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The Decorated Diagram

Harvard Architecture and the Failure of the Bauhaus Legacy

by Klaus Herdeg

In answering the critic Clement Greenberg's query "why all those ugly buildings?" Klaus Herdeg lays the blame directly at the feet of Walter Gropius and the curriculum at the Harvard Graduate School of Design. Herdeg contends that the work of many of America's leading architects who studied under Gropius—Philip Johnson, I. M. Pei, John Johanssen, and Edward Barnes among them—commands visual interest through an almost total absence of design, resulting in the banal and sterile quality of so much of modern architecture. He builds his case through meticulous comparisons of dozens of buildings.

"Among the more devastating comparisons are Johnson's and Franzen's respective facade designs for apartment buildings at 1001 and 800 Fifth Avenue with Le Corbusier's Besnos House, Johnson's Sheldon Memorial Art Gallery with Schinkel's Altes Museum, and Barnes's master plan for the S.U.N.Y. campus at Purchase with Thomas Jefferson's University of Virginia. Never in any doubt, the final score is Harvard zero and History three. Herdeg possesses a keen eye and an incisive style. He is at his best in these critiques."—Mary N. Woods, *Progressive Architecture*

"*The Decorated Diagram* is an intellectual's version of *From Bauhaus to Our House*. . . . Relying on a series of breathtaking sophisticated formal analyses, Herdeg concludes that most of today's buildings are 'curiously passionless' because they are built by former students of Gropius. . . . Herdeg's brilliant essay cuts across realms of modern, late-modern, and postmodern into a far more exciting and illuminating sphere."—Sarah Williams, *Architectural Record*

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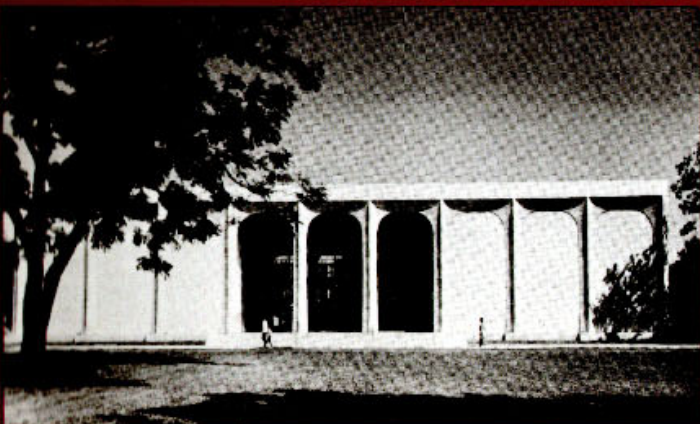
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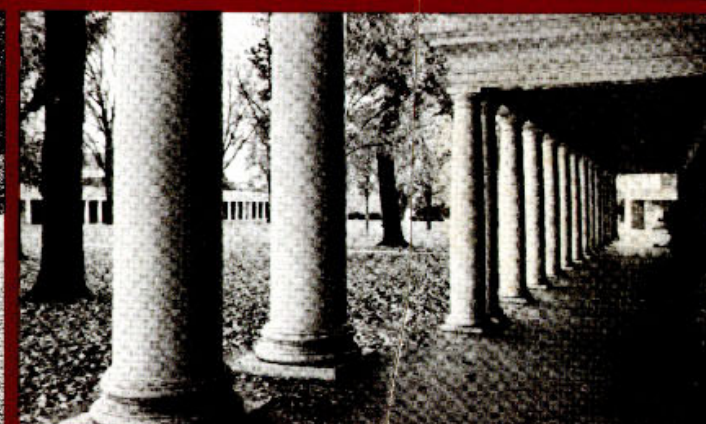
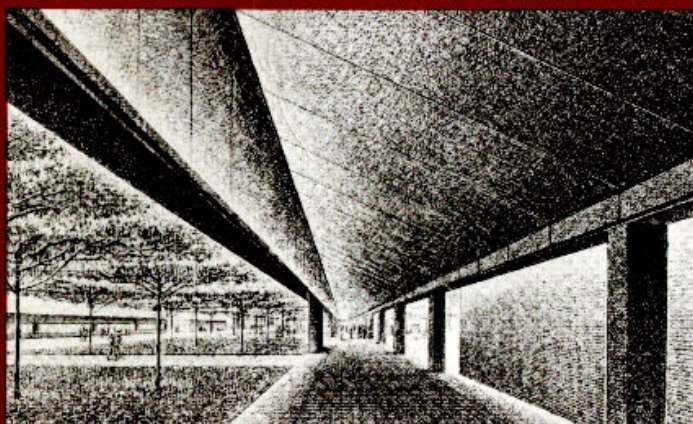
THE DECORATED DIAGRAM: Harvard Architecture and the Failure of the Bauhaus Legacy

Herdeg

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*Harvard Architecture and
the Failure of the Bauhaus Legacy*

Klaus Herdeg



In this chapter I will examine in detail some representative Bauhaus-legacy buildings in terms of the characteristics I have proposed—dichotomy between plan and appearance and, on the part of the architects, a certain blindness to formal structure and a general reluctance, if not inability, to experiment with new solutions when the occasion invites inventiveness on a fundamental level.

The first example is Philip Johnson's Sheldon Memorial Art Gallery in Lincoln, Nebraska, of 1963, a good illustration of a seeming rejection of the Bauhaus ethos for the sake of artistic license (figs. 54–57, 61). Here the architect's propensity toward the sort of classical grandeur traditionally associated with institutional or personal power, although antithetical to Bauhaus ideas, is quite apparent. But, true to Bauhaus teaching, the architectural methods by which the effects of architecture as art and the experience of grandeur are achieved are just as literal and mechanical as the ones employed in designing the much-denounced Harvard box.

