

The need to be able to learn and the need for beauty are fundamental to human existence and to the attainment of basic needs.

Cognitive needs

Acquiring and categorizing knowledge is necessary for survival. One has to have some understanding of the world in order to survive in it in other than in a purely externally nurtured state. To behave successfully and to understand one has to learn. In any society there is a need for continuing to learn. Many formalized ways exist through the provision of educational institutions, but the opportunities to learn do not have to be organized in a formal way because the everyday world is full of wonder. The whole environment presents a universe to be explored and for testing one's knowledge and skills. It is a storehouse of information, available for use and for attaining understanding and wisdom. People strive to have access to it to the degree necessary for attaining their basic needs. Cognitive needs are thus basic to life. The higher the level of basic needs to be fulfilled, the more learning that is involved. At the highest level such processes are necessary for aesthetic reasons—to learn for the sake of learning. To be a fully self-actualized person there is also the need to understand, to organize, to analyze, to look for relationships and meanings, and to construct a system of values for their own sake and not for any external reward or expression of self.

Aesthetic needs

People have two sets of aesthetic needs: for beauty and for self-expression. It is clear that the aesthetic quality of the built and natural environments is an important mechanism in attaining a variety of ends—certainly a sense of belonging and a sense of self-esteem. Aesthetic needs are also, however, manifested more subtly than these needs. At every level of the fulfillment of basic needs there is also the need for beauty as it is defined within cultures. At the highest level, there is also a cognitive need to understand the aesthetic theories of artists for their own sake. Indeed, cognitive and aesthetic needs have, at that level, sometimes been regarded as the same need.

For some people there is a need to understand the creator's objectives in designing a building, in composing a piece of music, in appreciating the culturally defined standards of beauty for their own sake and not for any instrumental purpose they may serve. George Santayana (1896) called this activity

the intellectual level of aesthetic appreciation. It is neither basic nor acquired simply through experience, but it is sought after. It is "dealing with moral and aesthetic judgments as phenomena of the mind" (Santayana 1896).

Variability in needs fulfilment

While Maslow's model of a hierarchy of needs or motivations for behavior is widely accepted as a general statement about people, it must be recognized that there is considerable variability among individuals in the manifestation of these needs and in the mechanisms for fulfilling them. Some major differences depend on the nature of the individuals, their physiques and personalities, and some depend on their roles as members of a group who share a common characteristic such as their stage in life cycle or their socioeconomic status. There are also broader cultural differences that range from attitudes toward the world as a whole to attitudes toward the relationships between people and between people and objects. These cultural differences are partly a function of the terrestrial environment itself, but people are mobile and their cultures may be, temporarily at least, at odds with the biogenic environment (Vayda 1969). This categorization of individual differences is based on the "functional" sociology of Talcott Parsons (1966). It has been found to be a useful point of departure by a number of designers and by architectural theorists in thinking about how the built environment meets human needs and thus in understanding the utility of specific patterns of the built environment for diverse people (Cranz 1974; Michelson 1976; see also Lang 1987a).

The way we look at the world is motivated by our needs, which, in turn are affected by our competencies. Competence is easiest to understand in physiological terms (see Lawton 1977). What we are capable of perceiving, remembering, and doing depends on our physiological and mental abilities. Blind people simply are unable to perceive visual information. Colorblind people are unable to distinguish between certain colors. Mental competence is more difficult to define and understand. Drawing consequential conclusions about the design of public policies and/or the establishment of design goals and design guidelines is fraught with problems.

Personality type

Individuals differ uniquely in their physiological abilities and also in their personalities. Many personality