ECOLOGY AND AESTHETICS

The healthy city is a concept addressed by all utopian futurists from Thomas More to Anne Spirn. Every notion of ideal city form has included gardens and public open spaces of one type or another. The symbolism of nature and the environmental benefits of shade trees, fountains, and sports fields have been the basic motives for including open space.

The value of urban open space has always been recognized by society; however, the quality, form, and function of urban open space has varied with time and place, embracing such diverse types as the sacred groves of Athens, the fora of Ancient Rome, church places and markets of medieval squares, plazas of the American Southwest, pastoral parks of the nineteenth century industrial city, and sports fields, playgrounds, and civic spaces of the twentieth century.

These open spaces, not always green, are a reflection of a society's vision of how life in a city should be at a particular time. As cities grow and change these open spaces are not always where we would like them to be. For example, we know how random the original location of large pastoral parks was in the nineteenth century; they often were sited where no other land use was profitable, such as places with rocky terrain, marshy ground, or sand dunes, and typically at the edge of the then built-up area. We know, too, that the justification of expenditures for public open space in the nineteenth and much of the twentieth century was based on theories, philosophies, and needs that are no longer self evident or realistic.

The two chief measures of the effectiveness of a city's open space have been traditionally the ratio of total acres to total population, e.g. 10 acres per 1,000 people, and the distribution of those acres according to population density and service area distance. Few cities have achieved the quantitative standards they adopted or set themselves and where they have, equitable distribution is not achieved.

As we approach the next century, enough has changed in our cities and in our way of life and in the globe and universe for us to reconsider the form and content of urban open space as part of an evolving urban environment whose population is constantly changing in numbers, ethnic origins, attitude, work routines, and recreation preferences.

Boston incorporated a series of streams and ponds used for flood control into its Emerald Necklace. Photos by Michael Laurie.

Three Principles

I propose three principles as a method whereby change in open space design may be brought about with a degree of rationality. They are: ecological expressionism, economy, and social satisfaction. *The principle of ecological expressionism* is based on the belief that contact with nature in some form is symbolic and significant in everyone's life. In addition it recognizes that the city is not separate from natural processes. *The principle of economy* implies productivity made possible by accessibility of open space, multiple use, and integration of objectives. The conservation and renewal of resources is a related broader goal. *The principle of social satisfaction* responds to the pluralistic nature of American society and the spectrum of interest groups in any society. It recognizes that different communities have different needs, that new forms of recreation may emerge, and that new minorities such as the elderly may need special consideration.

The three principles are interdependent and together are likely to result in a new look, a new aesthetic, for public urban open spaces.

There are two ways in which the principle of ecological expressionism can be applied to cities. First, the ecosystem can be adapted as a theoretical model in which the city is seen as a family house with various private and public rooms, halls, courtyards, and gardens. (A healthy house would be a beautiful one.) As the ecosystem embraces slow change and adaptation proceeding according to self sustaining processes, so the city, to remain healthy and beautiful, would have to change and adapt to new circumstances to survive and maintain itself as a viable environment. There is plenty of evidence that this occurs, as, for example, in the recycling of warehouses into shopping malls, the conversion of houses into apartments, and the redesign of public squares.

A second way involves identifying actual natural processes and features and developing city form with respect to these in such a way that the resulting open space associated with streams, flood plains, and unstable land structures the city. Boston's Emerald Necklace and Minneapolis' park system are two good examples from the nineteenth century. This approach applies most obviously to the planning of new towns and the expansion of existing cities.

In retrofitting older urban areas it is rarely possible to reinstate altered or eradicated natural processes. Nonetheless, such processes, however altered, exist: for example, rain falls, wind blows, waves wash, and seasons change. At a regional and global scale, the city makes its contribution of wastes, heat, smoke, and other forms of pollution while drawing a variety of resources from distant environments. The ecological attitude would concentrate on the provision of conditions for human comfort for citizens with the least adverse impact on the supporting environment.

Washington Square, San Fransisco. The neigborhood square is a setting for organized exercise classes and other activities, an expression of ecology through diversity and economy through multiple use.

Ecological expressionism responds to the importance of a sense of place and expression of the original natural processes of a site before urbanization. These can be revived in symbolic segments to remind us where we are, serving an educational purpose and "framed" as a work of art so that there is no confusion about what is nature and what is not.

