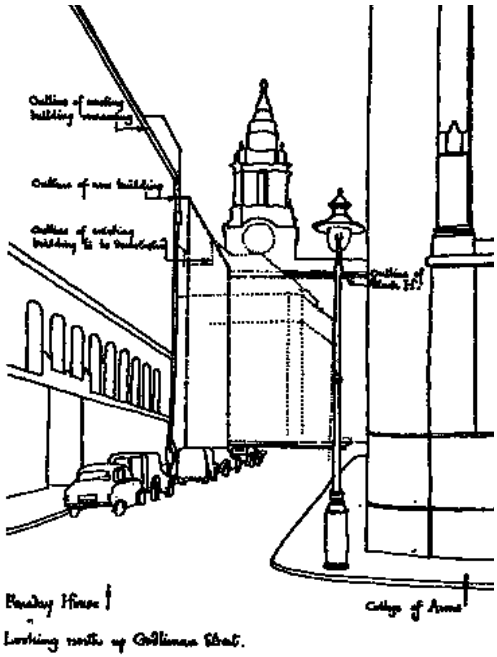


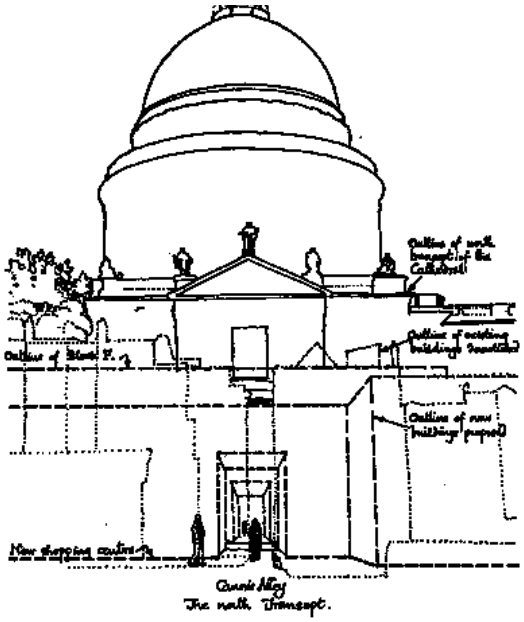
Figure 3.42 Holford's analysis of roof profiles for St Paul's London.

extended to include the preparation of lists of predominant building materials, noting the parts of the façade or street pavement where each material is used. This particular study should analyse the subtle changes of colour, material and detail from district to district, noting any characteristic features of path, node and landmark. One function of implementing a colour and material strategy is to enhance the clarity and distinction of the five perceptual components by which the image of the city is constructed.

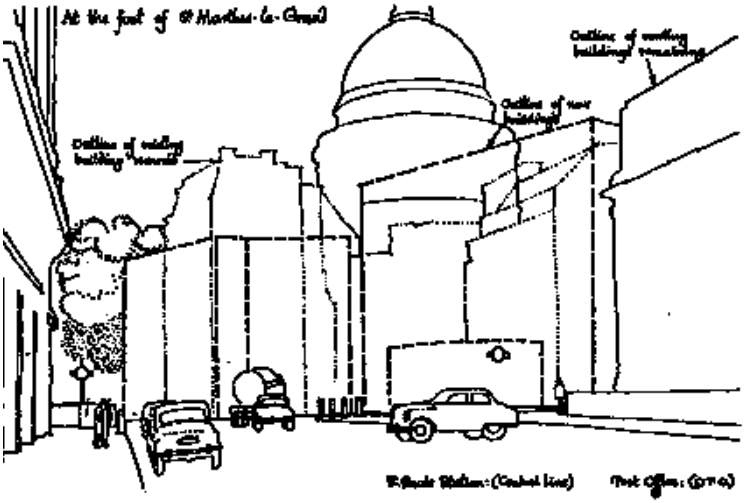
The roofline is a distinctive feature of the city, reflecting power structures of former times in addition to current patterns of wealth, prestige and influence. A visual study of the existing roofline is the first stage in determining the parameters for building heights in future developments. If sustainable development and energy efficiency are to have any meaning for built form, then, probably, the general roofline and height of buildings in urban areas may be close to that of the three- and four-storey traditional city.[26] Certainly, the skyscraper as the symbol of the wasteful competition for height and commercial prestige in the city may be nearing the end of its lifespan as an idea for development.

Two techniques for the analysis of building heights in the city are the studies by Holford in the area around St Paul's, London and the strategy for high buildings in San Francisco.[27] The Dome of St Paul's is one of the most imposing landmarks of London; Holford in his plans for the precinct around St Paul's was determined that it should retain this form. He made careful perspective studies of the Dome from critical viewpoints. In his plans for the precinct, Holford interposed between these critical viewpoints and the Dome only buildings of a height and bulk which did not damage the view of the Dome (Figures 3.42 to 3.44). The result was the imposition of a height strategy around St Paul's Cathedral. In San Francisco, a careful study of the landform and its topography was the basis for determining building height or roofline strategy. Building forms were used to enhance the landform and a 'hill and bowl' effect was created; tall buildings being restricted to the hill tops and lower buildings sited in the valleys.

Two features of the city which, to some extent, determine its character, are the treatment of street corners and the design of the pavement. Most traditional cities have a wealth of ornate street corners. The street corner has been classified into a simple typology.[28] The typology is a useful tool for the analysis of street junctions in a particular study area but this part of the city fabric lends itself to an imaginative and exuberant decorative display: the typology should therefore be used to stimulate, not restrict, ideas. The treatment of the ground floor and its junction with the pavement is the part of the city street which receives the most detailed attention from the pedestrian. It is the area of exchange between the public and the



3.43



3.44

private parts of the street. A lively and active city ground floor with many entrances, shop windows, alleyways to internal courts, is the essence of a vibrant city. A visual study of the ground floor, consisting of elevational drawings or a photographic series can indicate those areas of the city which are popular with users and which work well. It will also show those 'dead' areas without a frontage which generates activity. Such areas are shunned by pedestrians and are in need of remedial action.

The three-dimensional computer model of the urban environment is a wonderful tool which can be used at many stages in the design process. The most obvious use for the three-dimensional computer model is to assist in visualizing changes to individual buildings and public spaces. This technique is no more than an extension of the traditional process of visual analysis which relies upon various types of perspective, physical models and photographic records. The three-dimensional models of Edinburgh Old Town, designed in Strathclyde University, and the Georgian city of Bath, designed in Bath University, enable the examination of the impacts of proposed developments on the existing urban structures in those cities (Figure 7.17). Using the computer model, alternative arrangements can be assessed rapidly, opening the design process to informed public debate. All too often in the past public debate has been confused by the submission of projects slickly drawn, illustrated by perspectives carefully contrived to obscure the truth from a planning committee. It is only when the building is completed, that it is found to intrude on its surroundings in ways that were never anticipated. The three-dimensional computer model has the potential to overcome this particular problem by its ability to generate accurate perspectives from many different viewpoints and by the computer's power to analyse the visual effect of proposed development on any part of the immediate surroundings.[29]

Figure 3.43 Holford's analysis of roof profiles for St Paul's London.

Figure 3.44 Holford's analysis of roof profiles for St Paul's London.