"balanced" against need for development, tends to be marginalized in reality. Sustainable development takes more account of the intrinsic value of the natural capital, and requires that any proposed development – once justified in terms of actual human need – respects the natural environment as the context within which it should fit.' (See Chapter 5 for a full account of the natural environment and the need for its protection.)

The concept of the bio-city has been introduced in earlier chapters. The bio-city – like the British version of the compact city and the Garden City – sits somewhere in the mid-range along a continuum of ideas for sustainable urban forms. The bio-city is structured around public transport with residential densities close to the Garden City model and in tune with housing preferences in this country. There may be higher densities in existing centres and at points of urban concentration, but generally speaking a bio-city gives priority to the need for space in the city. Walking distances between home, public transport stop and central facilities are longer than the 500 metres which is a feature of the compact city. The bio-city, however, incorporates many desirable features of the compact city, such as preference for mixed land uses, a mix of house types and a spine of public domain linking the parts of the city with the surrounding countryside.

The bio-city is connected to, and is an intrinsic part of, the overlapping eco-systems that comprise its bioregion: it extends nature into the heart of urban areas. There is no sharp boundary between town and country: no 'ha-ha' to separate the manicured town from the dirt, mud and untidiness of the country. The boundary between town and country is simply a zone of transition, the kind of messy edge that surrounds all settlements in the countryside. Fingers of linear development arranged along public transport routes stretch out from the countryside to embrace the city, accepting human settlement as a part of nature's bioregion.

The star-shaped city is an urban form that may prove to be useful for the spatial organization of small to moderately sized bio-cities. It offers a prospect for the development of urban corridors based on a public transport spine, alternating with continuous landscape features, connecting the innermost parts of the urban areas with the working countryside. Green corridors permit the movement of wildlife within cities and, if formed of indigenous vegetation, they provide a rich habitat for a diversity of flora and fauna. A number of cities – Leicester for example – are developing this idea of the green corridor as a tool both for the protection of biodiversity and to provide a sense of continuity between town and country. Other features of the city's landscape plan would include the protection of large-scale refuges for the management of areas of ecological interest. Where it is not possible to connect refuges and other landscape features into corridors, small stepping stones or areas of vegetation can be used to provide shelter for local wildlife in transit between them: areas of private open space such as networks of rear gardens, green building façades and roof gardens complete a system of havens for small creatures.

THE QUARTER

The quarter is the main component of urban design. It is also fundamental for sustainable

development, particularly when the idea of a physical area of homogeneous architectural character is linked with the notion of the quarter as a political unit within the city. Effective sustainable development is linked with the idea of public participation in decision-making and with people taking responsibility for the environment. For example, the catch phrase; 'think globally; act locally' is linked with the Local Agenda 21 movement, which exhorts people to become involved with the concerns for their immediate environment. Local action, built on public participation, requires the legitimacy of a political structure and a population or power base big enough to challenge the views of the city authority, but small enough to encourage high levels of participation. The area it occupies and the density of occupation determine the population of a quarter. There is a growing consensus which would limit the area of a quarter to one which is determined by the comfortable walking distance from the perimeter to its centre. There is no absolute or perfect population size for the quarter. Ideas vary from Jacobs' recommendation of a population of 100 000, to the British 1950s' new town neighbourhood of 5000 people. The size of the quarter may vary with the size of the city, the densities acceptable in the locality, or the general culture of the community occupying the city. Most cities, however, are sub-divided into traditional quarters, which can be named and recognized by the inhabitants of the city. These traditional quarters should be the starting point for the definition of the political unit for purposes of public participation. More important than size is delegated political power, in the form of an elected body, with a recognized role. Anything short of a political structure is the emasculation of the idea of the quarter for purposes of local action for sustainable development: the quarter in these circumstances is little more than a device for developing areas with distinctive visual identity, but without social raison d'être.

THE STREET BLOCK

The street block of between an acre and hectare in extent, surrounded by two- three- or four-storey perimeter development, appears to be the basic urban form being advocated for city infill by a growing consensus of designers. It is a particularly appropriate form of street block for the higher densities associated with the compact city. This form of urban insulae, when it comprises a mix of uses, has advantages for the purposes of sustainable development. City centres, where large street blocks were formed when redevelopment occurred, have resulted in the destruction of the original fine grain of the traditional city. Large street blocks occupied by single uses, often in single ownership, destroy the vigour and vitality of the city, particularly if the sections of the city they occupy die at night or at the weekend. The arrest and reverse of this process is one of the reasons for the current preoccupation with the design of small-scale insulae or street blocks generating many different types of activity. Where street blocks are designed primarily for residential use, the backs of the properties can face onto shared external semi-private space: 'A small area of external space can be directly related to each housing group, dedicated to shared activities and uses. . . . The distribution of open spaces relating directly to small housing groups may result in a more economical use of space, of higher quality, with better maintenance, than