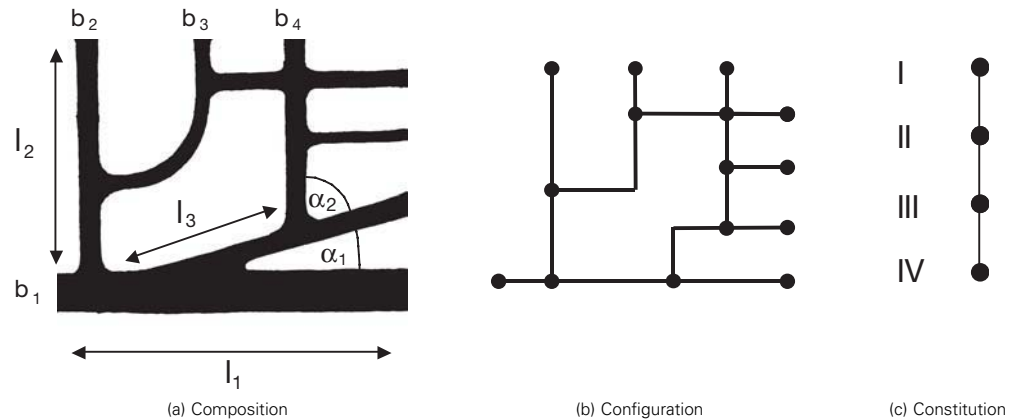


BOX 7. COMPOSITION, CONFIGURATION AND CONSTITUTION

A constitution is a system of types and relationships (c). It is like an abstraction from a configuration (b) – or a second-order abstraction from composition (a).



Constitution is based on hierarchical properties such as tier and type, which may be expressed as ordinal numbers – here denoted by Roman numerals. Compare with Box 4.

We can reinforce these parallel relationships by referring to systems of hierarchy and type as systems of *constitution*. We can regard constitution as an abstraction from configuration, just as it was possible to regard configuration as an abstraction from composition. Similarly, a hierarchy can be seen as a structural abstraction from a network, just as a network can be seen as a structural abstraction from a two-dimensional layout of streetspace (Box 7).

It is possible to explicitly relate the properties of composition, configuration and constitution to the earlier tree analogy, by equating different properties or structural conditions with different aspects of structure. It is suggested that necessary and allowable connections are constitutional properties, while the number and placing of those elements relate to configuration (Table 7.2). Table 7.3 summarises the properties and associations of composition, configuration and constitution.

Conceptual distinctions

A hierarchy can be recognised as a *particular kind* of constitution, usually associated with an asymmetrical ranking of a particular sort, such as a