STANDARDS
How to Tell Good Buildings from Bad Ones

However well organized writers may be, their writing must be useful. Before one can write well about architecture, one must have something to say. Mere factual description is sufficient for program documents or encyclopedia entries, but to appreciate the importance of an existing building, or to inform decisions about a new design, the standards are higher. Indeed, they must include precise and accessible judgments about quality. Many people are afraid to pass judgment on works of architecture, preferring to leave the choice to experts, by which they usually mean academics and professional critics. Yet while we can avoid literature, music, theater, painting, or sculpture, we are all obliged to experience architecture, whether in our houses, our workplaces, or our institutions. As a result, we are all entitled to our opinions about what makes a building good, bad,
or indifferent. Developing a set of criteria is the first step in becoming a discriminating observer, designer, user—or, in this case, writer. And nobody should fear being wrong.

This became embarrassingly clear to me when I had just been hired as the architecture critic for New York magazine. At a party with some friends, I was asked what made the Seagram Building so good. Completed in 1958, this office tower on New York City’s Park Avenue instantly became the poster building of high-rise corporate Modernism. It is included in most books on modern architecture, and it is widely considered one of the finest works by one of history’s greatest architects. But why? I answered the question by mumbling something about how “everybody knows how good Seagram is” and how it is a monument of modern times, but I had to admit to myself that I had never actually examined my reasons for accepting the received wisdom.

Rattled by the realization that I might someday have to answer the same question to a less forgiving audience, I decided to do some on-site investigation. I bought a three-legged canvas stool like the ones artists use to
sketch in museums, and on a sunny afternoon strode up from my office on Forty-First Street in Manhattan to Fifty-Second and Park. Nervously, I unfolded the stool on the plaza in front of Seagram and sat down, reporter’s notebook at the ready. Braving the puzzled looks from many of the fast-moving New Yorkers streaming to and from their jobs, I forced myself to stay put for more than an hour. During that time I studied the pleasing relationship between the expanse of the plaza and the thirty-eight stories of the tower, which is set back one hundred feet from the street. I took in the contrast between the tower’s palette of glass and bronze and the sturdy masonry of McKim, Mead & White’s 1918 Renaissance Revival Racquet and Tennis Club across the avenue. At the same time, I came to appreciate how Mies, while using different materials, had understood the classical organization of the club and paid it homage in his own thoroughly modern vocabulary. I looked closely at the placement of Seagram’s ornamental pools to north and south and wondered how my impression of the space would change if the pools were larger or smaller. I noticed that the edges of the vertical bronze
I-beams attached to the façade were curved slightly inward, softening the impact of the sunlight on them, and that the pinkish-gray of the window glass, while evidently dark enough to shade the interior, was not so dark as to block entertaining views from the outside of the office workers going about their business.

Feeling that I had absorbed enough of the exterior, I took my stool into the lobby and started the process over again. The formal symmetry of Seagram’s exterior is echoed on the interior by four elevator banks. The twenty-four-foot-high ceilings create a luxurious expanse of space. I took careful note of the fine materials surrounding me: travertine walls, granite floors, spotless glass windows providing views of the people and cars passing by outside. I was aware that the lighting was inviting, but noticed that the light fixtures themselves were artfully recessed, creating an ambient glow on the walls of honey-colored stone. Without any scientific way to measure them, I sensed that the relationships among the elements were harmonious. It seemed that every detail of the space had been conceived to convey a message of elegance, tranquility, order, and power befitting an
organization of great wealth—but one with high aesthetic standards. Folding up my stool, I realized that I had some answers for anyone who wanted to know why Seagram was so good.

From then on, I tried to conduct the same investigation of any building I was writing about, often returning at different times of the day and in different weather to see how it bore up under varying conditions. In my teaching, I ask my students to do the same, first taking in a building as an overall experience, and then boring in on its special qualities. The goal is to develop criteria by which the students can measure quality in a work of architecture. This is essential to being able to write intelligently about design, and the process is not as mysterious or as intimidating as it might seem.

