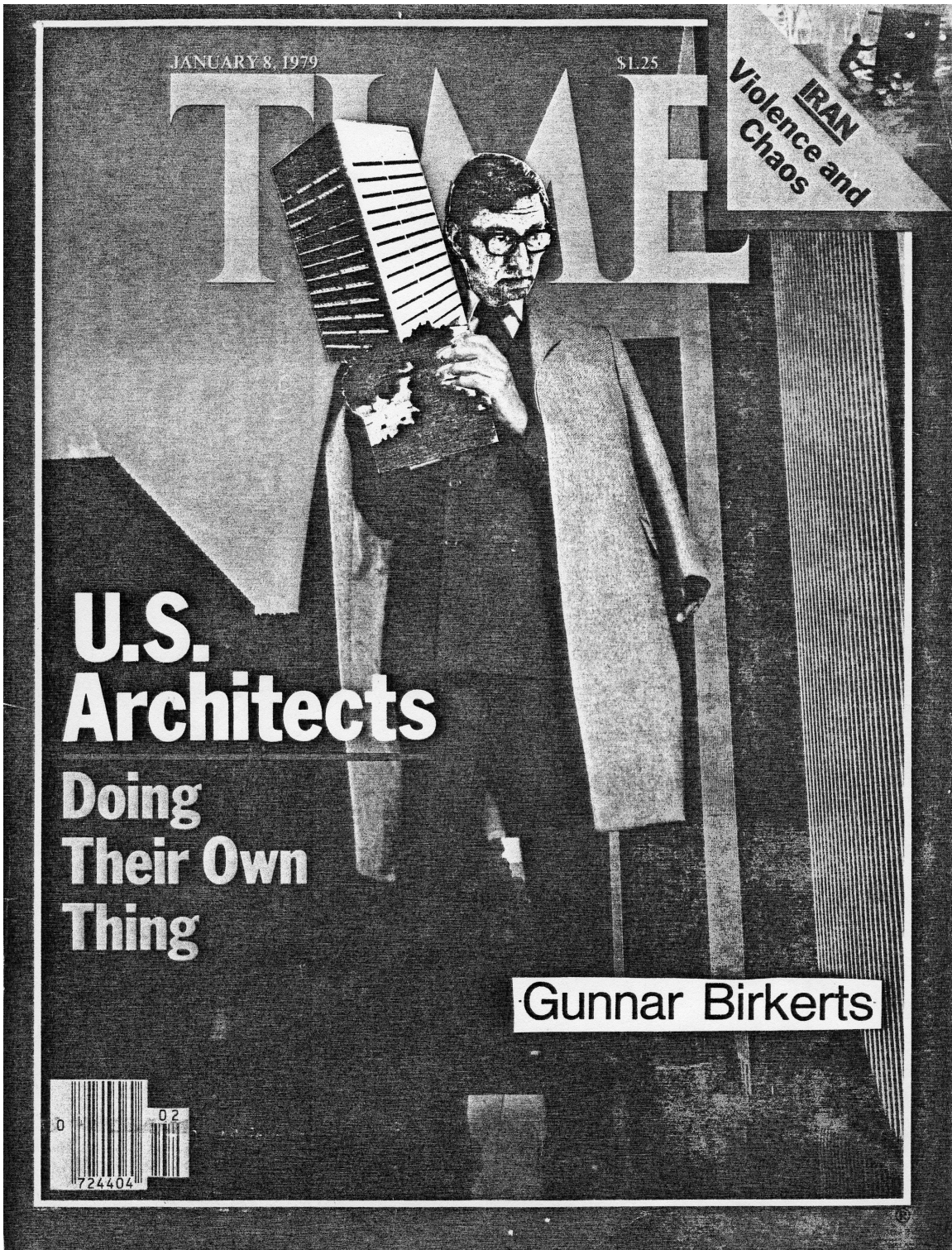
**Figure 5.05** GBA Logo, designer unknown, ca. 1964, redrawn by the author.



**Figure 5.06** Frank Lloyd Wright's Taliesin Fellowship logo, date unknown, redrawn by the author.



**Figure 5.07** Interlocking E & S letterforms, published on cover of Albert Christ-Janer, *Eliel Saarinen* (Chicago: University of Chicago Press, 1948), redrawn by the author.



**Figure 5.08** Photomontage on January 8, 1979 *Time Magazine* cover, with Philip Johnson replaced by Gunnar Birkerts. Photocopy, 8-1/2 x 11 inches. Box 8, GBP, BHL.



## BIBLIOGRAPHY

### Archives Consulted

Faculty of Architecture and City Planning Records, University of Stuttgart Archives,  
Stuttgart, Germany  
Gunnar Birkerts Papers, 1930-2017, Bentley Historical Library, University of Michigan  
Gunnar Birkerts and Associates Records, 1960-2014, Bentley Historical Library,  
University of Michigan  
Gunnar Birkerts Personal Library, National Library of Latvia, Riga, Latvia  
Gunnar Birkerts Drawing Collection, National Library of Latvia, Riga, Latvia  
Irwin-Sweeney-Miller Family Collection, Indiana Historical Society, Indianapolis,  
Indiana  
Tougaloo College Archives, Tougaloo, Mississippi

### Works Cited or Consulted

Abbott, Andrew. "Status and Status Strain in the Professions." *American Journal of Sociology* 86, no. 4 (1981): 819–35.

Abramson, Daniel M. *Obsolescence: An Architectural History*. University of Chicago Press, 2016.

Aggregate Architectural History Collaborative. *Governing by Design: Architecture, Economy, and Politics in the Twentieth Century*. Edited by Daniel M. Abramson, Arindam Dutta, Timothy Hyde, and Jonathan Massey. Pittsburgh: University of Pittsburgh Press, 2012.

Aiken, Henry David. *Predicament of the University*. Bloomington: Indiana University Press, 1971.

American Institute of Architects. *The Architect at Mid-Century, Vol 1: Evolution and Achievement*. Edited by Turpin C. Bannister. New York: Reinhold, 1954.

———. *The Architect at Mid-Century, Vol 2: Conversations Across the Nation*. Edited by Francis Rufus Bellamy. New York: Reinhold, 1954.

