

In this fashion, each of the six large buildings in this chapter has levels of detail, stepped down in easy jumps to the intricacy shown in chapters 14, 15, and 16 on fine structure.



The castle of Gwalior, India, also shows the principle.

again, in the lower photograph, we see the hall through a tiny archway from a building across the plaza. Again we see only a fragment of the massive hall, emphasizing its great size. Yet still, because of the relationship established by this archway, we are made comfortable, and feel related to the hall, even though it is so huge. It is because of the detailing, and the long hierarchy of scales in the living centers, ranging in comfortable steps from the great size of the building volume, to the smaller building next door, to the bays, then to the columns, and finally all the way down to the smallest ornaments. We feel it all to be related.



Smaller details, considered by themselves, reveal even more profuse levels of detail, not noticeable in the larger photo.



4 / MOUNTAIN VIEW CIVIC CENTER: DIFFERENTIATION OF A LARGE BUILDING AS A JEWEL, MADE BY SUCCESSIVE TRANSFORMATIONS OF THE SPACE WHERE IT EXISTS

If we follow a living process to embellish a public space, what must be made to happen is that the various aspects of the building break out from the context in such a way that it has the most magnificent effect on this place. Here we come to the fact that a building must preserve the structure of its surroundings. It should not impose itself; but instead — modestly, in a selfeffacing way — creates a brilliant light, a flash of volume, shape, and color which takes the latent centers and symmetries present in that public place, develops, enhances, strengthens them.

The first thing to unfold will usually be the volume itself: actually an *arrangement* of volumes. In relation to the centers which exist in the public space, it is our task to do the minimum. This means that the volume is most probably established as a primitive rectangular volume — often a principal, single rectangle — often with minor rectangles accompanying it, or "hanging" from it.

To understand this process well, it is necessary to see the rectangles of the building *volume* as cen-

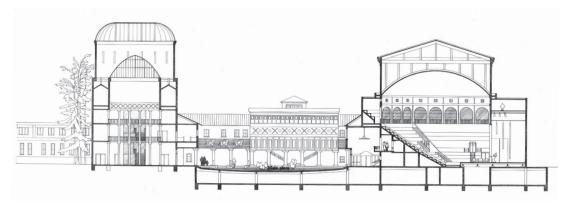
ters, and the rectangles of the *space* as centers too. Then both space and volume will have equal weight. Subsequently, at a second level, a series of smaller embellishments occur. The main symmetries of volume and space are usually given focus by new centers (again symmetries, again often rectangular) inserted at key points where latent centers are visible in the first-level structure.

This act creates a more elaborate structure, in which simple forms together generate highly complex asymmetries, while yet being simplified and smoothed out to preserve the simplicity of the whole.

At a third level of scale, we shall find the differentation introducing more detailed structure: articulations in the building volume, segments, divisions, all locally symmetrical as far as possible — and again calculated to have their own, distinct levels of scale. This further encrusting of structure in the whole then begins to create a fabric of nearly sheet-like unity which binds the whole together and gives power to its feeling.



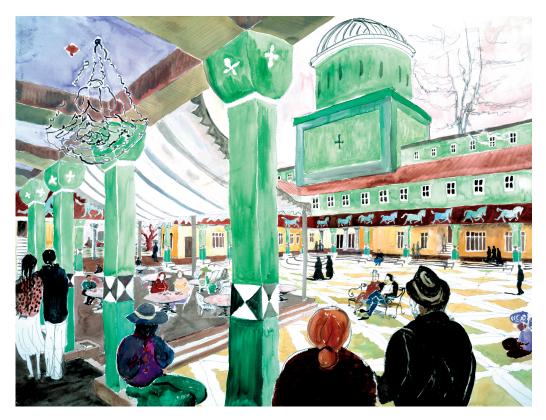
Street view of the Mountain View Civic Center, Mountain View, California, 1989