It should help clarify these statements to compare the Sheldon Art Gallery to a building which might have served as its model, Karl Friedrich Schinkel's Altes Museum in Berlin, completed in 1830 (figs. 52, 53, 58–61). It is a hypothetical rather than a historically certifiable precedent, but it serves as a contrasting solution to the same program type.¹⁶ It is obvious from a cursory look at the two buildings—or, more precisely, their published pictures and plans—that they have in common some basic elements of formal structure. Despite their differences in size and proportion (about 150 by 100 by 35 feet for Sheldon and about 296 by 184 by 64 feet for the Altes Museum), as well as period and culture, both are characterized by a freestanding, oblong, rectangular container, divided, parallel to its short sides, into three zones. The middle zone dominates by its central location and by its unique formal and

functional significance. Furthermore, on the major approach sides of both museums, the unity of the facade is represented by the use of uniform, rhythmic vertical divisions.

Perhaps the more glaring difference between the two is the relationship of facade to plan and the disposition of spaces inside the building. The Sheldon Art Gallery is essentially composed of two decorated boxes pulled apart to leave a void of the same dimensions; the Altes Museum is complex and finely orchestrated to multiple themes, gathered into a hierarchic whole. While schematically the uniform rhythm of vertical elements along the main facade refers to the unity of the building in each case, the means used and the path of refinement chosen produce facades at opposing ends of the scale of visual and intellectual interest.

The facade unity achieved in the Schinkel museum derives from the expression of the vertical elements as a freestanding colonnade set into a tight frame provided by end walls, base, and roof (fig. 52). Termination of the facade by walls instead of columns and the use of the classical device of narrowing the end spacing allow the colonnade to be perceived as an entity, like seeing the forest before the trees. Moreover, a row of columns set in front of a wall always constitutes a figure-ground relationship. While the columns play the more readily apparent part of figures, the spaces between them can be equally effective figures. Schinkel's portico behaves as the laws of perception would have it, except that in addition it displays a more subtle application of the figure-ground phenomenon. The colonnade as a whole, by virtue of its uniformity, offers a ground against which the recessed wall/colonnade ensemble becomes the figure. The result might be described as multi-wave visual and spatial oscillations, from small to large scale, from solid to void, from front to back, and from extremities to center.

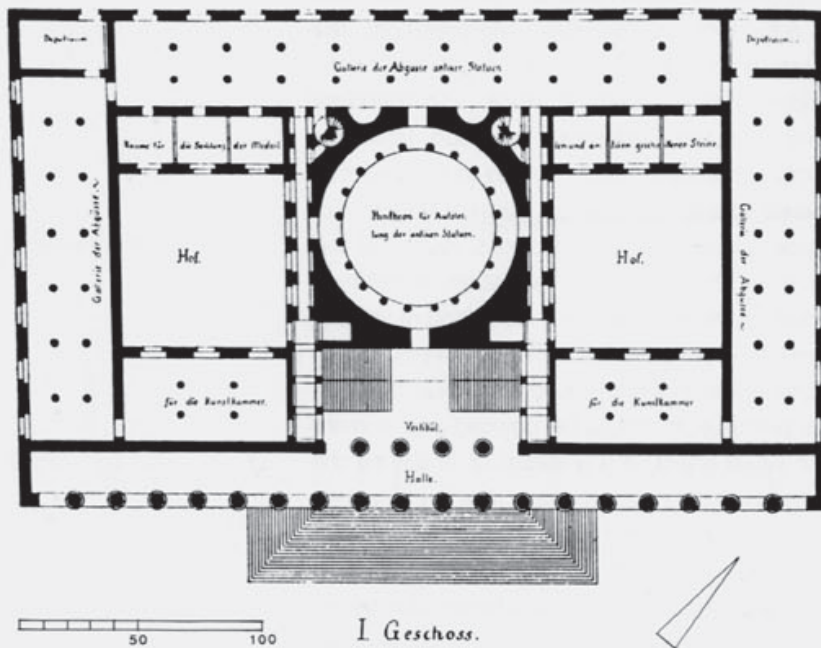
Finally, the play of sun and shadows breathes life into this already formidable spectacle. The facade, owing to this controlled use of a natural element, is not only an aesthetic tour de force for the intellect; it speaks directly to the emotions. The sense of time, always present when moving around and through a building, here acts in a different and complementary manner. While the viewer stands still, the building may alter its appearance by the minute and through the seasons. On every encounter there will be new nuances, new moods, new occasions for interpretation.

For instance, you may be subjected to the struggle for attention between two simultaneous formal/symbolic aspects of Schinkel's colonnade. One is its appearance as an independent screen that seems to move past incidental architectural events, tending to generalize the building behind it by ignoring all hierarchic elements. Symbolically the colonnade and, by association, the whole building tend to be seen as anonymous and therefore free to be mentally appropriated and interpreted by anybody, at any point in time, like an aqueduct. In its other interpretation, the screen of columns can be seen as integral to the building, firmly locked in place, and therefore serving as the outermost transition from the strictly articulated interior spaces to the universal exterior space, suggesting a classical temple. Together these two interpretations vastly expand the scale of visual/spatial oscillations mentioned earlier, to the point where the method of shifting attention promises to become the governing idea of the whole building, facade and plan (fig. 53). This principle, it should be pointed out, is more than visual effect: it is a means of engaging the viewer's intellect and emotions in active discovery and enjoyment of the Altes Museum.

The main facade of Johnson's Sheldon Art Gallery, by contrast, presents a scheme that seems to nullify all human passion, not to say engage-

52
Karl Friedrich Schinkel.
Altes Museum, Berlin,
1822, entry facade.

53
Altes Museum, plan.



ment. The calculated orchestration of physical, spatial, and temporal elements and forces into a vibrant yet serene whole in the Schinkel facade is reduced in Johnson's museum to a single chord straining to evoke a sound of grandeur. Although finely crafted travertine—evoking grandeur—covers the entire facade, the shaping contradicts traditional associations with institutions. What might be meant to recall a colonnade or portico is actually a travertine skin pulled over a concrete frame. Looking like the webbing of duck's feet, it induces some visual, quasi-physical tension along the sloped and curved surfaces which form the boundaries of each cartouche-shaped panel. Where, in the Altes Museum, there is spatial and temporal tension, even oscillation, in a facade of framed identity, we find here a nearly two-dimensional pattern, stretched across the major facade and eventually—if one walks around and into the building—enveloping both exhibition boxes and the building as whole.