The principle of economy is similar in some respects to that of ecological expressionism. As ecology is the study of the house, so economy is the management of the house. Productivity is an essential characteristic of economy and of a healthy ecosystem. Multiple use of space by different groups at different times of day and year is a specific aspect of economy with definite implications for design. Single purpose places are not only wasteful but likely to be dull at the same time.

The principle of social fulfillment is clearly related to economy and aesthetics, leading to an index of urban livability. The livable city has been described as a city of distinct neighborhoods with a sense of pride, place and history, safe streets, good housing, friendly playgrounds, parks, and open spaces. Each city will have its unique characteristics and opportunities and what may be apropriate for one may not be for another. The principles are therefore likely to result in a variety of solutions suited to time, place, and people.

Appraisal

If we return to the typical hierarchy of open spaces in mature cities, we will find a few neighborhood parks that contribute to livability and many that do not. Those which do tend to be high density areas with a mix of age and ethnic groups and a variety of land uses, and are physically located in hollows rather than hilltops.

The large pastoral parks have passed through a period of neglect and misuse. To some extent they turned around during the environmental movement. Some, such as Central Park in New York, have undergone restoration and have resumed an important function in high density urban areas. But few find themselves as appropriately located or with as significant a heritage to merit restoration.

Because of demographic change, new forms of recreation, and water conservation, it may be that the nineteenth century pastoral park is no longer the jewel in the crown of park systems that it once was. More important may be village greens, town squares, flower gardens, and street trees, because they are closely associated with and in scale with residential neighborhoods.

The large parks that remain in cities of the future may need to be changed in order to serve environmental roles such as waste recycling, urban forestry, community gardens, and microclimate modification. In addition, open spaces will need to respond to the new social values, urban pleasures, and tastes of a pluralistic society. Undefined and flexible space suitable for any recreational or social purpose that comes along may be the most sensible solution.

While few people actually advocate the dissolution of the large parks, their tradtional pastoral form and their strict separation from the city around them has been criticized. A good case could be made for the development of some portions of these parks in low density

Marina Green, San Fransisco. A formal green along San Fransisco Bay is transformed into a beach—an adaption of place for social fulfillment.

areas for housing. Golden Gate and McLaren Parks in San Francisco and Franklin Park in Boston are two likely candidates for this idea. All are large enough to stand carefully designed town house developments along the edges or in the case of McLaren Park in the middle, providing a close fit between dwellings and open space designed for sport, community gardens and the like.

Several advantages would accrue from this idea. The use of the park would likely increase because of the close proximity of potential users and a perceived greater safety would result due to overlooking windows. The park land space would be reduced, to say 600 acres in the case of Golden Gate Park (now 1,000) and 300 acres in the case of Franklin Park (now 500), still a very substantial size capable of including city-wide recreation functions and representing nature.

With the funds raised by the city from such development, suitable lands would be purchased in those neighborhoods now deemed under provided with open space or to relocate inappropriately sited parks, with a resulting overall city-wide increase in the provision and use of parks.

Aesthetic Implications

The planning criteria that emerge from this appraisal in terms of the three principles are, I think, quite obvious. The aesthetic effect requires slightly more imagination. For the neighborhood park I foresee a minimalist approach resulting in undifferentiated space with a variety of surfaces with a rich edge of symbols and activities, shade and sun —a sense of incompletion, flexibility, and ongoing process. I liken the future neighborhood park to the mantelpiece in a house, supporting an ever changing set of objects, invitations, and memorabilia, and capable of being swept clear for special occasions or of including an increasing number of treasures.

The large park, however it may be reduced or left alone, will lose its picturesque woodland and meadow character and take on some of the qualities of a productive farm. A million trees planted systematically for biomass or to improve air quality will require management and appropriate organization. Wastewater management might require structured ponds of water hyacinth. Community gardens would equally impose a new order. In other words, picturesque landscape might only exist in a small portion of the park while the rest, still accessible for recreation, would exhibit either a more rectangular form related to function or irregular forms adopted from natural processes.

Aesthetic appreciation of both these new landscapes will be the result of a combination of knowledge and experience with an improved sense of nature as process and ecology as concept. The artists and designers of the day in cooperation with the people will put it together in stunning compositions which will be considered art in the twenty first century just as Central Park was in the nineteenth century.