up' planning or design style. The dilemma which arises when rational synoptic planning is used for planning a city and a participatory approach is adopted for the design of a neighbourhood in that city is illustrated in the case study of the Markets Area, Belfast, mentioned in Chapter 6 and, in passing, in Chapter 1.[1] There is no easy resolution of this conflict between a synoptic and a participatory process of urban design. This remains an area of potential conflict which is perhaps best resolved pragmatically for individual cases.

The process involved in negotiating the brief is explained in Chapter 2. This is the starting point in the design process for many consultants in the field. A visit to the local authority to assess the potential for development in the area and the requirements placed upon a potential site is, or should be, an early investigation for a developer. For the local authority and its design staff, however, the preparation of advice for developers may be the result of a long process of planning investigations and site analysis. The design brief clarifies the goals and particular objectives for the development, together with a schedule showing the way in which the land will be used in the project. An agreed design brief at an early stage in the planning of a project can remove some of the difficulties associated with development control. An agreed strategy for development between developer and local authority holds out the prospect of reduced conflict and a more effective project implementation.

Chapters 3 and 4 outline the procedures and techniques used in the gathering and analysis of information which is directly relevant for the development project. Chapter 3 deals with site investigation, including the history and development of the site, townscape analysis, urban legibility, permeability studies and visual analysis. The precise nature of the project determines the scope of the survey and the emphasis given to individual aspects of the investigation. Of particular concern for sustainable development is the conservation of the built environment and the creation of a local environ-

ment of quality which is largely self-sufficient in terms of energy use and daily requirements. Surveys which explore the possibility of retaining existing structures and those which aim to understand the cultural heritage of the local community are of particular significance. Also important is the perception of the environment held by residents in the area. Attempting to gain an understanding of the image of a place and its legibility is a fundamental investigation for most urban developments. Appropriate development results from an understanding of present conditions, future possibilities, together with a knowledge of constraints which limit the nature and extent of any development. With this in mind the analysis of the problems of an area are sharpened by a study of its strengths, weaknesses, the threats it faces and the opportunities that may unfold for sustainable development.

Chapter 5 discusses the techniques used for generating ideas for alternative design solutions. Foremost amongst these is the art of developing appropriate analogies. The organic metaphor for the city is the most useful generic model for sustainable development. The eco-system is possibly the idea which generates the most practical suggestions for urban design and city planning. A number of case studies are described which illustrate the use of the organic analogy in urban design, including the eco-city in Norway, a landmark for studies in sustainable development. Participation is fundamental for sustainable development. A case study from Newark, Nottinghamshire, is analysed to illustrate the ways in which the public can be involved in the design of the local environment. The generation of design concepts has been the province of the professional designer. The invasion of this, the core of design, by the lay person poses some difficult questions for the professional working in this field. These questions include: whose opinion prevails in case of dispute? What if the popular view excludes from the design process others on grounds of race or religion? Who arbitrates in the case of rival communities with conflicting goals? What is the role of the designer if it is not design?