The most familiar criteria for architectural quality have come down to us from Vitruvius (c. 80–c. 20 BC), the chronicler of Greco-Roman architecture who emphasized the importance of firmitas, utilitas, and venustas. These Latin concepts were first translated into English as “firmness,” “commodity,” and “delight.” By “firmness,” Vitruvius meant structural strength; by
“commodity,” he meant function or practicality; and by “delight” he meant aesthetic quality, or beauty. The first two of these are largely self-explanatory. The last of the three is elusive, since it is in the eye of the beholder and is therefore always open to debate. However, that does not mean that beauty is inexplicable. On the contrary, the aesthetic qualities of architecture are what distinguish it from mere construction, and being able to make a lucid case for what is in a beholder’s eye is a major part of evaluating any design.

While the Vitruvian triad has endured for centuries as the basic criteria for judging architecture, other standards are also important. For example, does the building relate well to its site, including the buildings around it? The 1931 Villa Savoye, by Le Corbusier, is a landmark of modern architecture. Yet this austere white box raised on pilotis, or slim metal columns, is divorced from its natural setting and could have been deposited almost anywhere. Frank Lloyd Wright’s Fallingwater, the house he built in 1935 for a wealthy department-store magnate in the Pennsylvania countryside, is perhaps the most famous private house in the world. Yet it is
considered a masterpiece in part because of the way the architect integrated his building into the landscape, going so far as to bring the natural rock of the site up through the living-room floor. But his Guggenheim Museum, on New York’s Fifth Avenue—also considered a masterpiece—is as alien a form in its context of stately apartment buildings as the Villa Savoye is in its country setting. Which is better? And why?

Beyond site, the writer on architecture must consider how the architect has dealt with scale, meaning the relationship between one unit of measure and another and the relationship of the building to the human figure. (The word scale is derived from the Latin for “steps” or “ladder.”) A good way to test this is to study the parts of a building with which we are most familiar. The doorway to a conventional house is normally about seven feet high and two-and-one-half feet wide. This helps us measure the rest of the house. If the doorway is unusually high or wide, we instinctively sense that something is not right (unless, of course, the architect is deliberately distorting the relationship to make a visual point, as theater-set designers and Disney’s Imagineers do). But
if the building is a bank or a library, the reverse is true: an excessively small door would be both impractical and out of scale with the rest of the structure.

Closely related to scale is proportion, or the relation of a building’s parts to one another. Does the building seem too tall for its width, making it look unstable? Or is it too wide for its height, making it look heavy and squat? The architectural writer Brent Brolin, in his book *The Designer’s Eye*, conducted an exercise using computers to subtly alter the appearance of scores of buildings, both famous and obscure.† The goal was to demonstrate how subtle the differences may be between something that is considered excellent and something that is considered merely acceptable, or just bad. One of Brolin’s most striking examples is the John Hancock office tower in Boston, designed by Henry Cobb of the firm I.M. Pei & Partners and finished in 1976. (Brolin gives neither names nor dates for his examples, reducing the influence of prejudice in the viewer.) Located next to H.H. Richardson’s 1877 Trinity Church, a neo-Romanesque landmark, Cobb’s glass-clad tower is cleft by a V-shaped notch that runs from bottom to
top. This notch not only creates a dramatic shadow line but also divides the building visually into two narrow, asymmetrical shafts, thus reducing its mass and its impact on the adjacent church. The wisdom behind the notch is immediately apparent in Brolin’s manipulated photograph of the building without it. As a solid block, the tower is overwhelming and boring.

The study of proportion goes back to ancient times and the classical concept of the golden section (a mathematical relationship between one segment of a line and another), but it has been pursued by every architectural generation since antiquity. The most notable example in the Modernist period was the Modulor scale, developed by Le Corbusier. He had been trained in the metric system and as a young man was fascinated by the latest products of industry, from grain silos to steamships and airplanes. A painter and something of a philosopher as well as an architect, Le Corbusier was frustrated by the metric system’s unyielding rationality and was drawn to the Anglo-Saxon system of measurement based on the inch, foot, and yard because of its reflection of the human form. Invoking the golden sec-
tion, Le Corbusier developed a scale of measurement that would (according to his rather flexible calculations) bring the Continental and the Anglo-Saxon systems together. This synthesis would not only produce pleasing architectural results but also forge a symbolic link between pure geometry and human proportions. In practice, the system had many flaws, but the attempt to simultaneously rationalize and humanize architecture reflected a recurrent urge across the ages to create architecture in harmony with the natural world.