There is some plausibility in responding to an open site, which is surrounded by casually dispersed groves of trees so typical of college campuses and lacks strong spatial cues (fig. 56), with a building of continuous facades, particularly if it is to be entered on two opposing sides. It is just as plausible to find Schinkel responding to his site (fig. 60), which he himself chose and shaped and which has strong spatial and symbolic cues—consisting of the "tree wall" to the east, the castle front to the south, and the edge of the canal to the west of the huge square—with a building which has one dominant facade defining the northern limit of the square, while the other three facades resemble each other. The intentions in each case may be equally valid; it is their respective development which makes the difference. While the first chooses to stay within the range of surface manipulations, the second explores the powers of spatial events to realize its intentions. Where one facade freezes into deco-

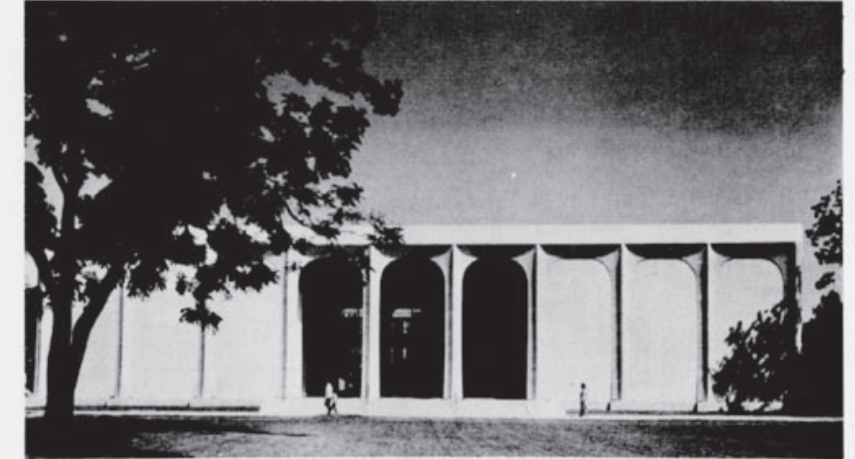
ration, the other opens up countless opportunities for human participation.

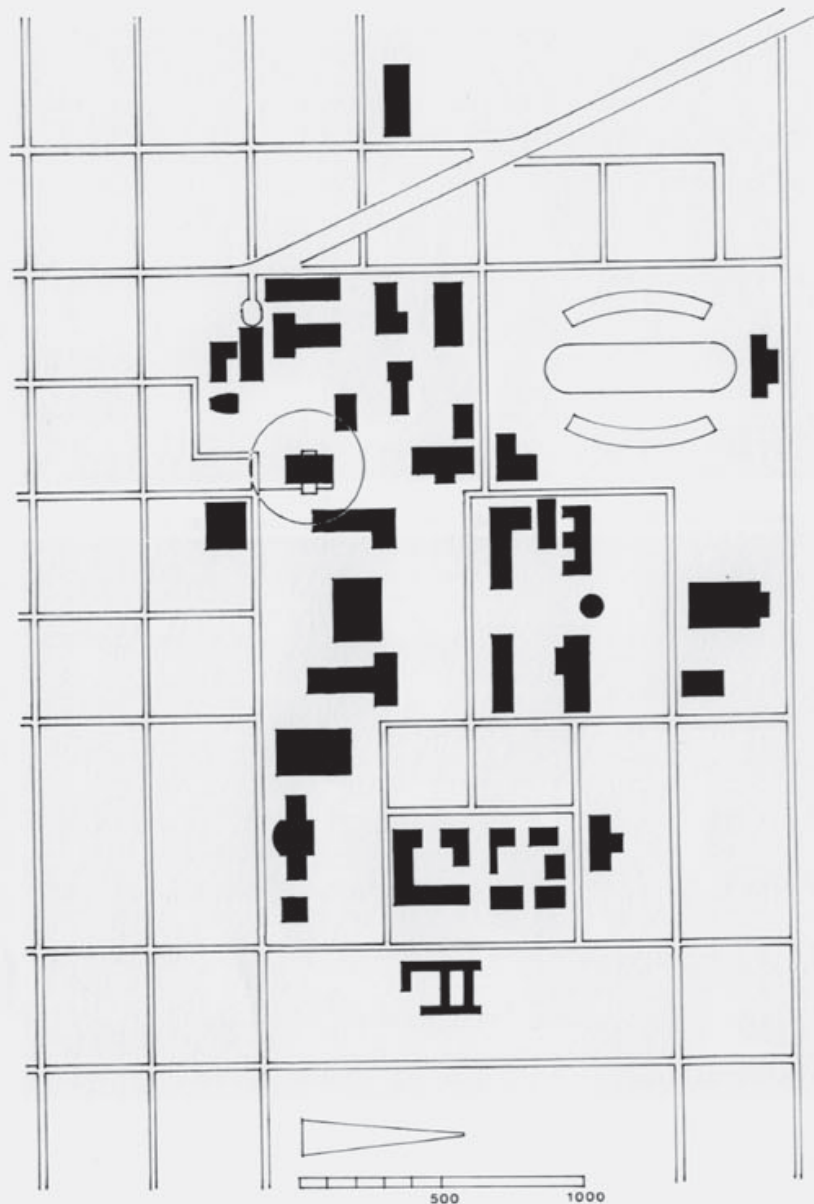
In the Sheldon Art Gallery facade we can observe that on account of a slight reveal which sets off the continuous skeleton, the walls seem to slip behind the quasi-pilasters to form a conceptually continuous plane which, in turn, defines the two closed volumes as boxes. This suggests a strongbox whose content is at once to be treasured and kept hidden. This unwelcoming imagery, which seems to be a paradox in a public museum, is reinforced by the choice of a catwalklike stair/bridge combination which looks weightless yet threatens to collapse on you in its fall to its original state of flatness should you find yourself under the double-cantilevered upper landing (fig. 55). Oddly enough, owing to its frontal symmetry and hinged diagonals, you may also have the uncomfortable feeling that you are about to be devoured by some enormous insect. Such sensations of uncertainty behind the seemingly almost impregnable facade, with its comparatively tiny entry through a vast glass membrane, add up to either a calculated frustration test or the result of an object-fixated, style-drunk design process or both. Such sensations are anything but the subtly calibrated interplay of architectural elements and ensembles in the service of human comfort and the heightening of self-esteem which we can find in the facade and entry sequence of the Altes Museum.