Anderson, James D. *The Education of Blacks in the South, 1860–1935*. Chapel Hill: University of North Carolina Press, 1988.

Avermaete, Tom. *Another Modern: The Post-War Architecture and Urbanism of Candilis-Josic-Woods*. Rotterdam: NAI, 2005.

Bacon, Mardges. "Le Corbusier and Postwar America." *Journal of the Society of Architectural Historians* 74, no. 1 (March 2015): 13.

Banham, Reyner. *A Critic Writes*. Edited by Mary Banham. Berkeley: University of California Press, 1996.

- . *Megastructure: Urban Futures of the Recent Past*. New York: Harper and Row, 1976.
- . *The New Brutalism: Ethic or Aesthetic*. New York: Reinhold Pub. Co., 1966.
- . *Theory and Design in the First Machine Age*. London: Architectural Press, 1960.
- Barnstone, Deborah Ascher. *The Transparent State: Architecture and Politics in Postwar Germany*. New York: Routledge, 2005.
- Bartlett, Nancy. *More than a Handsome Box: Education in Architecture at the University of Michigan, 1876-1986*. Ann Arbor, Mich.: University of Michigan College of Architecture and Urban Planning, 1995.
- Baum, Kelly, Andrea Bayer, Sheena Wagstaff, and Carmen Bambach, eds. *Unfinished: Thoughts Left Visible*. New York: The Metropolitan Museum of Art, 2016.
- Baxandall, Michael. *Patterns of Intention: On the Historical Explanation of Pictures*. New Haven: Yale University Press, 1989.
- Bell, Daniel. *The Coming of Post-Industrial Society; a Venture in Social Forecasting*. New York: Basic Books, 1973.
- Bell, Michael, and Craig Buckley, eds. *Post-Ductility: Metals in Architecture and Engineering*. Columbia Books on Architecture, Engineering, and Materials. New York: Princeton Architectural Press, 2012.
- Bennett, F. Lawrence. *Critical Path Precedence Networks: A Handbook on Activity-on-Node Networking for the Construction Industry*. New York: Van Nostrand Reinhold Co., 1977.
- Berman, Herbert. "CPM and the Architect." *AIA Journal* 41, no. 2 (February 1964): 55–62.
- Birkerts, Gunnar. "Defining a Design Methodology." *Architectural Record* 161, no. 2 (February 1977): 91–94.
- . "Design: The Critical Years." *The Canadian Architect* 19 (June 1974): 48–52.
- . Interview with the author, Needham, Massachusetts, July 27, 2015.
- . *Process and Expression in Architectural Form*. Norman: University of Oklahoma Press, 1994.
- . *Subterranean Urban Systems*. Ann Arbor: Institute of Science and Technology, University of Michigan, 1974.
- Birkerts, Sven, ed. *Gunnar Birkerts: Buildings, Projects, and Thoughts, 1960-1985*. Ann Arbor: University of Michigan, College of Architecture and Urban Planning, 1985.
- . *My Sky Blue Trades: Growing up Counter in a Contrary Time*. New York: Viking, 2002.
- Birkerts, Sven, and Martin Schwartz. *Gunnar Birkerts: Metaphoric Modernist*. Stuttgart: Edition Axel Menges, 2009.
- Blau, Judith R. *Architects and Firms: A Sociological Perspective on Architectural Practice*. Cambridge, Mass.: MIT Press, 1984.
- Blau, Judith R., Mark La Gory, and John Pipkin, eds. *Professionals and Urban Form*. Albany: State University of New York Press, 1983.
- Bloom, Harold. *The Anxiety of Influence: A Theory of Poetry*. New York: Oxford University Press, 1973.
- Bucci, Federico. *Albert Kahn: Architect of Ford*. Architetto Di Ford. English, 186 p. New York, N.Y.: Princeton Architectural Press, 1993.

- Burchard, John. *The Voice of the Phoenix: Postwar Architecture in Germany*. Cambridge, Mass.: MIT Press, 1966.
- Burke, Sean. *Authorship: From Plato to Postmodern: A Reader*. Edinburgh: Edinburgh University Press, 1995.
- Butler, Judith. "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory." *Theatre Journal* 40, no. 4 (1988): 519–31.
- Campbell, Clarice T., and Oscar A. Rogers. *Mississippi, the View from Tougaloo*. Jackson: University Press of Mississippi, 1979.
- Carmichael, Stokely. *We Ain't Goin' - Remarks at Tougaloo College, April 11, 1967*. Greenwood, IN: Educational Video Group, 1968.
- Carriere, Michael H. "Between Being and Becoming: On Architecture, Student Protest, and the Aesthetics of Liberalism in Postwar America." University of Chicago, 2010.
- Case and Company and American Institute of Architects. *Methods of Compensation for Architectural Services*. Washington: American Institute of Architects, 1969.
- Case and Company, Inc. *The Economics of Architectural Practice*. Washington: American Institute of Architects, 1968.
- Castillo, Greg. *Cold War on the Home Front: The Soft Power of Midcentury Design*. Minneapolis: University of Minnesota Press, 2010.
- Cayer, Aaron, Peggy Deamer, Sben Korsh, Eric Peterson, and Manuel Shvartzberg, eds. *Asymmetric Labors: The Economy of Architecture in Theory and Practice*. Brooklyn: The Architecture Lobby, 2016.
- Clausen, Meredith L. "Michael Graves's Portland Building." *Journal of the Society of Architectural Historians* 73, no. 2 (2014): 248–69.
- Cohen, Lizabeth. *A Consumers' Republic: The Politics of Mass Consumption in Postwar America*. New York: Vintage, 2004.
- Collins, Peter. *Changing Ideals in Modern Architecture, 1750-1950*. Montreal: McGill-Queens University Press, 1998.
- Columbus, Indiana Visitor's Center. *Columbus, Indiana, a Look at Architecture*. Columbus, Ind.: Visitors Center, 1984.
- Connell, R.W. (Raewyn). "The Big Picture: Masculinities in Recent World History." *Theory and Society* 22, no. 5 (1993): 597–623.
- Conrads, Ulrich, and Werner Marschall. *Modern Architecture in Germany*. Translated by James Palmes. London: Architectural Press, 1962.
- Cope, Debra. "The Fed's White Elephant." *American Banker*, July 22, 1991.
- Costanzo, Denise R. "'I Will Try My Best to Make It Worth It': Robert Venturi's Road to Rome." *Journal of Architectural Education* 70, no. 2 (July 2, 2016): 269–83.
- . "The Lessons of Rome: Architects at the American Academy, 1947–1966." Ph.D. Dissertation, The Pennsylvania State University, 2009.
- Coxe, Weld. *Managing Architectural and Engineering Practice*. New York: Wiley, 1980.
- . *Marketing Architectural and Engineering Services*. New York: Van Nostrand Reinhold, 1971.
- . *Success Strategies for Design Professionals: Superpositioning for Architecture & Engineering Firms*. New York: McGraw-Hill, 1987.
- Creighton, Thomas H., ed. "The Sixties: A Symposium on the State of Architecture, Part II." *Progressive Architecture* 42, no. 4 (April 1961): 164–69.

