

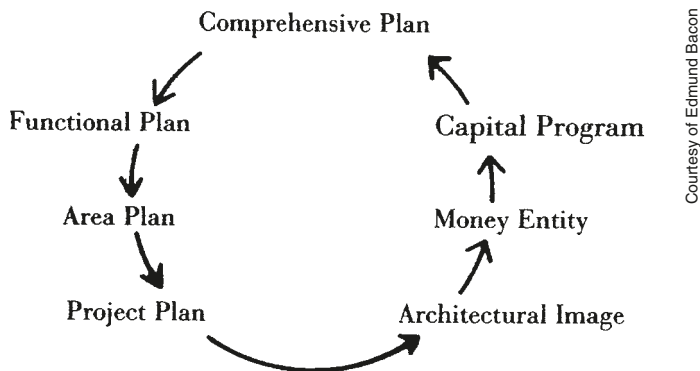
translated into zoning regulations. The idea that sunlight should penetrate all habitable rooms in housing area design is a sound one but when applied as the sole criterion in the design of residential precincts of high-rise apartments it creates dull boring environments with few opportunities for exploratory behaviour by children (e.g. see Figures 7.1 and 11.3). At least the space between buildings needs to be well considered and a greater range of behavioural opportunities provided.

A recent review of the impact of land-use regulations in Houston, Texas shows their unintended impact on the quality of urban places (Lewyn, 2003). Decrees about lot size for single-family homes, parking requirements (1.33 cars per bedroom in apartment buildings) street widths and block sizes (600 feet/185 metres between intersections) makes life hard for pedestrians and encourages driving for even the most local of necessities. The density of development that results from such codes makes all kinds of housing developments and public transit financially unfeasible. At the same time the codes have not alleviated the problems of traffic congestion that they were legislated to address. What is needed in developing item-by-item planning and building regulations is to fully understand their three-dimensional implications and how they work as a system of controls.

Current zoning regulations throughout the world make it impossible to build new precincts that have the characteristics of the well-loved areas of existing cities. They would make the design of today's Paris, London, Boston and San Diego impossible. The codes were designed to avoid obnoxious facilities such as smoke-belching factories being located in residential areas and not much more. The world has changed and much needs to be rethought.

### **Urban Design as Part of Comprehensive Planning**

Urban development is an endless process. Edmund Bacon portrayed it as in Figure 4.1 (Bacon, 1969). Urban design is very much part of the development



**Figure 4.1** Urban design (project planning and architectural imagery) as part of the development process.