There is one attempt in the Sheldon Art Gallery entry space to articulate a distinct hall or lobby in what would otherwise be the gap space trapped between the two gallery masses. The ameliorative attempt consists of giving the pilasters a double role (fig. 55). First, having the same shape and spacing (except for those added to hold the glass membrane) they reinforce the definition of each box as separate, thus keeping the original diagrammatic reading of the space as the consequence of positioning the two masses. Sec-

54
Philip Johnson. Sheldon
Memorial Art Gallery,
University of Nebraska,
Lincoln, 1963, west
facade.

55
Sheldon Memorial Art
Gallery, view of entry hall
and staircase from east.



56
Sheldon Memorial Art
Gallery, site plan.

ond, by extending the pilasters into the vaguely coffered ceiling with the same formal idiom, and by arranging for visual appropriation of the two pilaster-shaped columns at each open end, a certain amount of identity and stability is gained.

However, on account of the configuration and alien construction materials of the stair, excepting the tread treatment, one is never quite sure whether the opposing walls or masses are (figuratively speaking) about to be pushed farther apart by the pair of stair runs or moored in place by the bridge. It appears, therefore, that whatever stability of the entrance hall is gained through one means is lost by another, adding to the feeling of uncertainty called forth by the stair assembly alone. The entire play of sensual agitation in the hall and on the exterior of the building, quite in contrast to that of the Altes Museum, does not resolve itself in a deeper understanding of architecture, but, instead, alienates the viewer by reducing evolving action to two tableaux: view of building set in gentle park and dramatic-looking stair ensemble set in bellows-like space with grove of trees in the distance.

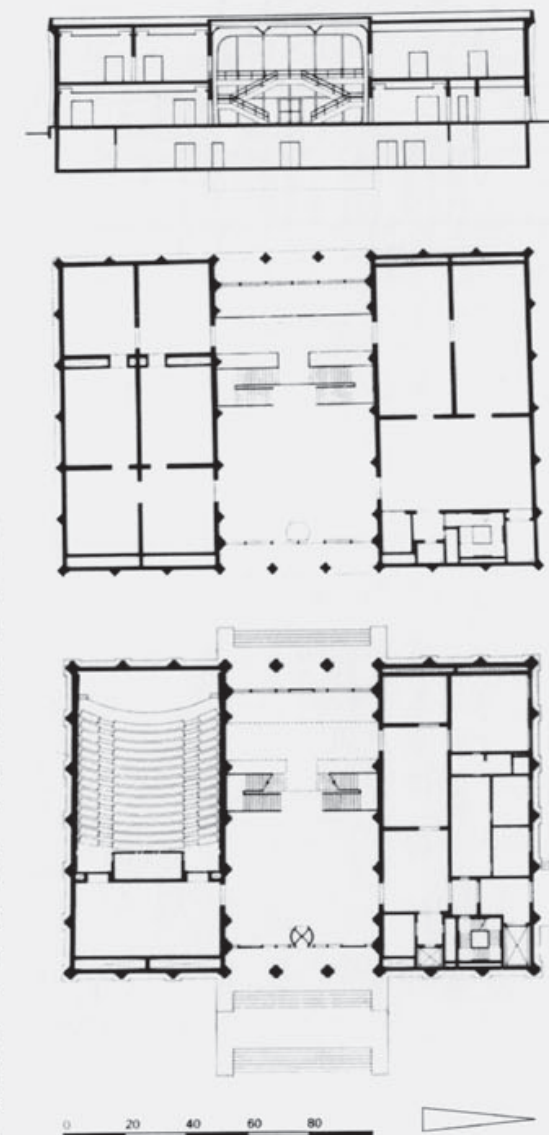
Within the entry, the stairs appear to consume all the space around them, to such an extent that they become the principal object exhibited in this museum, demoting bona fide sculpture in the same space to the status of decorations or humble bystanders at a grand event. It ought to be mentioned that the stair alone is not to be blamed for this condescending treatment of the sculptures; again, the visual agitation caused by the prismatic pilasters cutting into the hall space like wedges contributes its share. The stair's very quality as object, aided by its monumental scale, deepens the dichotomy between the programmatic *raison d'être* of this building, the art galleries, and its perceived *raison d'être*, the stairs.

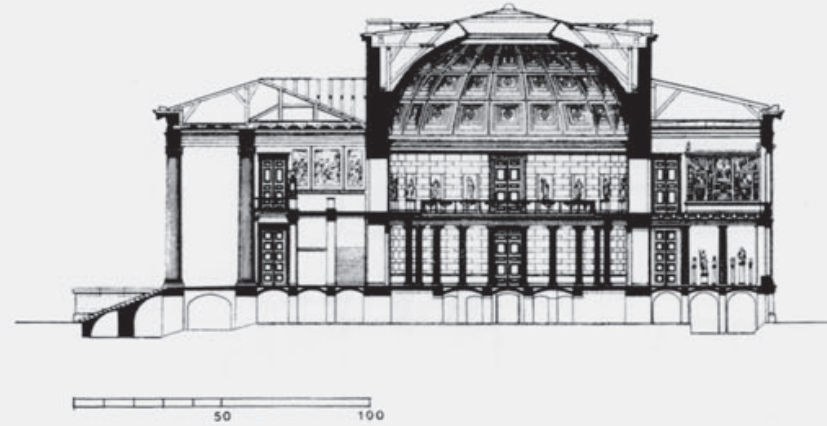
While these stairs may be visually unique, their chief function is to convey visitors to the galleries. Hence, the more pronounced the dichotomy the

more necessary it seems to introduce transition elements, for instance, neutral spaces of appropriate size and proportions, in order to guarantee a perceptually and emotionally coherent entrance sequence for the visitor. Instead, the hierarchically structured approach to the galleries, leading the visitor to expect a correspondingly significant formal, functional, and emotional culmination, is cut off with guillotine sharpness as he or she steps into either set of galleries from the bridge.

