

Hierarchical antecedents

Conventional systems of road hierarchy in many countries have evolved from principles stretching back over many decades. For example, today's hierarchical approach in the UK, in *Transport in the Urban Environment*, can be related back directly through *Roads and Traffic in Urban Areas* to *Traffic in Towns*.⁶ *Traffic in Towns* built on previous principles set out by Alker Tripp, who was himself influenced by ideas from the USA, where the development of the notion of a road 'hierarchy' was advanced in Olmsted's design of Central Park, New York.⁷

Both Tripp and Buchanan were concerned with the issue of road safety, and both proposed solutions involving pedestrian–vehicular segregation of one sort or another. Buchanan himself emphasised environmental quality as his starting point in *Traffic in Towns*, with traffic in a subservient role. But despite this good intention, when applied in practice the result often appeared to be traffic-dominated outcomes (see Figure 1.1).

To understand how hierarchy came to be the way it is, it will be revealing to take a closer look at Buchanan's original propositions, which have been influential in the design and management of road networks to this day.

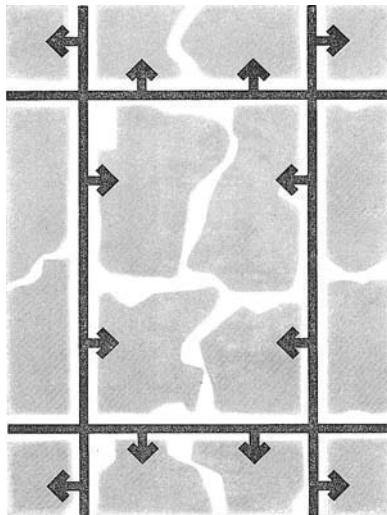
Traffic versus towns

Buchanan's thesis is founded on a basic principle:

Basically, however, there are only two *kinds* of roads – *distributors* designed for movement, and *access roads* to serve the buildings. [original emphasis]⁸

In effect, this 'basic principle' – that lies at the heart of *Traffic in Towns* as a whole – is a division between a system of traffic distributors, where the needs of movement are prioritised, and a system of 'environmental areas' where environmental considerations are prioritised. In a sense, this is a division of 'traffic' and 'towns' into separate areas of priority. The spatial consequence of this is a cellular approach to urban structure, where environmental areas – likened to 'urban rooms' – are connected by a complementary network of roads – 'urban corridors' (Figure 3.3).

In Buchanan's system, effectively the 'traffic' forms the main superstructure, while the 'town' is fragmented into separate subdivisions. This system was influenced by considerations of hospital layout, where circulation takes place on main arteries (corridors) and areas of work and repose take place in more secluded areas (rooms).⁹



3.3 • Buchanan's cellular concept. Environmental areas (incorporating minor roads) are plugged into a superstructure of main traffic distributors.