

From 1988 the author was involved in an exchange programme on urban renewal and housing development between the cities of Rotterdam and Shanghai. Frequent visits, building with Chinese architects and designing within another culture offered the opportunity to learn a great deal from Shanghai. One of the major lessons was that it is possible to live in a very high-density environment, the success of which depending not so much on volume and floor space but also on the infrastructure, views, privacy and facilities provided.

Ultimately, this experience led to the formation of the Upper City Foundation in Rotterdam, which aims, through an integrated approach to urban areas, to add development space to urban areas without using up more green spaces, and without destroying existing buildings. The major themes are linked to sustainability; increasing density, reuse and reduction of waste, shortening journey distances and improving the existing environment and buildings through urban renewal.

Upper City: *Bovenstad*

Rotterdam was designated Cultural Capital of Europe 2001 (Foundation Rotterdam, 2000), and as part of its cultural programme initiated the idea to explore the roof space of the city. Maik Mager, a sculptor and art teacher at the Willem de Koningh Academy (a part of Rotterdam University) came up with



Figure 11.1
The buildings of Rotterdam University, showing an aerial view of the roof site for 'Bamboo Summit City'.
(Source: Hulshof Architects.)

the proposal for a sculpture on the roof of one of its main buildings (Figure 11.1). The concept involved using scaffolding, a very flexible material to make spatial frames and to construct unusual volumes. Together with the practice's experience in transforming existing buildings, and involvement with Shanghai, the concept developed into the idea for a 'Bamboo Summit City' on the University building's roof. Viewing the city from this elevated point, it was clear that the majority of Rotterdam city centre roofs are flat, forming ugly areas scattered with air-conditioning units, chimneys, pipes and services. These flat roofs are not 'designed', yet could potentially be seen to be a fifth facade of a building. There are large areas of such space in the centre of Rotterdam that could offer useful space. Although the idea of using roofs is not new (a proposal was made in the 1970s for an Upper City in Amsterdam (Figure 11.2)), the 'Bamboo Summit City' could be seen as a start.



Figure 11.2
Constant's 'New Babylon', a 1970s proposal for an Upper City over the roofs of Amsterdam.

A fund raising campaign was initiated to realize 'Bamboo Summit City', and to investigate the space on top of the roofs of Rotterdam, and around 500,000 euros were raised. The programme started with a design in the form of a model made by Mager and van der Vlis (Figure 11.3). The practice was in charge of the development process making the design into a building plan and introducing useful spaces like a huge terrace, hall and exhibition room (Figure 11.4). The funding enabled Chinese scaffolders to come from Shanghai to construct the sculpture. The bamboo also came from China as a part of the relationship with

Figure 11.3
Mail Mager and van der Vlis' model for 'Bamboo Summit City'. (Source: Hulshof Architects.)