Consistent with the image of the hermetically sealed box, the layouts of the galleries, one being arbitrarily different from the other, do not recognize the privileged condition of entry from the stair since they have symmetrically disposed and similar openings, in the form of windows, overlooking the entrance hall. By being arranged *en filade* laterally across the gallery level the two windows and two doorways serve to suggest a certain unity for the building as a whole; yet, lacking support of the same kind elsewhere—for instance, all gallery doorways could be related in a consistent manner—the *en filade* idea remains as isolated from other ideas as the galleries are isolated from the stairs.

In contradistinction to Johnson's Sheldon Art Gallery, the single most inventive element in the formal structure of Schinkel's Altes Museum is precisely its vestibule-stair ensemble, inventive because it resolves demands made on various levels of consideration with great economy and elegance of spatial and functional arrangement (figs. 52, 53, 58). Besides literally giving access to the galleries and the rotunda on the lower and upper levels, the vestibule, including the stairs, forms the most important conceptual and experiential element of transition between the open square and the closed galleries. It is clear that Schinkel saw a visitor's entry sequence neither as a purely technical problem of circulation nor as an isolated "exciting" event, nor simply as a by-product of other decisions. He must have recognized the need for slowing down the visi-

57
Sheldon Memorial Art
Gallery, section and
plans.

58
Altes Museum, Berlin,
section.

tor's pace, both physically and mentally, in order to remove him gradually from everyday routine and make it possible to enter a mood of contemplation appropriate to the appreciation of art.

The genius of Schinkel's solution seems to lie in the fact that it allows everybody his own rate of transition—we are reminded of the individually adjustable interpretations of the facade—by designing vestibule and stairs as much for direct movement as for lingering. Obviously, transition has to be as effective toward and into the galleries as out of them and back into the city, with different architectural features appearing prominently, first in one direction and then the other. On the way in, for example, the pediment-shaped stair wall simultaneously announces movement straight ahead, upward, and to either side. On the way out, however, the inner and outer rows of identical columns, silhouetted against the bright, open square, are naturally most prominent. Their gigantic scale, in relation to the size of the vestibule space and the observer, who can see them only from a short distance, lets the partially revealed city appear at a scale comparable to that of the paintings and some of the sculptures just seen, thus providing an essential psychological continuity in which there is time to pause (fig. 59). The visitor may want to reflect on what he has just seen or prepare for the mundane things which await, by strolling about the balcony or the lower vestibule. He or she may be aware of, but also feel protected from, the world beyond. Architecture, somehow, seems to be most effective when it makes possible such moments of suspension between one's inner and outer world.

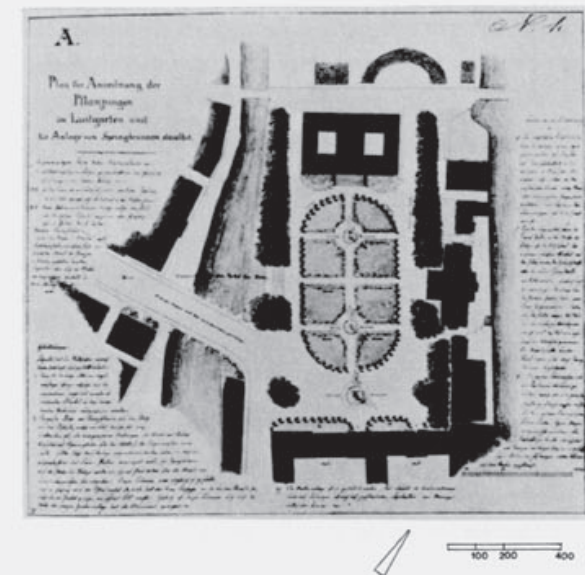
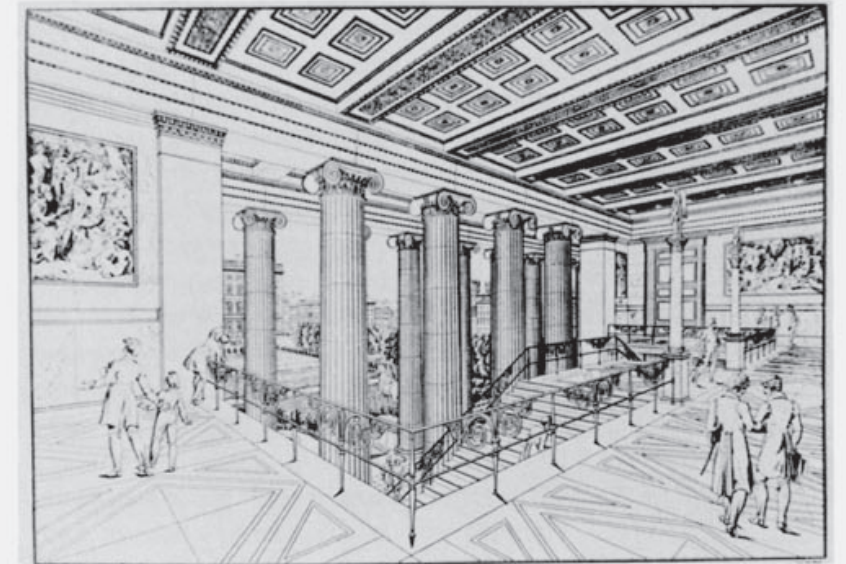
In further explicating the entry sequence, one could see the two diagonal edges of the stair wall as abstract boundary lines of an incomplete triangle rising to its implied apex, reinforcing the axial location of the portal and thus offering a strong cue for actual entry. Should the condition

be reversed, however, the same abstract inclined lines might represent ascending stairs, and the portal could be seen, when closed, as an abstract rectangle or wall decoration, or, when open, as a neutral void almost keeping the two stairs from meeting.

