Figure 4.3 Istanbul

wishing to decorate the city with an ornamental roofline (Figure 4.2).

So far, the discussion has concentrated on the development of a single hill, the sort of development epitomized by the small Italian medieval hilltop city or the small housing cluster in the countryside. By contrast the modern city, and even some traditional cities extend over a wide terrain. Ancient Rome had its origins in the coalescing of seven hill-top settlements. Any of the approaches to built form so far discussed in this chapter are suitable for a city on undulating terrain. The hilltops in the city can stand out as green landscaped knolls above a general carpet of low rise development or the hill tops may be enhanced with high crowning developments associated with important city functions. To control, achieve, and maintain a skyline of concord and balance on undulating terrain has its difficulties, particularly where there is the means and desire to build higher than a uniform height of about four or five storeys. This has been possible in most cities since the last part of the nineteenth century. If the underlying topography is not respected, then the city may as well have been built on a plain, thus denying the critical qualities of its location. In instances where cities have exploited the topography, the resulting skylines have given distinction to a unique setting. The quality of such skylines is not the result of the subtle placing of a single imposing building, but the result of a total built form in harmonious relationship with the terrain. Rome and Istanbul are two of the finest traditional cities where the topography and the city serve to combine to enhance the skyline. In Istanbul, for example, each of its seven hills is crowned with a cultural centre and a Royal Mosque. Each mosque has two to six slender minarets surrounding a semicircular dome. On the hill which dominates the entrance to the city from the sea is Santa Sophia and also the Blue Mosque. The grand scale of these monuments is in contrast to the human scale of the Topkapi Palace with its mini domes and scores of chimneys. In the low lying land beneath the seven hills stretches the rest of the city. This multi-layered composition defines a rich and imposing skyline (Figure 4.3).

The advantages of mirroring the topography with the roofline is illustrated in the *Urban Design Principles for San Francisco* published by the San Francisco Department of City Planning (Attoe, 1981). It is claimed that the 'near perfect' visual relationship of buildings and topography in San Francisco by the early 1960s was in part due to the 'hill-and-bowl' effect (Attoe, 1981). This pattern of building has two major advantages, first, from a distance the natural modulations of the terrain are accentuated, and second, views of the city and of San Francisco Bay from the hills are left unobstructed.

Some of the points made about hill-and-bowl development are illustrated in Figures 4.4 to 4.7 taken from Attoe (1981). Figure 4.4 shows that erecting low buildings on hill crests and tall ones in the valleys produces a uniform, horizontal skyline which obscures the topography of the site. Figure 4.5 shows that placing tall buildings in the valleys also reduces the visual impact of the hills. Figure 4.6 illustrates the preferred approach, the 'hill-and-bowl' effect, where tall buildings exaggerate the height of the hills and assure views for more people. In Figure 4.7 the point is made that if excessively bulky buildings are placed on hilltops, the hills are reduced to being just podiums for structures and no longer seem like hills. The only exception to the 'hill-and-bowl' pattern that city planners accepted in San Francisco was the cluster of tall buildings comprising the Financial District near the foot of Market Street. That concentration was considered, visually, an additional 'man-made hill'. However worthy these intentions, they were not able to control the development in San Francisco after the 1960s. As Attoe (1981) points out: 'Whatever had been distinctive about the light-coloured city on undulating terrain was being overwhelmed by anonymous, highrise boxes built for profit and with no sensitivity to the San Francisco locale and its architectural traditions.'

The parameters structuring development on a flat site are quite different from those governing built form on a steeply sloping site. In some ways the discipline is not so strict. The contours on the sloping site to a great extent determine the position of the long axis of buildings and also the location of

Figure 4.4 Hill-and-bowl development, San Francisco
Figure 4.5 Hill-and-bowl development, San Francisco

4.4

4.5