density can influence the area of the town development and distances travelled on foot in the settlement. It also influences traffic within the town – the higher the density, the more effective the public transport system. The authors of the Hook report therefore, argued for the highest possible density compatible with the house and private garden, which they noted was the type of home most British people wanted.

Figure 8.6 is a diagram which was added, almost as an afterthought. It showed the various land takes as pie charts. This demonstrates that the same considerations of density, when applied to a circular form, do not affect the distances travelled from the perimeter in quite such a dramatic way as it does in an elongated rectangle. For the extremes of density used in the calculations of the 'land take', the radius of the circle increased from about 2 kilometres to 3 kilometres.

The criticisms of the neighbourhood have been directed mainly at the concept when it has been overlaid, mistakenly, with meanings of community. The neighbourhood concept when used as a physical structuring device is a most useful tool for relating population and facilities. Further confusion arises when the neighbourhood concept is used for structuring space at quite different scales. The term neighbourhood can be used to describe: a few streets with a population of about 500 to 600 inhabitants; the catchment area of a primary school having a population of 4000 to 5000; or the district or quarter with a political function and a population of 20 000 to 100 000. Alexander, for example, advocates the desirability of small neighbourhoods. According to Alexander, people need to belong to an identifiable spatial unit which should be no more than 300 metres across, with about 400 to 500

inhabitants: 'Available evidence suggests, first, that the neighbourhoods which people identify with have extremely small populations; second, that they are small in area; and third, that a major road through a neighbourhood destroys it'. In coming to a decision about the correct population for the neighbourhood, Alexander took as his standard the size of group which can coordinate itself to reach decisions about its community self-interest and the ability to bring pressure to bear on city authorities: 'Anthropological evidence suggests that a human group cannot coordinate itself to reach such decisions if its population is above 1500, and many people set the figure as low as 500' (Alexander et al., 1977).

The neighbourhood as used in the context of twentieth-century new town planning in Britain has already been discussed: its population is somewhere between 4000 and 10 000. These figures are based on the population which can be served by a primary school located within easy walking distance of every home. The school forms the nucleus of a centre for the neighbourhood: 'Grouped centrally near are the local shopping centre and such community buildings as a clinic . . . ' (Boyd et al., 1945). It is for this spatial unit – and not Alexander's smaller unit – that the term neighbourhood will be reserved in this text. As Gibberd and others have declared, it is important for the neighbourhood to have its own architectural character and to be a discrete visual unit. Boundaries between neighbourhoods reinforce the integrity of the neighbourhood. In Harlow and other British new towns of that time, landscape was the feature which established the boundary between neighbourhoods. While this is an effective visual method of

separating neighbourhoods, it does tend to increase the distances between the different activities in the urban area, and also weakens connections between adjacent neighbourhoods. In existing towns and cities, large areas of open space between neighbourhoods is most unusual. Other edges for neighbourhoods include: main traffic routes; canals and other waterways; or an abrupt change in architectural style. It is unusual to find an edge between neighbourhoods as 'hard' as the 'Peace Line' running between the Shankill and the Falls in Belfast Figure 8.7), or the wall of separation between the Jewish and Palestinian settlements in Israel. Alexander, while supporting the notion of the need for an edge to define spatial units, believes that such features should be 'fleshy' rather than 'hard': 'There is the need for a certain ambiguity at the edge and provision for connection' (Alexander *et al.*, 1977). The spatial unit of this dimension, that is, a neighbourhood covering an area about 1 mile or 2 kilometres in diameter and served by public transport, would seem appropriate for the sustainable city of the future.

The third spatial unit for which the term neighbourhood has sometimes been used is the large district of a city, which will be referred to in this book from now as the quarter: it is a unit of between 20 000 and 100 000 people. This, according to Lynch and Jacobs, should be the main governmental unit within and below the level of the city council (Jacobs, 1965; Lynch, 1981). Most writers since Jacobs would probably agree with her comments upon the vitality of cities and their quarters: 'This ubiquitous principle is the need of cities for a most intricate and close-grained diversity of uses that give each other

Figure 8.7 Peace Line, Belfast. (Photographs by Pat Braniff)

constant mutual support, both economically and socially' (Jacobs, 1965). Gosling, for example, quoting Jacobs, proposes four conditions for a successful district: '. . . the need for mixed primary uses . . . the need for small blocks . . . the need for aged buildings . . . and the need for concentration' (Gosling and Maitland, 1984). Leon Krier