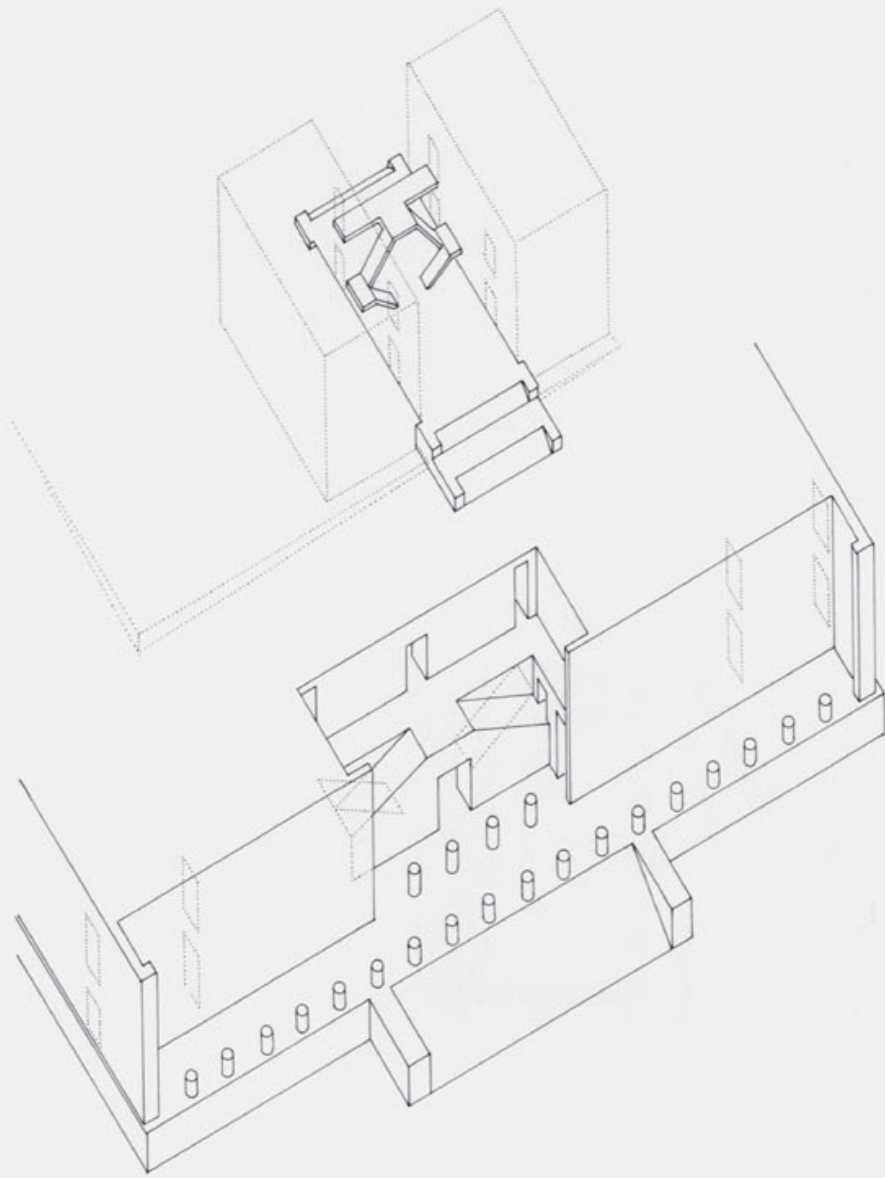
Therefore, when entering the vestibule with the intention of going to the painting galleries on the upper level, one is confronted with two almost equally strong but somewhat mysterious cues of how to proceed forward and upward; mysterious not only because of the latent formal-functional reversals but also because the lower halves of the flights of stairs are neither exposed nor intimated to the entering visitor (fig. 61). Mystery, implying conflicting signals and pretense, seems to have been employed here to a good purpose, the reconciliation of two conflicting concepts, just as Le Corbusier employed mystery's cousin, irony, to resolve a conflict between a small, private program and a publicly prominent site.

As one is led to expect in approaching the building, the configuration and spatial character of the stairs themselves play a crucial part in tying the building together conceptually and experientially, outside to inside, facade to plan, lower to upper level, utilitarian to honorific spaces, and uncontrolled exterior light to controlled interior light. On the way in, the visitor climbs the front steps, passes through the outer colonnade across a shallow layer of space and through the inner colonnade into the vestibule. This last space, on eye level, also appears to be shallow, tending to force movement straight through it toward the opening under the stairs or to either side into the sculpture galleries.

Two spatial events take place between inner colonnade and stair wall, as if to urge one by spatial means to decide how to proceed. One space is sensible as the eye moves upward toward the balcony and the ceiling, in the course

59
Altes Museum, upper
vestibule.
60
Altes Museum, site plan.

61
Altes Museum and
Sheldon Memorial Art
Gallery, axonometric
views; aspects of formal
structure.



of which the shallow space perceived at the lower level of the vestibule is gradually transformed by a succession of recesses into a volume three times the depth and height of the same space at eye level. The beams on the ceiling run perpendicular to the facade and obey its divisions, thereby continuing its vertical rhythm in a slower tempo. They thus not only bind the greater vestibule plan to the facade but subordinate the functionally more literal, perhaps more human-scale lower vestibule to the spatially more complex greater vestibule, which is itself more in scale with the building as a whole.

The other, simultaneous spatial event is caused by the alignment of the doorways *en filade* with the narrow dimension of the lower vestibule (figs. 53, 58). The turn toward the galleries is made less abrupt by this means, since the vestibule can be interpreted as being at once part of the galleries to the immediate right and left and by implication part of the ring of all galleries, which, needless to say, reinforces a smooth transition from outdoors to indoors and from forward to lateral movement. On the conceptual level—perhaps to be consciously experienced after careful observation—the same *en filade* arrangement of doorways, identical on both floors, with their implied, corridorlike space locked into the first pair of windows on the east and west walls, accomplishes a number of other things which help to organize and animate the building.

