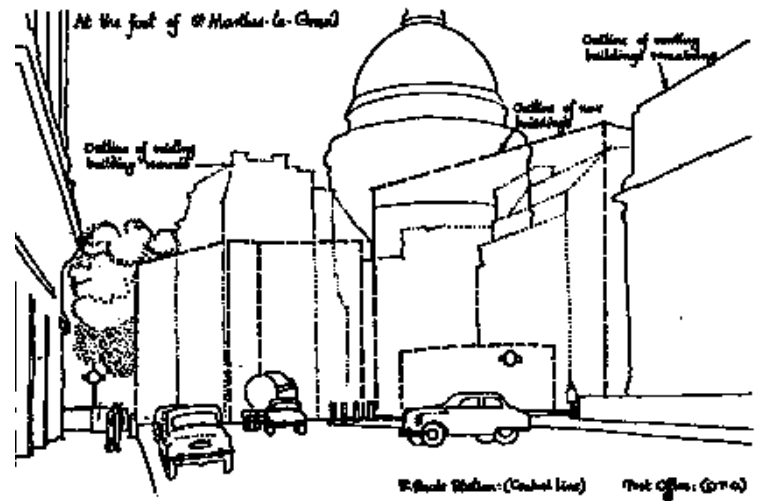


3.43

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



3.44

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.

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