

Figure 1.8 Ludwig Mies van der Rohe. The Bacardi Administration Building, Mexico City. Photography by Werner Blaser.

classical bilateral symmetry in this asymmetrically planned composition. By virtue of reflection, the mirrored horizontal and vertical planes align themselves with their sources to create new, widened and elongated planes (Figure 1.9). The line of symmetry is no longer an abstract centreline but a physical plane captured between the horizontals which appear to bypass or to cut through the vertical planes. The depth that is apparent in the non-reflected view is visually compressed because of the change in proportions of length to width of the image.



Figure 1.9 Ludwig Mies van der Rohe, The Barcelona Pavilion (reconstruction), 1986. Photograph by Robin Evans. Courtesy Janet Evans.

In a statement similar to Colin Rowe's on Le Corbusier, Evans claims for Mies: "if [he] adhered to any logic, it was the logic of appearance. His buildings aim at effect. Effect is paramount" (ibid., p. 247). Unlike the placement of horizontal planes symmetrically above the typical viewer's horizon line, the visual effect of reflective symmetry is not only devised for the viewer; it depends on the viewer's presence for its existence. But the fact of its presence cannot answer the question regarding Mies' design process. Is this effect simply a fortuitous perceptual occurrence or was it an intentional component of the design?

The perception of depth is not available in the Cartesian conception of space as uniform and infinite. An orthographic drawing (e.g., a plan, section, or elevation), or an isometric drawing that is constructed of real proportional dimensions and relative coordinates cannot provide the designer any insight into the qualities of appearance to the subjective viewer. Of course, a designer's experience permits valid speculation about the visual results of an abstract representation. But if it is of any import to the designer to test for such visual qualities as depth prior to the materialization of a design, a different kind of representation will be made.

The invention (or recognition) of modern perspective techniques for constructing a painting or a drawing, first articulated by Leon Alberti's codification of the experiments of Brunelleschi and others in 15th-century Italy, 10 relied essentially on three fundamental concepts: first, that lines that are parallel appear to converge; second, that these lines converge to a single point, which Alberti called the centric point; and third, that the apparent decrease in distance between equidistant transverse lines could be determined by geometric method. To be sure, Alberti himself understood the illusory nature of this form of representation when he stated: "No learned person will deny that no objects in a painting can appear like real objects. . . ." (1991, p. 56). But this mathematical artifice immediately and overwhelmingly became the accepted convention for artistic accuracy in portraying the earthly world. The clearest evidence of the acceptance of this convention was the soon-to-be ingrained ability of painter and viewer alike to apprehend converging lines as parallel and transverse lines of diminishing distance as in fact equidistant. The diagonal line became virtually synonymous with depth.

The numerous treatises on perspective construction that followed its early practice were almost without exception mathematically based until the invention of photography fixed the perspectival image on a flat surface without the aid of the human optical organ. This development caused the discourse to shift to an examination of whether perspective construction is the nearequivalent of the optical conditions of sight or whether it is merely a convention of Western representation that has been so culturally ingrained that it prefigures the way we see. As previously discussed, in the 20th century the perspective view has been frequently discredited by those who consider it a purely intellectual and abstract construction of the objective world. As such it is infinite,11 totalizing, and, most importantly, the privileged view of the contemplative gaze of a disembodied viewer. Further discussion of this contentious issue need not be pursued here since there are numerous other texts to consult.¹² It is true, however, that perspective is not intrinsic to objects. Even though this subjective vision can be simulated mathematically, it requires at least a conceptual subject in order to exist at all. And surely it is conceivable that the perspective view can have sources other than the