

7 THE CONSTITUTION OF STRUCTURE

It is therefore necessary to introduce the idea of a 'hierarchy' of distributors, whereby important distributors feed down through distributors of lesser category to the minor roads which give access to the buildings. The system may be likened to the trunk, limbs, branches, and finally the twigs (corresponding to the access roads) of a tree.

*Traffic in Towns*¹

A tree is a useful object of contemplation when considering issues of structure and hierarchy, since it is both a familiar and intuitively understood object, and yet it also has a manifold complexity that reveals itself under closer examination.

Consideration of the structure of a tree can help to answer questions that relate rather directly to specific aspects of structure and hierarchy, as applied to streets and patterns. What exactly do we mean by hierarchy – which is more than just 'classification' or 'typology', but implies order and structure? What is hierarchical structure? What is a tree-like hierarchy? Can we use understanding of hierarchical structure to distinguish the structure of conventional road hierarchy, and what makes this 'bad' hierarchy, and explore other possible kinds of structure, that might equate with 'good' hierarchy?

While Christopher Alexander classically argued that 'a city is not a tree',² in relation to city structuring in general, Colin Buchanan explicitly likened road network structure to the structure of a tree, as in the opening quotation to this chapter. This chapter 'deconstructs' the issue of structure and hierarchy through use of an extended tree analogy. This leads to the suggestion that the system formed by types and their hierarchical relationships is