



## 8 / A NEW APPROACH TO URBAN SPACE: FIRST FORMING A THREE-DIMENSIONAL PLAN OF HULLS

Let us ask, now, how a system of hulls, the shaped space of a town, might be created in practice.

Since it is true that such space is hard to shape, and that shaping it must come first, before shaping buildings — then there must be some way of giving the creation of this system of hulls the mental and social priority it needs, then using it as a common goal for the town, and getting all the individual acts of construction to participate and complete the geometry of the spaces.

That, in turn, requires a new form of representation, a new form of plan or diagram. It must be something which is three-dimensional, which is flexible (so that it can absorb the variations and local needs of different building proj-

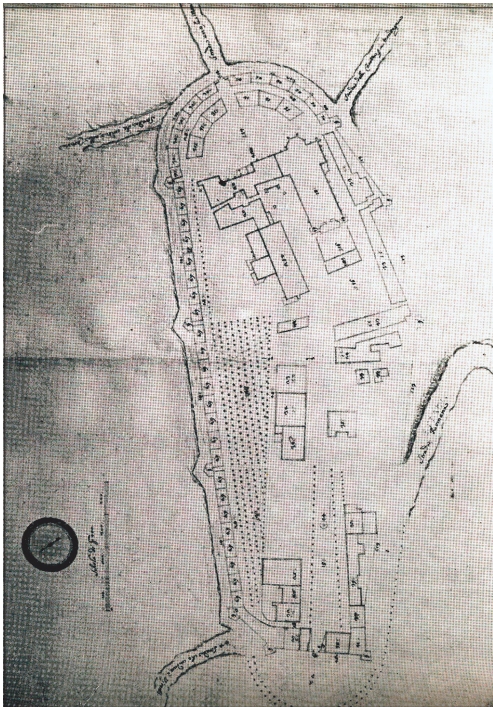
ects), yet something which maintains a real handle on the shape of the *space*, and on the shaped system of *spaces*, that are required to keep the hulls of space throughout the town in good order.

I used to think that this large-scale structure — the hulls of space for a town — had to be created piecemeal, as a forest is created from the growth and interaction of the trees, without a plan. That is partly true. But I have become convinced, after years of trying to make it work, that it is after all necessary to have some kind of plan. Pure piecemeal growth just does not work well enough to create the structure of the larger wholeness needed in a city. The reason is, that it is the large-scale organization of the space, the actual geometric order of the streets and spaces, which matters most. Even the beautiful and sentimental Italian hill-towns, which look as though they just grew, were sometimes planned, laid out, by the bishop of the local church, or by someone else who cared about the whole (see illustration).

