The Senses

An environment must be perceived to be understood. Thus, it is imperative that the designer of environments understand and appreciate how humans perceive and interpret their physical surrounds. This knowledge provides the basic groundwork for becoming an effective designer.

There are seven ways in which humans sense their environment. Of these, only two stand out as extremely important in our ability to sense and understand an architectural environment. The first, and most dominant sense, is that of sight. It is our most highly developed sense and gives us our greatest range of distance perception. Coordinated with sight is the internal sense of balance developed by the semicircular canals in our ears. These give us a constant set of axes forming a basic horizontal and vertical orientation from which we can sense our relationship with the earth. Surprisingly slight deviation from these axes is immediately evident to most people.

The third most important sense in relation to architecture is that of touch. It is through touch that we add associations or meanings to objects in our environment. These associations are learned at an early age and they are with us all our lives. Meanings associated
with some objects may be: their relative softness, weight, warmth, sharpness, and possible danger to us. Meanings such as these become ingrained in us at an early age (when we are first experiencing the world), and in later life we react almost instinctively to similar characteristics in known and unknown objects. The element of distance associated with touch is of major importance to architects. When an object comes without our reach, we anticipate the possibility of touching it and take steps to do so or not depending on our attitude toward it. In this way, our environment becomes immediate and understandable to us.

The remaining senses are those of taste, sound, smell, and heat. The requirements of human comfort have very narrow limits in terms of these senses, so they cannot be overlooked in the designing of physical environments; but they have little to do with form apart from association. For example, part of our memory of a particular environment might be that it was cold and drafty. This work is intended to deal with the attributes of architectural form, and therefore these secondary senses will not be elaborated upon. Suffice to say that in relation to form, these senses tend to corroborate perceptions of the physical environment sensed by
sight, balance, and touch. When they do not, we become uncomfortable until we are able to resolve the conflict.