A Room in Context

This chapter takes the elements of architectural composition and analyzes them in relation to standard architectural configurations for rooms and groupings of rooms. Architecture is the organization of rooms into a perceptual whole, i.e. composition. The composition is the context in which the room has meaning and the composition in turn, is part of some larger context. We will look first at "the room", and slowly move from there out into the potentials of various patterns and sequences that form compositions. The line at which one thing forms the context for another is vague and is in a perceptual sense relative to the objectives of the viewer. In architecture, the context in which an object is situated is always larger in scale than the object. The context, by definition, has meaning in relation to the object, and it is the architect's responsibility to control the context in which one perceives part of a architectural composition so that it reflects his concerns no matter at what location the viewer draws the object/context line.

We will approach the standard architectural configuration for rooms by logically deforming a neutral room/space and analyzing each defor-
formation separately. The analysis will again stress hierarchies inherent in various degrees of form deformation, because it is through an understanding of hierarchies that we can relate changes in form to their meaning in context. The neutral room/space selected for deformation is a 12 foot cube. It was chosen because it is easily within the range of good depth perception and even a good intuitive/tactile perception can be expected. It also somewhat minimizes the importance of the viewer's location, which becomes more critical as the size of a space grows. We can describe this neutral space from the inside as being a static volume with its center of gravity centered on itself and having no links to any outside context. The first, and most basic, manipulation we can do with this space is to create minimal links between it and the surrounding environment. This is done by making holes (doors and windows) in it from which we can view the outside environment. The resulting form might be considered a 'place' for a function to occur. The position, size, shape and number of openings has a great effect on the 'personality of the space'. Let us consider one opening, a window: as it increases in size, there is a corresponding growth in the spaces relation to the outside
environment. This relationship can be enhanced or diminished by window location. Thus, the location and shape of the windows express the intention of the designer to control the space's relationship to the exterior environment. The significance of this relationship is dependent on the physical or social interest inherent both inside and outside the room and on how well the opening focuses our view on the salient features of the outside environment. Window shape, especially as the openings increase in size, affects our sense of the form of our neutral space. The more horizontal or vertical the opening's shape, the more the room takes on the same perceptual quality. Our response to the location of openings has a great deal to do with our expectation of what is normal. Departures from the norm heighten the significance of the opening. As openings move above our horizon line, our sense of enclosure by the walls increases. As openings move below our horizon, our sense of closure by the roof increases. These sensations become more significant as the openings increase in size and number and begin to encroach on the corners of the space. As corners give way to openings, our sense of closure in the space decreases and the opportunity for connection with the exterior context increases.
Implied continuation of form from inside to outside provides the strongest connections between two spaces. As these connections multiply, the spaces become intimately related and their centers of gravity as experienced from either space tend to move toward a common center of gravity. At some point on this continuum, a common center of gravity is attained at which time we can consider the two spaces as one.

The second, and again basic, deformation we can make on our neutral cube is one of form. The simplest change is to expand parallel walls to give direction. This action generates a hierarchy of importance based on the length of the major and minor axes, with the contrast between the two providing the scale by which to judge the relative strength of various axes. The next level of deformation of the cube consists of extending two rectangular sides which have a common edge. This produces a space that is internally directional toward the edge formed by the two planes intersecting at an obtuse angle. The quality of links with the external environment again depends upon destroying the edges; but because the form is internally directional, destroying the edge that is produced by the acute intersection of two planes provides the greater potential for
connection with the exterior environment if all other variables remain the same. Destroying the edge with good continuation lessens the directional quality of the space considerably. Combining parallel expansion with intersecting plane expansion produces forms with characteristics that can be directionally reinforcing or multi-directional. Multiple use of both of these ways of deforming a cube produces irregular shapes which are dynamic because of the multi-directional quality of the resulting space. In these cases, the spatial characteristics that imply direction as well as the ones that imply links with the exterior environment are essentially the same as those in simpler deformations.

Some thought must be given now to other regular geometric forms (hexagons, octagons, etc.) commonly used in architecture. In comparison to the cube, or forms derived essentially from deformations of the cube, these other regular geometric forms have more edges (therefore more obtuse surface intersections) and tend to have better continuation from surface to surface. At some point, as edges are added to regular geometric forms, the inside surfaces are perceived as continuous or essentially a curved surface. The stronger the sense of curvature, the more
extreme the center orientation of the space becomes. This characteristic gives these forms more potential for a 'both/and' situation as their surfaces are penetrated and links with the outside are developed. Axial expansion is possible with these regular geometric forms, and their expansion generates the same hierarchical effect that we have seen in the similar expansion of rectangular forms. And finally, as curve surfaces develop, we lose much of our distance and scale perception for lack of visual clues. This fosters an extremely dynamic situation which makes contrasts with it vivid.