

to establish what the structural properties can distinguish in a variety of network cases.

Figure 6.1 is organised loosely by network type, ranging from inner city grids to peripheral tributaries.

Prototype street patterns

The four cases in the 'prototype' category are 'pure' designs. In two cases, these designs have remained unbuilt (North Bucks New City and Hilberseimer's *New City*); in the other two cases; versions of these plans appeared on the ground (Craig Plan, Edinburgh; *Ciudad Lineal*, Madrid). The idea here is to demonstrate the idealised structures to give an impression of the 'pure' forms of the drawing board, before these collide with the reality of application to real sites (Figure 6.2).

The excerpt from North Bucks New City (a) is a development 'pod' for the unbuilt new town proposed for a site near present-day Milton Keynes. The Craig Plan (b) is an example of a 'hierarchical' grid of traditional streets (Figure 2.13). The excerpt from Hilberseimer's *New City* (c) could be described as an H-shaped excerpt of an X-fractal. *Ciudad Lineal* is an example of what might be termed a pioneer form of Transit Oriented Development, designed along the backbone of a tramway spine (d). Its creator, Arturo Soria y Mata, claimed it to be a 'higher' or 'vertebrate form' in contrast to the more organic, 'vegetable' form of the garden city.¹

Demonstrative street patterns

The 'demonstrative' networks include examples from the literature – which may be based on actual cases – and networks devised within the research process to demonstrate specific structural properties of significance. Some of these have already been presented for demonstration purposes earlier in the book. These can help to 'calibrate' the analysis, relating the actual street patterns to typical types (Figure 6.3).

The basis for analysis

The overall range of 60 networks was chosen to depict a variety of types of structure, and is not supposed to be a statistically representative 'sample' of urban networks in general. Particular attention was paid to selecting certain kinds of 'traditional', inner urban layout, which are rich in route diversity and structural complexity – these are particularly significant to the analysis in the second half of the chapter. Therefore, examples of these are well represented numerically. By contrast, pure grids and tributaries are simpler to grasp and distinguish, and fewer examples seemed necessary