- Crinson, Mark, and Claire Zimmerman. *Neo-Avant-Garde and Postmodern: Postwar Architecture in Britain and Beyond*. Studies in British Art 21. New Haven: Yale Center for British Art, 2010.
- Cruikshank, Jeffrey L., and David B. Sicilia. *The Engine That Could: Seventy-Five Years of Values-Driven Change at Cummins Engine Company*. Boston: Harvard Business School Press, 1997.
- Cuff, Dana. *Architecture: The Story of Practice*. Cambridge, Mass.: MIT Press, 1991.
- Daniels, Roger. *Guarding the Golden Door: American Immigration Policy and Immigrants since 1882*. New York: Hill and Wang, 2004.
- Deamer, Peggy, ed. *Architecture and Capitalism: 1845 to the Present*. London: Routledge, 2014.
- , ed. *The Architect as Worker: Immaterial Labor, the Creative Class, and the Politics of Design*. London: Bloomsbury, 2015.
- Deamer, Peggy and Phillip G. Bernstein. "Letter." *Architectural Theory Review* 21, no. 1 (2017): 4-6.
- Dean, Andrea Oppenheimer, and Bruno Zevi. *Bruno Zevi on Modern Architecture*. New York: Rizzoli, 1983.
- Deatherage, George E. *Construction Scheduling and Control*. New York: McGraw-Hill, 1965.
- DeGoff, Robert A., and Howard A. Friedman. *Construction Management: Basic Principles for Architects, Engineers, and Owners*. New York: Wiley, 1985.
- Deleuze, Gilles. "Postscript on the Societies of Control." *October* 59 (1992): 3–7.
- DeMars, Richard B. "A Contractor Looks at Construction Management." *Architectural Record* 151, no. 1 (January 1972): 55–58.
- "Designed for Mobility, Both Social and Physical: Three Colleges by Gunnar Birkerts." *Architectural Record* 144, no. 4 (October 1968): 129–44.
- Diefendorf, Jeffrey M. *In the Wake of War: The Reconstruction of German Cities after World War II*. New York: Oxford University Press, 1993.
- Dittmer, John. *Local People: The Struggle for Civil Rights in Mississippi*. Urbana: University of Illinois Press, 1994.
- Dixon, John Morris. "How to Grow a Campus, 1: Tougaloo College." *Architectural Forum* 124, no. 3 (April 1966): 56–61.
- Dober, Richard P. *Campus Planning*. New York: Reinhold Pub. Corp., 1963.
- . *Environmental Design*. New York: Van Nostrand Reinhold, 1969.
- Dober, Richard P., and Educational Facilities Laboratories. *The New Campus in Britain; Ideas of Consequence for the United States*. New York: Educational Facilities Laboratories, 1965.
- Döcker, Richard. *Terrassentyp*. Stuttgart: F. Wedekind, 1929.
- "Dr. Anthony Adinolfi, 40, Dies; State University Building Chief." *The New York Times*, April 1, 1971.
- Drew, Philip. *Third Generation: The Changing Meaning of Architecture*. New York: Praeger, 1972.
- Drexler, Arthur. *Transformations in Modern Architecture*. New York: Museum of Modern Art, 1979.
- Drucker, Peter F. *Innovation and Entrepreneurship: Practice and Principles*. New York: HarperBusiness, 1985.

- Duhl, Leonard J., ed. *The Urban Condition: People and Policy in the Metropolis*. New York: Basic Books, Inc., 1963.
- Dutta, Arindam, and et al., eds. *A Second Modernism: MIT, Architecture, and the "Techno-Social" Moment*. Cambridge, Massachusetts: MIT Press, 2013.
- Educational Facilities Laboratories, ed. *Bricks and Mortarboards: A Report on College Planning and Building*. New York, 1963.
- . *Schools without Walls; a Report*. Profiles of Significant Schools, 56 p. New York, 1965.
- Edwards, Paul N. "A Vast Machine': Standards as Social Technology." *Science* 304, no. 5672 (2004): 827–28.
- Eksteins, Modris. *Walking since Daybreak: A Story of Eastern Europe, World War II, and the Heart of Our Century*. Boston: Houghton Mifflin Co., 1999.
- Elflin, Ross. "The Dematerialization of Architecture." *Journal of the Society of Architectural Historians* 75, no. 2 (June 1, 2016): 201–23.
- Elliott, Cecil D. *The American Architect from the Colonial Era to the Present*. Jefferson, N.C.: McFarland & Co., 2003.
- Elliott, Mark R. *Pawns of Yalta: Soviet Refugees and America's Role in Their Repatriation*. Urbana: University of Illinois Press, 1982.
- Elwall, Robert., Building Centre Trust., Drue Heinz Fund., and Heinz Gallery. *Photography Takes Command: The Camera and British Architecture, 1890-1939*. London: RIBA Heinz Gallery, 1994.
- Elwall, Robert., and Royal Institute of British Architects. *Building with Light: The International History of Architectural Photography*. London: Merrell, 2004.
- Farrell, Jr., Paul B. "Construction Manager: Menace to the Architect?" *Architectural & Engineering News* 10, no. 4 (April 1968): 35–43.
- Fishman, Robert. *Bourgeois Utopias: The Rise and Fall of Suburbia*. New York: Basic Books, 1987.
- Forty, Adrian. *Concrete and Culture: A Material History*. London: Reaktion, 2012.
- . *Words and Buildings: A Vocabulary of Modern Architecture*. New York: Thames & Hudson, 2000.
- Foster, Hal. *Recodings: Art, Spectacle, Cultural Politics*. Port Townsend, Wash.: Bay Press, 1985.
- . *The Anti-Aesthetic: Essays on Postmodern Culture*. Port Townsend, Wash.: Bay Press, 1983.
- Foucault, Michel. *The Essential Foucault: Selections from the Essential Works of Foucault, 1954-1984*. Edited by Paul Rabinow and Nikolas Rose. New York: The New Press, 2003.
- Foxhall, William B. "Professional Construction Management and Project Administration." *Architectural Record* 149, no. 6 (June 1971): 69–70.
- Franch i Gilabert, Eva, Ana Miljacki, Carlos Minguez Carrasco, Jacob Reidel, and Ashley Schafer, eds. *OfficeUS: Manual*. Zürich: Lars Müller Publishers, 2017.
- Franch i Gilabert, Eva, Ana Miljacki, Ashley Schafer, and Michael Kubo, eds. *OfficeUS: Atlas*. Zürich: Lars Müller Publishers, 2015.
- Friedman, Alice T. *American Glamour and the Evolution of Modern Architecture*. New Haven: Yale University Press, 2010.