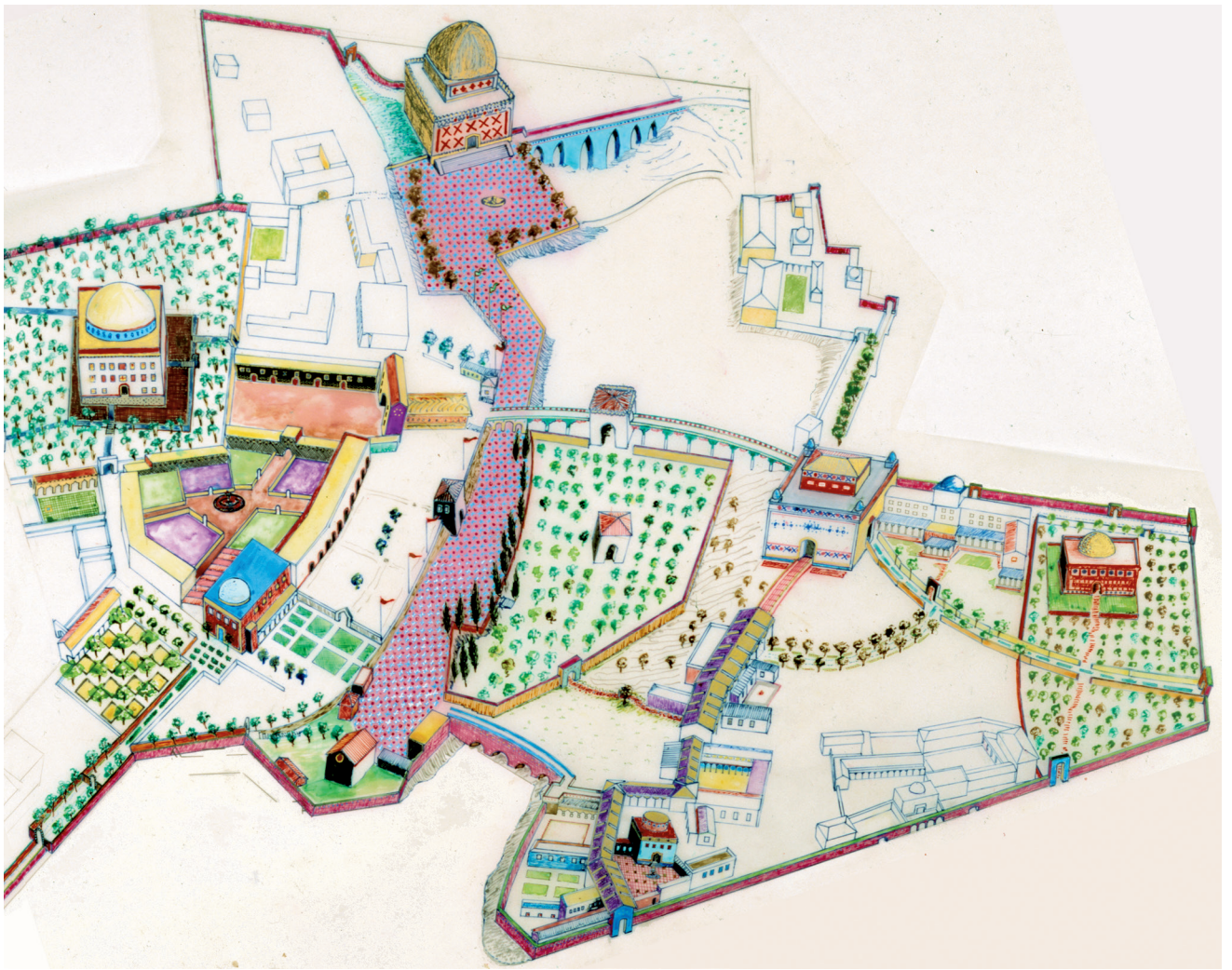
The unfolding process, in the case of a town, is complex and difficult. It cannot always go on, romantically, “by itself.” It needs guidance of a disciplined kind, through which the emerging space is defined, agreed, and visualized in some public and sharable form of a three-dimensional model. Once we have a way of doing this, the whole thing can go forward easily enough.

On the next page I show a kind of diagram which may be useful: a three-dimensional cartoon, which places emphasis on the spaces as solid objects, and allows everything else to support these spaces and related to them.

The principle which creates such hulls for the city as a whole, or for a large part of a city, may also be used repeatedly in local areas to create a similar map, or diagram, for the streets and pedestrian hull within each local area.



*The plan of San Martino al Cimino in Italy where a certain bishop in the middle ages played a major role in defining the plan, especially the apse-like road and buildings at the far end. The townspeople then followed, filling in the details of the large-scale order.*



*My design for the Aga Kahn competition for a new city center for central Samarkand, to be built on unbuilt land. The buildings and spaces in their entirety were designed by us from scratch, to match the important 14th-century buildings all around the site. The drawing might be considered a model of the way that pedestrian hulls could be shown, and specified in a new kind of urban city plan. The drawing shows, in three dimensions, the "hull" or essential spatial envelope for this central section of Samarkand.*

*Unlike a typical plan, the drawing concentrates on the key spaces, their shapes, building volumes, paths, and connections, with their relation to the land and to the rest of the existing city. Such a drawing can allow individual building projects to take their own form within the limits of the drawing, and to contribute in their own ways to the hulls of space that are portrayed.*

*Christopher Alexander, Bob Walsh, Hajo Neis, and students, 1993.*

It is notable that in this example, the centeredness of each hull, making it a living center, is intensified by the powerful center of a powerful and carefully chosen building. Although placing an important building at the "head" of every major public space could hardly be an absolute rule — it is too strict — nevertheless it gives an indication of the kinds of specification that may be needed to be sure that the hulls of urban space are *real*, and

likely to succeed, while retaining flexibility and artistic openness for the builders of the individual buildings.

Once again, though, the builders would need to accept and understand how the shape and organization of each building must somehow work to bring life to the hull it dominates. This needs, yet again, a new form and new conception of urban planning, and a new form of specification.