First, it tends to free the wall behind the colonnade, not to the degree of independence and identity of the colonnade, as observed in the discussion of the facade, but commensurately less, for the outer surface of the wall is perceptually and in terms of its honorific purpose associated with the colonnade in front of it, while the inner surface serves the pragmatic function of a wall in any art gallery. In contrast, we are reminded of the diagrammatic treatment, devoid of any spatial idea, of the same general condition in the Sheldon Art Gallery. Second, and as a

corollary to the first accomplishment, the inner block of spaces—stairs, rotunda, courtyards, and small galleries—is similarly detached and unified, with the help of two opposing pairs of doorways and windows looking into the courts on the northern side of the building. Again we see how on this level of the museum's formal structure the abstract values associated with geometric conditions match corresponding functional and symbolic meanings.

Formally, the vestibule and the two flanking galleries are neither completely contained within the two north-south galleries, nor totally attached to the facade ensemble, nor strictly autonomous. They become to a greater or lesser extent any one of a combination of these conditions, depending on the functional and symbolic meaning required of them by program and siting or expectations encouraged in the visitor by a progression of visual cues. Therefore, design and effect of facade and plan, as we now see, share the design principle of multivalency, just as facade and plan of the Sheldon Art Gallery are governed by the principle of a "univalent" diagram, decorated where visible to the eye. Applying the same principle to the interior and exterior of a building, however, does not guarantee automatic affinity between the two. It is ultimately through the act of formal/symbolic interpretation that the two aspects interrelate. Hence the greater the number of parallel interpretations possible, the richer the building and its experience.

The stairs in the Altes Museum, as we observed earlier, are crucial to the unity of the building. They appear at once as the principle object in the vestibule and a minor erosion of the building mass. Their scale seems colossal in respect to the vestibule but appropriate to the collection of spaces they lead to. The fact that they also appear to be carved from a large mass, rather than set into their own space—as in the Sheldon Art Gallery—mutes their object quality to the point

where it is difficult to know whether one is climbing or descending an independent flight of stairs or moving effortlessly on a continuous surface such as a ramp.

The visual ambiguity between object and relief, noticeable even from across the square outside, is confirmed and heightened by physical involvement when one uses the stairs (fig. 61). A spiral climb beginning under the balcony and upper runs of the stairs leads up through the tunnel-like first run to an intermediate landing, from which one continues up to the open second run to arrive on the balcony landing, overlooking the point where the journey began. By this ingenious means the entering visitor literally experiences the stairs as being, first, integral with the mass of the building and, second, an object occupying the middle of the vestibule space. The contrast between the two sequential experiences may perhaps be felt as analogous to the experience of the mystery and momentary disorientation below and the gaining of clarity, overview, and dominance above. One gradually becomes the other through vibrating upward movement at a constant rate, except for a pause for rest and reflection on the intermediate landing, almost as if some kind of cleansing process were intended, preparing the visitor for his encounter with man's most perfect state, which lies in art. Mozart's *Magic Flute* may come to mind in a musical analogy.

The stairs are also, with respect to a higher level of the building's formal structure, the most finely scaled manifestation of a three-part sequence of conceptual relationships, based on the little-known but effective design principle of prefiguration and recall, in the relationship of the landings to the stair, the stair and balcony to the vestibule, and, finally, the vestibule to the building. Because of this progression of similar relationships, the visitor is able to relate himself to the museum by visual and mental translation at all scales.

A discussion of the rotunda space has so far been deferred for the reasons that it is, despite its hierarchically dominant location in the plan, hidden from the visitor and because it has no corollary in Johnson's museum. The rotunda is announced on the outside of the building but is visible only from some distance across the square, and even then the dome is camouflaged by a low-lying rectangular box. It submits itself to the mass of the building and its main facade, also marking the position and lateral extent of the vestibule and thereby serving as the backdrop for the stair in a scenographic interpretation. Looking at elevation, plan, and section together (figs. 52, 53, 58) we find the rotunda embedded in a clearly articulated mass of cubic proportions whose uppermost region is identical with the roof protrusion visible on the exterior. While the rotunda space is unique in form and position with respect to the other spaces, as perceived from within (perception of position relies on remembering the position of entries in respect to adjacent spaces) from the outside its mantle conforms to the prevailing rectilinear geometry, thus neutralizing, if not denying, its presence. Because it is the focus of the entire facade composition and more in scale with the "backdrop" wall to the stairs and the vestibule, the large portal presents itself as the only clue which leads one to expect a commensurately large space beyond it. But because that expectation is put momentarily in question by finding that it also gives access to the stairs, the rotunda space, upon piercing the mantle, still comes as a great surprise. While on the plan the axis of the entry sequence continues through a door on the opposite side, perceptually the domed space appears as the goal of the sequence on account of an emphasis on the centrality of the space by the even spacing of the columns and the abstracted, almost hovering circles made by the balcony.

More often than not the middle zone of a tripartite, diagrammatic plan is developed func-

tionally and symbolically to recognize and serve the building as a whole. The result is frequently, as we well know, one central dominating space symbolizing, among other things, arrival and announcement of the general purpose of the building, and actually organizing major circulation routes and means, as well as many ancillary functions. The Sheldon Art Gallery represents one of these schemes. The Altes Museum, however, divides the traditional single space into two successive spaces: the first (vestibule) accommodates the most important program functions and a narrow range of symbolism, mostly associated with entering and leaving the building, and the second space (rotunda) assumes such symbolic meaning that, formally, it almost becomes a separate building. On a higher level of consideration, this assignment of the two chief attributes of a traditional entry sequence to two separate spaces may be in itself seen as a symbolic expression of a preference for a "working museum," whose rationality brings it and the artworks it contains closer to the visitor, over a "show museum," whose primary purpose would be to impress upon the visitor the aspirations to power and glory of those who commissioned or designed the museum, thereby alienating the viewer from the art if not the building. By concentrating symbolism of rest and permanence in the form of the rotunda, the actual galleries are left free to respond more directly to the needs of display. No matter how the viewer's emotions might be aroused by looking at paintings and sculptures, he will always find calm and reassurance in the eye of the storm: the rotunda. The metaphor of a storm may be brought to mind, in formal structural terms, by the sequential arrangement along the building's periphery of long spaces of the same cross section and horizontal axes—implying *horizontal* movement of body and eyes, impelled forward by the depth of perspective—in contrast to the unique domical space in the center of the building, suggesting a pronounced vertical axis,

implying rest of the body or measured movement along the rotunda's perimeter and *vertical* movement of the eyes.