- Gans, Herbert J. *The Urban Villagers; Group and Class in the Life of Italian-Americans*. New York: Free Press of Glencoe, 1962.
- Gartman, David. *From Autos to Architecture: Fordism and Architectural Aesthetics in the Twentieth Century*. New York: Princeton Architectural Press, 2013.
- Gatrell, Peter, and Nick Baron, eds. *Warlands: Population Resettlement and State Reconstruction in the Soviet-East European Borderlands, 1945-50*. New York: Palgrave Macmillan, 2009.
- Giedion, Sigfried. *Space, Time and Architecture; the Growth of a New Tradition*. Cambridge, London: Harvard University Press, Oxford University Press, 1941.
- Goble, Emerson. "200-Bed Hospital Studied in Actual Use - Rockford Memorial Hospital, Rockford, Illinois." *Architectural Record* 117 (March 1955): 197–208.
- Goldblatt, David. "The Dislocation of the Architectural Self." *The Journal of Aesthetics and Art Criticism* 49, no. 4 (1991): 337–48.
- Goldhagen, Sarah Williams, and Réjean Legault, eds. *Anxious Modernisms: Experimentation in Postwar Architectural Culture*. Cambridge, Mass.: MIT Press, 2000.
- Goodman, Robert. *After the Planners*. Middlesex: Pelican Books, 1972.
- Gorman, James E. *Simplified Guide to Construction Management for Architects and Engineers*. Boston: Cahners Books, 1976.
- Graham, James D. "Usonia, Americanized: Gunnar Birkerts Goes Underground." *Manifest*, no. 1 (2014): 134–53.
- Guercio, Gabriele. *Art as Existence: The Artist's Monograph and Its Project*. Cambridge, Mass.: MIT Press, 2009.
- Gunnar Birkerts & Associates, and Yukio Futagawa. *IBM Information Systems Center, Sterling Forest, N.Y., 1972. Federal Reserve Bank of Minneapolis, Minnesota, 1973*. *Global Architecture*, 31. Tokyo: A.D.A. Edita, 1974.
- Gutman, Robert. *Architectural Practice: A Critical View*. Princeton: Princeton Architectural Press, 1988.
- . *Architecture from the Outside in: Selected Essays*. Edited by Dana Cuff and John Wriedt. New York: Princeton Architectural Press, 2010.
- . "Review: The Architect's Handbook of Professional Practice, Edited by David Haviland." *Journal of Architectural Education* 45, no. 2 (1992): 122–24.
- Gyure, Dale Allen. *Minoru Yamasaki: Humanist Architecture for a Modernist World*. New Haven: Yale University Press, 2017.
- Haar, Sharon. *The City as Campus: Urbanism and Higher Education in Chicago*. Minneapolis: University of Minnesota Press, 2011.
- Hall, Edward T. *The Hidden Dimension*. Garden City, N.Y.: Doubleday, 1966.
- Hall, Peter. *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century*. New York: Blackwell, 1988.
- Harvey, David. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Cambridge, Mass.: Blackwell, 1989.
- Harwood, John. *The Interface: IBM and the Transformation of Corporate Design, 1945-1976*. Minneapolis: University of Minnesota Press, 2011.
- Hays, K. Michael, ed. *Architecture Theory since 1968*. Columbia Books of Architecture. Cambridge, Mass.: MIT Press, 1998.