The use of materials is another basic criterion by which to judge an architect’s work. Perhaps no designer of the late modern period has paid closer attention to materials than I. M. Pei. The glass pyramid he designed as the centerpiece of the renovation of the Louvre museum in Paris is a consummate example. Completed in 1989, the severely abstract structure is the new main entrance, providing access to underground corridors leading to the galleries above. The architect’s goal was to create a central feature that would have minimum visual impact on the imposing architecture of the original palace. His solution was to clad the pyramid in glass
supported by a fretwork of steel struts. (A combination of Parisian air pollution and pigeon droppings compromised the hope for total transparency, but the pyramid is a striking addition to the museum and now competes with the Eiffel Tower as a symbol of the city on tourism brochures.) Pei was so determined to get precisely the quality of glass he wanted that when the centuries-old French glass fabricator Saint-Gobain said Pei’s specifications were impossible to satisfy, the architect threatened to hire a German firm. National pride prevailed, and Saint-Gobain delivered the glass.

Pei’s attention to the details of his buildings is considered a virtue by many, but obsessive by others. The Canadian-born California architect Frank Gehry takes an entirely different approach. His Frederick R. Weisman Museum at the University of Minnesota in Minneapolis, completed in 1993, is a striking sculptural composition clad in stainless steel panels. At a distance, the main façade, which overlooks the Mississippi River, is a powerful aesthetic statement meant to advertise the university’s commitment to contemporary art and architecture. But on closer inspection, the metal panels in
places seem to bulge and buckle at the joints, creating an impression of hasty, if not sloppy, construction. Gehry has always celebrated the theatrical and the transitory in his work, and perhaps the anti-establishmentarian treatment of his architectural details is a way of embracing the disorderly nature of artistic creation and contemporary life. Perhaps, on the other hand, it reflects a lack of architectural rigor. Pei’s precision would be as irrelevant to Gehry as Gehry’s focus on form would be to Pei. Who is right?

Whatever school of architecture may be favored at a particular moment, the best examples of it almost always demonstrate an internal consistency, or organizing principle. The architects who were trained in various forms of classical European tradition were expected to adhere to dictates of monumentality as expressed in the great works of the past. An example is the work of the firm Cram, Goodhue, and Ferguson, architects of the US Military Academy at West Point. Completed in 1913, the academy buildings reflect the firm’s belief in the neo-Gothic as a style that perpetuated the spiritual as well as the aesthetic traditions of
Christian Europe. But they are also stripped to their essentials, emphasizing the underlying code of sacrifice embodied by the military.

The Modernists cast aside the overt historicizing of such architects as Cram, Goodhue, and Ferguson and developed an aesthetic that celebrated the machine, insisting that the sort of ornament favored in previous eras violated the honesty they felt was demanded by modern materials and building techniques. A powerful document of this is the campus designed in the 1940s for the Illinois Institute of Technology in Chicago by Mies van der Rohe. Using a modular system of rectilinear masses, Mies created a relentlessly orderly environment of virtually interchangeable architectural parts: without signs, there was no way to tell which of his units—all composed of steel members filled with brick panels and glass—performed which function. The chapel is almost indistinguishable from the research and classroom buildings.

