

school gymnasium where, it can be assumed, athletic activities are pursued more for their own sakes.

In a comparative study of parks in Paris and Los Angeles, Lyle (1970) found large group activities such as picnics more common in Los Angeles. Lindsay's (1977) study of Central Park suggested that some Hispanics seek intense high-energy activities (such as dancing) while others seem to be seeking a "pastoral retreat."

Providing for active recreational needs is a predominant aspect of public place design. In recreation we also find regional, geographic, cultural, and age differences, both within and across spaces. People go to parks because ball playing, tennis, boating, and hiking are available and, although the public does vary in its preferences for these activities, they are generally popular. O'Donnell (1981) found that when youths were given the opportunity to select from among different amenities for a new park, as might be expected, they were strongly in favor of the development of recreational facilities in contrast with more passive options preferred by adults. Yet adults, too, are involved in active pursuits; jogging has become a popular exercise as enthusiasts find appropriate paths in likely and unlikely places. Bicycling also has increased and many parks provide paths for this active recreation.

Other cultural differences appeared in the contrast between parks in Los Angeles and Paris (Lyle, 1970). Active sports and games were spread over the parks in Los Angeles, whereas in Paris they were restricted to specific portions of the space. In addition, large group activities were more frequent in Los Angeles. Lyle also found considerably more variety of use in the local parks in Los Angeles when compared with those in Paris.

In some cases, activities enable participants to exercise both their bodies and their competitive desires. In other cases there seem to be other needs – for adventure, challenge, mastery, and perhaps even risk. Certainly the popularity of wilderness areas such as those frequented in Outward Bound courses attests to this quality. At the very least, they offer an extreme contrast to daily life, although risks are not necessarily unique to the wilderness.

Vigorous encounters with physical elements of a setting represent another dimension of active engagement. Here we are describing direct physical contact rather than just being within or moving across a place. One example can be found in the wading and frolicking found in some fountains – for example, Lovejoy and Forecourt in Portland (Love, 1973). This contact with water also formed part of the most

frequent activities on the original Sacramento Mall in California, now replaced by a more open transit mall (Becker, 1973). In his cross-city comparison, Lyle (1970) found people were actively involved with natural elements in Los Angeles, whereas Parisians were more apt to be viewers of the scene. From our own observations, the use of large, public fountains by children to float toy boats and feed fish, although common in Paris, is rare in the United States.

Although it is important to respect the needs of people with physical disabilities, public places could, and should, promote vigorous energetic use of the human body, something lacking in most present-day designs. The jogging paths, bicycle lanes, gardening plots, horseback riding paths, ice-skating rinks, and tennis courts are examples of some forms of active uses, and reflect the growing interest in exercise and health. But they are the exceptions rather than the rule in most public parks and are limited to a small portion of the public.

Another aspect of physical engagement involves manipulation of elements such as sculpture. There are examples of public art encouraging this activity, for example, the Calder sculpture in a Chicago plaza (Goldstein, 1975). In other cases, users may manipulate or alter fixed elements as a kind of protest against the lack of responsiveness of public places. This is especially apparent in the provision of seating, most of which is rigid and unyielding. Where movable chairs are available, they are used and appreciated.

Challenge and mastery are qualities that stimulate interest and use and are human needs that explain much of the use of public places. Yet most of the time this need is not acknowledged as sites are designed to minimize dangers and reduce the risks of liability of the space managers. People need to be able to test themselves, intellectually and physically, or they lose interest. These opportunities are especially critical to children because they are the foundation of the development of their cognitive abilities and their sense of competence (White, 1959). Florence Ladd has identified another developmental need. In an article entitled "City Kids in the Absence of ..." she argues that adventure should be provided for city teenagers (Ladd, 1975). These issues are major concerns in the design of children's play spaces, especially adventure playgrounds (Cooper, 1970; Nicholson, 1971). However, opportunities for healthy challenge and mastery are needed across the life cycle. Psychologists have shown that stimulation is essential throughout the years, including the later ones. Some of the deterioration of the elderly appears to come from the limited, uninteresting lives of many, due to physical