- Hays, K. Michael, and Carol Burns, eds. *Thinking the Present: Recent American Architecture*. New York, NY: Princeton Architectural Press, 1990.
- Heck, Sandy. "Community Architecture, Columbus Style." *Architects' Journal* 184, no. 43 (October 22, 1986): 36.
- Heery, George T. "Let's Define Construction Management." *Architectural Record* 155, no. 3 (March 1974): 69–71.
- . *Time, Cost, and Architecture*. New York: McGraw-Hill, 1975.
- Heyer, Paul. *Architects on Architecture: New Directions in America*. New York: Walker, 1978.
- Hildebrand, Grant. *Designing for Industry: The Architecture of Albert Kahn*. Cambridge, Mass.: The MIT Press, 1974.
- Hillmann, Roman. *Die Erste Nachkriegsmoderne: Ästhetik Und Wahrnehmung Der Westdeutschen Architektur 1945–63*. Petersburg, Germany: Michael Imhof Verlag, 2011.
- Hitchcock, Henry Russell. "The Architecture of Bureaucracy and the Architecture of Genius." *Architectural Review* 101 (January 1947): 3–6.
- Hobsbawm, Eric. *The Age of Extremes: A History of the World, 1914-1991*. New York: Pantheon Books, 1994.
- Horsley, Carter B. "End of Magazine on Architecture: Architectural Forum Halting with Its March Issue." *New York Times*. March 26, 1974.
- Hubbard, Jr., W.N. "Flexible Bricks – Building for a Change." In *Architecture and the College: Presentations from the 1968 Conference*. Urbana, Ill.: University of Illinois Department of Architecture, 1968.
- Hugh D. Galusha, Jr. "Yellowstone Years." *Montana: The Magazine of Western History* 9, no. 3 (1959): 2–21.
- Hughes, Jonathan, and Simon Sadler, eds. *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism*. Oxford: Architectural Press, 2000.
- Hunt, William Dudley, and American Institute of Architects. *Comprehensive Architectural Services, General Principles and Practice*. New York: McGraw-Hill, 1965.
- . *Creative Control of Building Costs*. New York: McGraw-Hill, 1967.
- Hyde, Timothy. "Notes on Architectural Persons." *The Aggregate website*. <http://we-aggregate.org/piece/notes-on-architectural-persons>. (Accessed October 14, 2018)
- James-Chakraborty, Kathleen, ed. *Bauhaus Culture: From Weimar to the Cold War*. Minneapolis: University of Minnesota Press, 2006.
- Jameson, Fredric. *Postmodernism, or, The Cultural Logic of Late Capitalism*. Durham: Duke University Press, 1991.
- Jamrich, John X., and Educational Facilities Laboratories. *To Build or Not to Build; a Report on the Utilization and Planning of Instructional Facilities in Small Colleges*. Edited by Ruth Weinstock. New York, 1962.
- "Jan C. Rowan, Former Editor of P/A [Obituary]." *Progressive Architecture* 66, no. 6 (June 1985): 30.
- Jencks, Charles. *The Language of Post-Modern Architecture*. New York: Rizzoli, 1977.
- Jencks, Charles, and George Baird. *Meaning in Architecture*. New York: Braziller, 1969.

- Jencks, Christopher, and David Riesman. *The Academic Revolution*. Garden City, N.Y.: Doubleday, 1968.
- Johnson, Philip. *Writings*. New York: Oxford University Press, 1979.
- Johnston, George Barnett. *Drafting Culture: A Social History of Architectural Graphic Standards*. Cambridge, Mass.: MIT Press, 2008.
- Judt, Tony. *Postwar: A History of Europe since 1945*. New York: Penguin Press, 2005.
- Kaiser, Kay. *The Architecture of Gunnar Birkerts*. Washington, DC: American Institute of Architects Press, 1989.
- Kauffman, Jordan. *Drawing on Architecture: The Object of Lines, 1970-1990*. Cambridge, Mass.: MIT Press, 2018.
- Kavanagh, Thomas C., Frank Müller, and James J. O'Brien. *Construction Management: A Professional Approach*. New York: McGraw-Hill, 1978.
- Kepes, Gyorgy, ed. *Arts of the Environment*. Vision + Value Series 7. New York: George Braziller, 1972.
- Kerr, Clark. *The Uses of the University*. Godkin Lectures at Harvard University. Cambridge, Mass.: Harvard University Press, 1963.
- Kirsch, Karin, and Gerhard Kirsch. *The Weissenhofsiedlung: Experimental Housing Built for the Deutscher Werkbund, Stuttgart, 1927*. New York: Rizzoli, 1989.
- Kittler, Friedrich A. *Discourse Networks 1800/1900*. Stanford, Calif.: Stanford University Press, 1990.
- Klobuchar, Jim. "Ordeal on Beartooth Mountain." *Popular Mechanics* 136, no. 5 (November 1971): 84–89; 194.
- Knight, Richard. *Saarinen's Quest: A Memoir*. San Francisco: William Stout Publishers, 2008.
- Knoblauch, Joy. "The Economy of Fear: Oscar Newman Launches Crime Prevention through Urban Design (1969–197x)." *Architectural Theory Review* 19, no. 3 (September 2, 2014): 336–54.
- Knox, Paul L., ed. *The Design Professions and the Built Environment*. New York: Nichols Pub. Co., 1988.
- Korab, Balthazar. *Columbus Indiana: An American Landmark*. Kalamazoo, Mich.: Documan Press, 1989.
- Kostof, Spiro, ed. *The Architect: Chapters in the History of the Profession*. New York: Oxford University Press, 1977.
- Krieger, Alex, and William S. Saunders, eds. *Urban Design*. Minneapolis: University of Minnesota Press, 2009.
- Kubler, George. *The Shape of Time: Remarks on the History of Things*. New Haven: Yale University Press, 2008.
- Lane, Barbara Miller. *Architecture and Politics in Germany, 1918-1945*. Cambridge, Mass.: Harvard University Press, 1968.
- . *National Romanticism and Modern Architecture in Germany and the Scandinavian Countries*. New York: Cambridge University Press, 2000.
- Larson, Magali Sarfatti. *Behind the Postmodern Facade: Architectural Change in Late Twentieth-Century America*. Berkeley: University of California Press, 1993.
- . *The Rise of Professionalism: A Sociological Analysis*. Berkeley: University of California Press, 1977.

- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford ; New York: Oxford University Press, 2005.
- . *We Have Never Been Modern*. Translated by Catherine Porter. Cambridge, Mass.: Harvard University Press, 1993.
- Lavin, Sylvia. *Form Follows Libido: Architecture and Richard Neutra in a Psychoanalytic Culture*. Cambridge, Mass.: MIT Press, 2004.
- Leslie, Thomas. *Louis I. Kahn: Building Art, Building Science*. New York, NY: George Braziller, 2005.
- Loeffler, Jane C. *The Architecture of Diplomacy: Building America's Embassies*. New York: Princeton Architectural Press, 1998.
- Lowe, Maria. "An Unseen Hand: The Role of Sociology Professor Ernst Borinski in Mississippi's Struggle for Racial Integration in the 1950s and 1960s." *Leadership* 4, no. 1 (February 1, 2008): 27–47.
- . "'Sowing the Seeds of Discontent': Tougaloo College's Social Science Forums as a Precognitive Movement Free Space, 1952-1964." *Journal of Black Studies* 39, no. 6 (2009): 865–87.
- . "An 'Oasis of Freedom' in a 'Closed Society': The Development of Tougaloo College as a Free Space in Mississippi's Civil Rights Movement, 1960 to 1964." *Journal of Historical Sociology* 20, no. 4 (2007): 486–520.
- Lukes, Steven. "The Meanings of 'Individualism.'" *Journal of the History of Ideas* 32, no. 1 (1971): 45.
- Lumans, Valdis O. *Latvia in World War II*. New York: Fordham University Press, 2006.
- Lynch, Kevin. *Site Planning*. Cambridge, Mass.: M.I.T. Press, 1962.
- Maciuka, John V. *Before the Bauhaus: Architecture, Politics and the German State, 1890-1919*. New York: Cambridge University Press, 2005.
- Mailer, Norman, and Vincent J. Scully, Jr. "Mailer vs. Scully." *Architectural Forum* 120 (April 1964): 96–97.
- Manolopoulou, Yeoryia. "Unformed Drawing: Notes, Sketches, and Diagrams." *The Journal of Architecture* 10, no. 5 (November 1, 2005): 517–25.
- Marks, Judy. *A History of Educational Facilities Laboratories (EFL)*. Edited by Educational Resources Information Center (U.S.). Washington, DC: ERIC Clearinghouse, 2009.
- Marlin, William, and Yukio Futagawa, eds. *GA Architect 2: Gunnar Birkerts and Associates*. Tokyo, Japan: A.D.A. Edita, 1982.
- Martin, Reinhold. *The Organizational Complex: Architecture, Media, and Corporate Space*. Cambridge, Mass.: MIT Press, 2003.
- . *Utopia's Ghost: Architecture and Postmodernism, Again*. Minneapolis: University of Minnesota Press, 2010.
- Mattox, Robert F. *Financial Management for Architects: A Guide to Understanding, Planning, and Controlling the Firm's Finances*. Washington, D.C.: American Institute of Architects, 1980.
- May, Roland. "Remigration: Postponed. The Architect Paul Bonatz between Turkey and Germany." *New German Critique*, no. 108 (2009): 1–38.

- Mayer, Frederick W., and Carl V. Schmult Jr., eds. *The Changing Campus: People and Process*. Selected Papers from the Third Annual Conference, Society for College and University Planning. New York: Society for College and University Planning, 1968.
- McCamman, E.R. "The Architect in Practice: Critical Path Method of Scheduling." *Architectural Record* 133, no. 1 (January 1963): 155–58.
- McCoy, Esther. *Gunnar Birkerts & Associates: IBM Information Systems Center, Sterling Forest, New York, 1972; Federal Reserve Bank of Minneapolis, Minnesota, 1973*. Edited by Yukio Futagawa. Vol. 31. Global Architecture. Tokyo: A. D. A. Edita, 1974.
- McLeod, Mary. "Architecture and Politics in the Reagan Era: From Postmodernism to Deconstructivism." *Assemblage*, no. 8 (1989): 23–59.
- McMorrough, John. "Ru(m)inations: The Haunts of Contemporary Architecture," *Perspecta* 40, Monster (2008), 164-169.
- Meeth, L. Richard. "The Report on Predominantly Negro Colleges One Year Later." *The Journal of Negro Education* 35, no. 3 (1966): 204–9.
- . "The Transition of the Predominantly Negro College." *The Journal of Negro Education* 35, no. 4 (1966): 494–505.
- Miljački, Ana., ed. *Under the Influence*. Cambridge, Mass.: SA+P Press, 2014.
- Mitchell Rentschler, Charles E. *The Cathedral Builder: A Biography of J. Irwin Miller*. Bloomington, In.: AuthorHouse, 2014.
- Mozingo, Louise A. *Pastoral Capitalism: A History of Suburban Corporate Landscapes*. Cambridge, Mass.: MIT Press, 2011.
- Mumford, Eric Paul. *The CIAM Discourse on Urbanism, 1928-1960*. Cambridge, Mass.: MIT Press, 2000.
- Muthesius, Stefan. *The Postwar University: Utopianist Campus and College*. New Haven: Yale University Press, 2000.
- Neumann, Dietrich. "Teaching the History of Architecture in Germany, Austria, and Switzerland: 'Architekturgeschichte' vs. 'Bauforschung.'" *Journal of the Society of Architectural Historians* 61, no. 3 (2002): 370–80.
- Neutra, Richard J., and Richard Heyken. "Die Schubaugruppen am Gänsberg in Stuttgart-Rot." *Architektur und Wohnform, Innen-dekoration* 63 (February 1955): 105–22.
- "New Talent USA: Architecture." *Art in America* 50, no. 1 (1962): 52–55.
- Newman, Oscar. "The New Campus." *Architectural Forum* 124, no. 4 (April 1966): 30–55.
- Nittve, Lars, ed. *Implosion: A Postmodern Perspective*. Stockholm: Moderna museet, 1987.
- O'Brien, James J. *CPM in Construction Management: Scheduling by the Critical Path Method*. New York: McGraw-Hill, 1965.
- . "Practical Factors in Project Application of CPM." *AIA Journal* 43, no. 5 (May 1965): 56–60.
- Ockman, Joan, and Edward Eigen, eds. *Architecture Culture, 1943-1968: A Documentary Anthology*. Columbia Books of Architecture. New York: Rizzoli, 1993.
- Ockman, Joan, and Rebecca Williamson. *Architecture School: Three Centuries of Educating Architects in North America*. Cambridge, Mass. : Washington, D.C.: MIT Press ; Association of Collegiate Schools of Architecture, 2012.