In another turn of the aesthetic wheel, architects in recent decades have rebelled against the perceived rigidity of Modernist doctrine and turned to the sculptural
possibilities provided by computer-aided design and fabrication. Underpinning many of these designs by such architects as Rem Koolhaas, Zaha Hadid, and Daniel Libeskind is a determination to engage the user through the deliberate use of spatial disorientation. While some of their buildings may seem chaotic and therefore lacking in any organizing principle, the careful creation of disharmony can, ironically, be used as an organizing principle of its own. At first glance, Gehry’s Guggenheim Museum in Bilbao, Spain (1997), may appear to be a random sculptural form; on closer analysis, it provides a defining focus for what had been a disorganized urban backwater.

Good architecture is created according to organizing principles, principles that are intimately related to the message the designer wishes to send. Although the organizing principle of Albert Speer’s designs for Adolf Hitler’s Berlin may have been the sort of symmetry common to the Classical tradition, that principle was perverted by gigantic overscaling and simplification of forms to remind the users that the Nazi state was supreme and that the individual was both small and expendable. The
message was one of power and intimidation. One could say something similar about American corporate architecture. Philip Johnson’s AT&T (now Sony) Building, on New York City’s Madison Avenue, is an example. While the apparently whimsical Postmodern split pediment at the top drew the greatest public attention when the building was finished in 1984, the oversized arcade at street level delivered the more powerful architectural message. Showing a troubling similarity to a design by a Nazi colleague of Speer’s, Hans Malwitz, Johnson’s arcade dwarfed pedestrians, reminding them that the communications giant that had commissioned the building was to be respected if not feared.

The US Supreme Court, the neo-Classical temple designed by Cass Gilbert and finished in 1935 (soon after Le Corbusier’s Villa Savoye), might seem out of step with its time. Yet the message the nation wanted to send from Washington, DC, was that the central shrine of the American legal system was visually and unmistakably linked to its origins in Roman law. The same language has been used in the design of thousands of banks to reassure depositors that their money would be secure
over time, just as the columns of Greece and Rome have endured through the centuries. More recently, Louis Kahn evoked memories of Roman vaulted forms in his Kimbell Art Museum, in Fort Worth, Texas (1972), perhaps subliminally reminding visitors of the expression *Ars longa, vita brevis*—art is long, life is short. However, what appear to be vaults are actually concrete beams in the shape of gull wings. The vaults have been sliced down the middle to admit light to the galleries. Is this an honest use of historical imagery? If not, does the sublime illumination of the interior not compensate for this bit of stage-set sleight of hand?

Generations of American students have spent their formative years oblivious to the fact that the collegiate Gothic buildings in which they studied at Notre Dame or Duke were designed to subtly enhance their education. A stroll through the courtyards of Yale or the University of Pennsylvania is meant to transport a student back to Oxford and Cambridge in medieval or Tudor times, when monks and scholars labored over their manuscripts in pursuit of knowledge. Of course, the Yale and Penn buildings were constructed between
the 1890s and 1930s, but while their beams were steel rather than oak, their shapes and details were crafted to spur undergraduates to continue a venerable academic tradition going back centuries.

These criteria for measuring works of architecture are the most familiar, but they are by no means comprehensive. Each of us is likely to make some additions to the list. Among the standards my students have come up with are “intention,” “sensuality,” and “value over time.” One student insisted that a good building must have “people at its center.” He went on to argue, “Buildings develop over a long period of time and accrue a patina of all the people who have inhabited them . . . becoming part of our collective identity.” Another felt that a building’s design should “take an artistic stand.” Others felt that a good building should address “the emotional needs of the occupant” and reflect “a thoughtful acknowledgment of constraints.” Yet another argued that good architecture must “ennoble” its users and its surroundings. All of these are valid criteria by which to judge a building’s quality, but the key to communicating how buildings fulfill these standards lies in close
analysis and clear expression of the conclusions. As in the case of beauty, however, one observer’s nobility may be another’s pomposity, so the writer must be prepared to illustrate and document the ways in which a work of architecture conveys its virtues. Merely rattling on with such trendy architectural terms as “the materiality of an intervention,” “temporalized signification,” or “climax ecology” is not likely to persuade a reader, let alone a client.