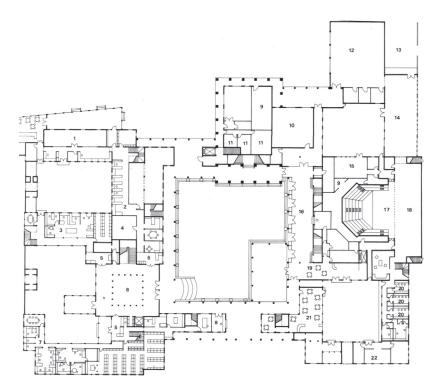
Main cross-section through the city hall lobby and theater. I like this section very much. Though, sadly, never built, it expresses the core of what I mean by a living architecture in form and character. It has no reliance, no echo even, in the buildings of traditional cultures. It arises as pure form, in itself, of the future, and arises pure, from the theory I have presented. Its geometry, articulation, are new and fresh. It carries the features of the fifteen properties and the imprint of the fifteen transformations without historical reference, and so shows what these transformations really mean.

The whole, a carpet of structure at many levels, will then exist as something rich and complex, sometimes immensely large, which yet remains — for all that — simple. If you scan the examples in this chapter you see six big projects — two built, four not built. What is the quality they have in common?

First, an extended range of scale. They all



The main courtyard of the Mountain View Civic Center.



First floor plan, Mountain View Civic Center, Christopher Alexander with Artemis Anninou, 1989

contain pieces which are like pieces of a smaller building. They have well-formed building elements, not too large, ranging from middle-sized to tiny in scale. There is a hierarchy visible so the building is not amorphous. Each of these buildings contains a pyramid of scale, going from the largest shape, in steady steps, down to the smallest details, which are at a comfortable, even intense human scale.

Once the broad structure is laid in — and even *that* is based directly on feeling, relatively simple and humane — the larger interior spaces then come directly from their location. Engineering structure comes from the larger spaces. Small spaces come from the structure. The detail comes from the structure and the smallest spaces. Above all, there is a careful pure geometry, simple and organized, with high degrees of local symmetries. Shapes have been found, which, within the scheme of unfolding, are able to express the deepest feeling directly.

From the point of view of unfolding, the design of a very large building poses special prob-

lems: The location and character of the most important rooms; the flow of movement from entrance to biggest space; the positive character of corridors and movement places, and the centeredness of each one; the position of the building volume in the site; the contribution which the building volume makes to surrounding space; methods of testing the validity of these larger features of the building, through models big enough to anticipate the feeling of the real thing; depth of feeling in the whole; rapid use of models, tearing up stuff, changing, chopping, placing, moving, until a deep feeling appears; major composition in terms of centers; very early involvement of the users; taking the users' notions seriously, whenever they contribute to unfolding, but not otherwise.

Helping to form hulls of public space by strengthening their centeredness is one of the most important of these things. All six of the illustrated projects do it. The Great Hall was conceived, and shaped, to extend the campus plaza (see pages 173–81). The Tokyo Forum is



This sketch of the Mountain View theater interior shows the unusual combination of scale and intimacy, which I believe is likely to come about, almost inevitably, from the use of living process. Mountain View Civic Center, Christopher Alexander, 1989.

a progression through space, from the street to the enormous Assembly Hall at the top, extending the vector which starts from the street. The Mountain View Civic Center was formed by experiments to find out how best to support and supplement the feeling at that point in Castro Street, the main street of the city of Mountain View (see pages 112–14). The Mary Rose Museum is shaped to give magnificence and wholeness of form to Victory plaza in Portsmouth, forming a space which helps set off and enhance HMS Victory (page 137). The Julian Street Homeless Shelter was built to give shape to the Julian-Montgomery intersection of San Jose, and to create interior courtyards which are public space (Book 2, pages 283–90).



5 / TOKYO FORUM: UNFOLDING OF A MASSIVE BUILDING

The method of getting the volume from the site appears even in the very largest example, a supermodern convention center in the heart of downtown Tokyo. This building complex was to cost (and did cost — though it was not our design that was selected for construction) \$750,000,000, three-quarters of a billion dollars.

The site was a huge block, in downtown Tokyo, next to the main railroad tracks going west from Tokyo station. Here is another exam-