- Olson, Robert L., and Heather Kurent. *Vision 2000: Trends Shaping Architecture's Future*. Washington, DC: American Institute of Architects Press, 1988.
- Osman, Michael. *Modernism's Visible Hand: Architecture and Regulation in America*. Minneapolis: University of Minnesota Press, 2018.
- Otero-Pailos, Jorge. *Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern*. Minneapolis: University of Minnesota Press, 2010.
- Pai, Hyungmin. *The Portfolio and the Diagram: Architecture, Discourse, and Modernity in America*. Cambridge, Mass.: MIT Press, 2002.
- Pasnik, Mark, Michael Kubo, and Chris Grimley. *Heroic: Concrete Architecture and the New Boston*. New York, New York: The Monacelli Press, 2015.
- Patterson, James T. *Grand Expectations: The United States, 1945-1974*. Oxford History of the United States 10. New York: Oxford University Press, 1996.
- Pelkonen, Eeva-Liisa. *Alvar Aalto: Architecture, Modernity, and Geopolitics*. New Haven: Yale University Press, 2009.
- Pelse, Stella. "History of Latvian Art Theory : Definitions of Art in the Context of the Prevailing Ideas of the Time, (1900-1940)." Institute of Art History, Latvian Academy of Art, 2008.
- . "Modernist and Anti-Modernist Theories of National Art in Latvia during the 1920s and 1930s." *Centropa: Journal of Central European Architecture and Related Arts* 1, no. 3 (2001): 196–208.
- Perlstein, Rick. *Nixonland: The Rise of a President and the Fracturing of America*. New York: Scribner, 2009.
- Petit, Emmanuel. *Irony or, the Self-Critical Opacity of Postmodern Architecture*. New Haven: Yale University Press, 2013.
- Piper, Robert J. *Opportunities in an Architecture Career*. VGM Career Series. New York: Educational Books Division, Universal Pub. and Distributing Corp., 1966.
- Pommer, Richard, and Christian F. Otto. *Weissenhof 1927 and the Modern Movement in Architecture*. Chicago: University of Chicago Press, 1991.
- Price, Jay M. *Temples for a Modern God: Religious Architecture in Postwar America*. Oxford ; New York: Oxford University Press, 2013.
- Pugh, Derek S. *Organization Theory: Selected Classic Readings*. Fifth Edition. London: Penguin, 2007.
- Ramsden, Edmund. "From Rodent Utopia to Urban Hell: Population, Pathology, and the Crowded Rats of NIMH." *Isis* 102, no. 4 (2011): 659–88.
- Ramsden, Edmund, and Jon Adams. "Escaping the Laboratory: The Rodent Experiments of John B. Calhoun & Their Cultural Influence." *Journal of Social History* 42, no. 3 (2009): 761–92.
- Rasmussen, Steen Eiler. *Experiencing Architecture*. Cambridge, Mass.: MIT Press, 1959.
- Reinisch, Jessica, and Elizabeth White, eds. *The Disentanglement of Populations: Migration, Expulsion and Displacement in Post-War Europe, 1944-9*. New York: Palgrave Macmillan, 2011.
- Riesman, David. *A Changing Campus and a Changing Society*. Washington, DC.: American Association of State Colleges and Universities, 1968.
- . *Constraint and Variety in American Education*. Lincoln: University of Nebraska, 1956.
- . *Individualism Reconsidered, and Other Essays*. Glencoe, Ill.: Free Press, 1954.

- Riesman, David, Nathan Glazer, and Reuel Denney. *The Lonely Crowd: A Study of the Changing American Character*. Abridged and revised edition. New Haven: Yale University Press, 1961.
- Riker, Harold C., and Educational Facilities Laboratories. *College Students Live Here: A Study of College Housing*. New York: Educational Facilities Laboratories, 1961.
- Risselada, Max, and Dirk Van den Heuvel, eds. *Team 10: 1953-81: In Search of a Utopia of the Present*. Rotterdam: Netherlands Architecture Institute, 2005.
- Rohan, Timothy M. *The Architecture of Paul Rudolph*. New Haven: Yale University Press, 2014.
- Rowan, Jan C., ed. "A Search for Architectural Principles—Some Thoughts and Works of Gunnar Birkerts." *Progressive Architecture* 45, no. 9 (September 1964): 172–91.
- , ed. "Aesthetics and Technology of Preassembly." *Progressive Architecture* 45, no. 10 (October 1964): 162–222.
- . "Editorial." *Progressive Architecture*, no. 02 (February 1967): 89.
- , ed. "Matriculation Matrix." *Progressive Architecture* 47, no. 4 (April 1966): 211–13.
- . "Wanting to Be: The Philadelphia School." *Progressive Architecture* 42, no. 4 (April 1961): 130–63.
- Rudolph, Paul. *Writings on Architecture*. New Haven: Yale School of Architecture and Yale University Press, 2008.
- Rudolph, Paul, Jose Louis Sert, Eero Saarinen, and William Wurster. "The Changing Philosophy of Architecture: Speeches Made at the 1954 A.I.A. Convention, Boston, Mass." *Architectural Record* 116, no. 2 (August 1954): 120–.
- Saarinen, Eliel. *Search for Form: A Fundamental Approach to Art*. New York: Reinhold, 1948.
- . *The City: Its Growth, Its Decay, Its Future*. New York: Reinhold, 1943.
- Said, Edward W. *Beginnings: Intention and Method*. New York: Basic Books, 1975.
- Saint, Andrew. *The Image of the Architect*. New Haven: Yale University Press, 1983.
- Schmertz, Mildred F. *Campus Planning and Design*. New York: McGraw-Hill, 1972.
- Scott, David H. "An Analysis of Critical Elements in Project Management." *Canadian Architect* 16 (May 1971): 54–57.
- . "Organizing for Change." *Canadian Architect* 16 (April 1971): 63–65, 72.
- . "The Organization of Architects' Offices." *Canadian Architect* 15, no. 1 (January 1970): 35–38.
- Shanken, Andrew Michael. *194X: Architecture, Planning, and Consumer Culture on the American Home Front*. Minneapolis: University of Minnesota Press, 2009.
- Shephard, Ben. *The Long Road Home: The Aftermath of the Second World War*. New York: Alfred A. Knopf, 2011.
- Smithson, Alison, ed. "The Work of Team 10." *Architectural Design* 34, no. 8 (August 1964): 373–93.
- Stephan, Regina, ed. *Eric Mendelsohn, Architect 1887-1953*. New York: The Monacelli Press, 1999.
- Stephens, Suzanne. "The Fountainhead Syndrome: The Skyline's the Limit, Says Suzanne Stephens, When Architects Build Reputations on a Foundation of Ego." *Vanity Fair*, April 1, 1984.