Regardless of criteria, a responsible writer on architecture must take into account the intentions of the client and try to reinhabit the time in which the building was designed. Today’s standards are necessarily different from those of yesterday. But one needs to be wary of the “Oedipus effect”—condemning one’s parent before reaching maturity. In 1933, Rockefeller Center was damned by the leading architecture critic of the day, Lewis Mumford, who wrote that “the main building, from a distance, is a graceless hulk, and will never be anything better until it is hidden.” Mumford went on to say, “Here one has monotony without strength and irregularity without any dynamic force.” 2 Now, of course,
Rockefeller Center has been embraced by critics and the public alike. The entry on it in the AIA Guide to New York City reads: “An island of architectural excellence, this is the greatest urban complex of the twentieth century: an understated and urbane place that has become a classic lesson in the point and counterpoint of space, form, and circulation.” To take a more recent example, Edward Durell Stone’s 1965 Gallery of Modern Art, also in New York City, was panned by the architecture critic of the New York Times, Ada Louise Huxtable, as “a die-cut Venetian palazzo on lollipops.” But many who might have agreed with Huxtable’s aesthetic judgment nevertheless considered the gallery to be a representative building of its day, and such prominent architects as Robert A. M. Stern argued that it should be preserved as a landmark. (It was subsequently gutted and resurfaced.)

Changes in the way we judge architecture over time suggest that we must be patient about deciding which works to preserve and which to discard. Just as children tend to rebel against their parents and embrace their grandparents, people who make decisions about architectural preservation often undervalue the work of their
own time, while rediscovering the virtues of buildings that have endured for a generation or more. Of course, if those buildings have been demolished as a result of changing tastes, there is no chance to reevaluate them free of contemporary passions. Merely because many orthodox Modernist buildings of the 1950s were considered cold and out of date by the Postmodern architects of the 1970s was hardly reason enough to tear down so many that, after a decent interval, might have been respected, or even beloved.

A building that survived rotations of the Oedipal fashion wheel is Paul Rudolph’s 1963 Art and Architecture Building at Yale (since renamed Paul Rudolph Hall). When it opened, the building appeared on the covers of all the major American architectural magazines and drew praise from the most authoritative critics. Within a few years, however, its massive concrete bulk had become a symbol of all that was wrong with a nation consumed by racial upheaval and protests against the Vietnam War. Yale considered demolishing the building but was constrained by the cost and instead merely neglected its care. In 2009, having been recognized as
a monument to an important period in American architectural history—and perhaps the best work its architect had produced—Rudolph’s building was renovated and expanded. Its near-death experience was overshadowed by yet another outpouring of critical enthusiasm. Ada Louise Huxtable, who had condemned Stone’s museum—and never changed her view of it—nevertheless recognized that architectural judgment is never fixed in time. Writing of Rudolph’s Yale building in 1971 in the New York Times, she said, “Never have a building’s fortune and reputation gone up and down so fast.” She went on to observe: “How the human condition and consciousness change. How arbitrarily are reputations made, destroyed, and revived. How short is history today.”

The ups and downs Huxtable describes make absolute judgments of architectural quality difficult if not impossible. Nevertheless, a rigorous application of thoughtful standards will help protect a writer from the lures of fashion and fads. Good architecture, regardless of time or style, has virtues that have been recognized across the centuries. Good writing about architecture is grounded
in the author’s ability to approach buildings with an open mind, sharp eyes, and sympathy for readers who may need help in appreciating the value of the built environment that surrounds them.
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LIKE ALL THE ARTS, architecture arouses passions and engages ideologies. But unlike the other arts, architecture affects every aspect of our lives. Persuading people of one’s architectural convictions is a skill that requires an understanding not just of qualitative standards but also of the role of buildings as cultural messengers. Perhaps more than any other form of writing about architecture, it also requires a voice. Persuasive writers must do more than present their positions; they must also sway their readers, just as politicians, preachers, and the best leaders do.

In years past, we have seen persuasive writing most often in the form of editorials and op-ed pieces for newspapers and magazines. But with the growth of technology, persuasion is increasingly the role of emails, blogs, and tweets. In all forms, the commitment to the