Because of the rotunda's location, central although relatively isolated from the rest of the museum, visitors are not compelled to acknowledge the space and all its implications at a predetermined point; rather, they are allowed to ignore it or choose to incorporate it into their visit according to individual purpose and mood. Again, as in the facade-entry sequence, we find in Schinkel's Altes Museum that quality of non-coercion, coupled with clearly defined opportunities for choice on a conceptual and pragmatic level, which can only be conducive to every visitor's personal enrichment.

In trying to understand the formal structure of a building, it is often useful to generate a hypothetical transformation from the building's most elementary, unyielding, and abstract diagram to the final multivalent, resilient, and accommodating reality. Along the way one might find some formal explanation for those aspects which are otherwise not readily understandable.

For example, when looking at Schinkel's and Johnson's plans side by side, with the intention of distinguishing collections of spaces which, together, appear as coherent figures (roughly in the sense of "gestalt") governed by bilateral or quadrilateral symmetry, we can see in both plans a shift of figures with respect to one another along the axis of entry. Presumably these shifts, or planimetric agitations, respond to some real condition, whether it be site, program, or symbolism, given or self-imposed. In the Altes Museum we find two dominant, interlocking figures, together encompassing the whole building. One consists of the portico, echoed by the service spaces of the same width in the rear of the building and completed by the two side galleries and courtyards. In and of itself this figure clearly distinguishes between front and back of the building, stakes out its four corners, and implies its

center. The other figure is composed of the central rotunda, holding front galleries-and-vestibules and rear gallery together. Its center, and therefore the rotunda's, is shifted to the rear by the depth of the lower vestibule, another distinction of the dominant front from the anonymous rear of the building.

The most obvious of many effects of the non-congruency of rotunda and building centers is the muting of the hierarchic importance of the rotunda in symbolic and functional terms, which effect is then strengthened by various means of camouflage, as discussed earlier. The point here is that the abstract effect of the plan order is the generator of subsequent design decisions which ultimately result in the real effect, or the plan is the real effect's imprint, depending on synthetic or analytic intentions.

In Johnson's plan we can distinguish three figures, one shifted in respect to the others, and instead of interlocking they are overlapping. The stair figure hovers above the figure of the entrance hall, confirming the importance of the main entrance by its plastic form and slight displacement to the "rear" of the building. The congruence of quadrilateral symmetry between the figure of the entrance hall and the total building block reinforces the unyielding unity of the museum, as observed earlier in the discussion of the facade. What is lacking in conceptual resiliency in the entrance hall is made up for by retinal agitation: decoration of the undifferentiated ribbing of walls and ceilings and huge perforated gold medallions buttoned to the ceiling. In this swish environment the stair itself can hardly be expected to represent more than a caricature of a museum stair such as the one in the Altes Museum.

The third figure, represented by the podium from which hall and stair rise, does not do much to enrich one's possibilities of interpretation although there are a few steps added to the main entrance side, and the two gallery masses seem

to encroach a bit on it (fig. 61). The three figures being within the same zone, being literal and hence easy to grasp, they become self-contained objects—podium, hall space, and stair—rather than formal analogs to spatial, functional, and symbolic events.

In conclusion, we have in the Sheldon Art Gallery a clear example of an unmitigated dichotomy between plan and appearance. The democratically homogenized interior spaces will always come as an inexplicable surprise after the authoritarian prelude of the exterior and the central hall. Their clash makes a mockery of both concepts. As in so many other buildings belonging to the Bauhaus legacy, space is not used as a primary organizational and experiential medium. If space had been thought of in such terms, the clash of conceptual with perceptual aspects of the Sheldon Memorial Art Gallery might instead have become an interesting discourse between two contrary forces of contemporary significance—democratic homogeneity and authoritarian hierarchy—and thus enriched the experience for every visitor by manifesting that struggle and inviting him or her to participate in it emotionally and intellectually.

It appears from this and other examples that design objectives in Bauhaus-legacy buildings have often been reduced to two criteria: derivation from a functional plan and creation of visual interest. These are viewed as independent criteria, each doing its job, resulting in a lack of dialogue or mutual reinforcement between plan and appearance. This deficiency becomes even more serious if we take plan and exterior appearance to be analogs of such fundamental architectural dialogues as inside–outside, invisible–visible, and conceptual–perceptual, all of which take place in the medium of space, which is consciously articulated for the purpose of explaining, mediating, ordering, and enriching this cluster of dualities. And here we get to the cen-

tral deficiency of the architecture under discussion: there is little sensation of space as a medium under the control of the architect and having distinct or positive figural characteristics. Space tends to be equated in these works with air or area; in other words, it tends to be residual in nature, as opposed to its use in the Aalto and Schinkel examples.

Let us pursue this theme further. On the one hand, space is conceived by many Bauhaus-legacy architects as the universal, all-pervasive medium displaced by solid objects (buildings and rooms), much as a rock displaces water. And, on the other hand, they are likely to think of space as an area between objects and walls that is adequate for the conveyance of people and goods or for activities such as those appropriate to a living room, corridor, theater, or factory. While the first concept is a passive acceptance of space as so much air between solid objects, the second gives it purely functional significance; it becomes a convenient bookkeeping way to translate a building's anticipated uses and activities into a physical container by calculating the necessary areas in plan and section.