- Stern, Robert A. M. *New Directions in American Architecture*. New Directions in Architecture. New York: George Braziller, 1977.
- Stevens, Garry. *The Favored Circle: The Social Foundations of Architectural Distinction*. Cambridge, Mass.: MIT Press, 1998.
- Stroup, Edsel W. "The Amerika Häuser and Their Libraries: An Historical Sketch and Evaluation." *Journal of Library History* 4, no. 3 (1969): 239–52.
- Sugrue, Thomas J. *Sweet Land of Liberty: The Forgotten Struggle for Civil Rights in the North*. New York: Random House, 2008.
- Taeuber, Karl E., and Alma F. Taeuber. *Negroes in Cities: Residential Segregation and Neighborhood Change*. Chicago: Aldine Pub. Co., 1965.
- Tafuri, Manfredo. *Architecture and Utopia: Design and Capitalist Development*. Translated by Barbara Luigia La Penta. Cambridge, Mass.: MIT Press, 1976.
- . *The Sphere and the Labyrinth: Avant-Gardes and Architecture from Piranesi to the 1970s*. Translated by Pellegrino d’Acierno and Robert Connolly. Cambridge, Mass.: MIT Press, 1987.
- . *Theories and History of Architecture*. Translated by Giorgio Verrecchia. New York: Harper & Row, 1980.
- "The Current Work of Paul Rudolph." *Architectural Record* 121, no. 02 (February 1957): 161–75.
- The Role of Design in the Profitable Architectural Office: From the AIA Committee on Design Symposium "Art and Profit" Held March 18, 1985 in Washington, D.C.: [Proceedings]*. Washington, D.C.: The AIA Press, 1985.
- Tombesi, Paolo. "Back to the Future: The Pragmatic Classicism of Australia’s Parliament House." *Arq: Architecture Research Quarterly* 7, no. 2 (2003): 140–54.
- . "The Carriage in the Needle: Building Design and Flexible Specialization Systems." *Journal of Architectural Education* 52, no. 3 (February 1999): 134–42.
- Turin, D.A. "Building as a Process [1967]." *Building Research & Information* 31, no. 2 (2003): 180–87.
- . "Perhaps, Perhaps, Perhaps ...." *Habitat International* 3, no. 1 (1978): 77–78.
- Turner, Paul Venable. *Campus: An American Planning Tradition*. Cambridge, Mass.: Architectural History Foundation ; MIT Press, 1984.
- University Facilities Research Center, and Educational Facilities Laboratories. *Horizontal and Vertical Circulation in University Instructional and Research Buildings*. Madison, 1961.
- Varnelis, Kazys. "The Spectacle of the Innocent Eye: Vision, Cynical Reason, and The Discipline of Architecture in Postwar America." Ph.D. Dissertation, Cornell University, 1994.
- Venturi, Robert. *Complexity and Contradiction in Architecture*. Museum of Modern Art Papers on Architecture. New York: Museum of Modern Art; Doubleday, 1966.
- Venturi, Robert. *Complexity and Contradiction in Architecture*. Second Edition. New York: Museum of Modern Art, 1977.
- . *Iconography and Electronics upon a Generic Architecture: A View from the Drafting Room*. Cambridge, Mass.: MIT Press, 1996.
- Venturi, Robert and Denise Scott Brown. *A View from the Campidoglio: Selected Essays, 1953-1984*. Edited by Peter Arnell, Ted Bickford, and Catherine Bergart. Icon Editions. New York: Harper & Row, 1984.

- Venturi, Robert, Denise Scott Brown, and Steven Izenour. *Learning from Las Vegas*. Cambridge, Mass.: MIT Press, 1972.
- . *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form*. Revised Edition. Cambridge, Mass.: MIT Press, 1977.
- Vinegar, Aron. *I Am a Monument: On Learning from Las Vegas*. Cambridge, Mass.: MIT Press, 2008.
- Vinegar, Aron., and Michael J. Golec. *Relearning from Las Vegas*. Minneapolis: University of Minnesota Press, 2009.
- Virno, Paolo, and Michael Hardt, eds. *Radical Thought in Italy: A Potential Politics*. Theory out of Bounds 7. Minneapolis: University of Minnesota Press, 1996.
- Voigt, Wolfgang, and Roland May, eds. *Paul Bonatz 1877-1956*. Tübingen: Wasmuth Verlag, 2010.
- Wagnleitner, Reinhold. “Propagating the American Dream: Cultural Policies as Means of Integration.” *American Studies International* 24, no. 1 (1986): 60.
- Wharton, Annabel Jane. *Building the Cold War: Hilton International Hotels and Modern Architecture*. Chicago: University of Chicago, 2001.
- Whyte, William H. *The Organization Man*. Garden City, N.Y.: Doubleday, 1956.
- Wickersham, Jay. “From Disinterested Expert to Marketplace Competitor: How Anti-Monopoly Law Transformed the Ethics and Economics of American Architecture in the 1970s.” *Architectural Theory Review* 20, no. 2 (2015): 138–58.
- Wilkerson, Isabel. *The Warmth of Other Suns: The Epic Story of America’s Great Migration*. New York: Random House, 2010.
- Williamson, Joy Ann. *Radicalizing the Ebony Tower: Black Colleges and the Black Freedom Struggle in Mississippi*. New York: Teachers College Press, 2008.
- Williamson, Roxanne Kuter. *American Architects and the Mechanics of Fame*. Austin: University of Texas Press, 1991.
- Wittkower, Rudolf. “Individualism in Art and Artists: A Renaissance Problem.” *Journal of the History of Ideas* 22, no. 3 (1961): 291–302.
- Woods, Mary N. *From Craft to Profession: The Practice of Architecture in Nineteenth-Century America*. Berkeley: University of California Press, 1999.
- Wyman, Mark. *DPs: Europe’s Displaced Persons, 1945-1951*. Ithaca: Cornell University Press, 1998.
- Yaneva, Albena. *Made by the Office for Metropolitan Architecture: An Ethnography of Design*. Rotterdam: 010, 2009.
- . *The Making of a Building: A Pragmatist Approach to Architecture*. New York: Peter Lang, 2009.
- Zevi, Bruno. *Architecture as Space: How to Look at Architecture*. New York: Horizon Press, 1957.
- . *The Modern Language of Architecture*. Seattle: University of Washington Press, 1978.
- . *Towards an Organic Architecture*. London: Faber & Faber, 1950.
- Zimmerman, Claire. *Photographic Architecture in the Twentieth Century*. Minneapolis: University of Minnesota Press, 2014.
- Zukowsky, John, ed. *The Many Faces of Modern Architecture: Building in Germany Between the World Wars*. New York: Prestel, 1994.