



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).

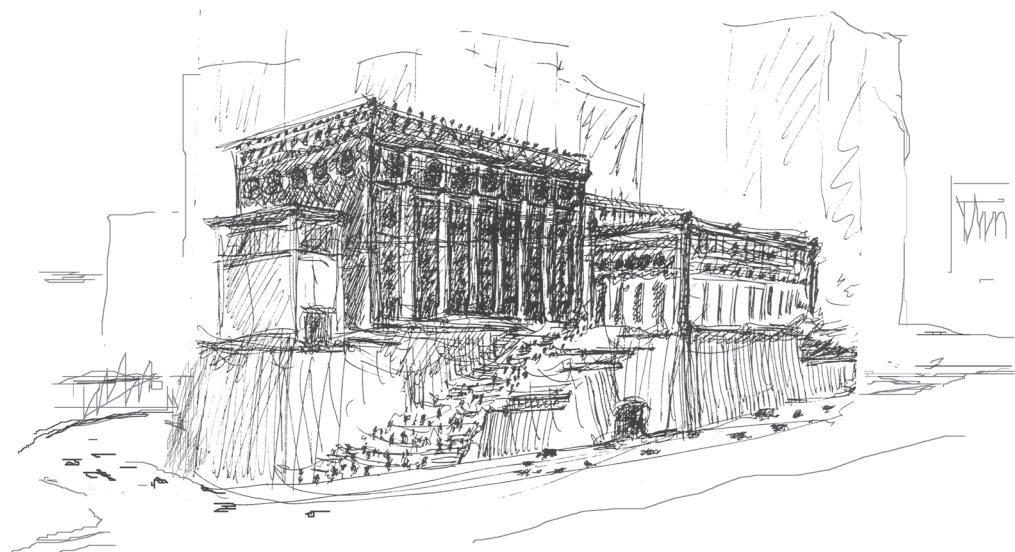


5 / TOKYO FORUM: UNFOLDING OF A MASSIVE BUILDING

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-



My first sketch of the building volume. Tokyo International Forum, Christopher Alexander, 1989

ple of the way that feeling appeared through unfolding, appearing step by step through a series of questions I asked myself as I prepared for the project.

First step As I was walking about the site, by the railroad tracks, a certain feeling gradually began to emerge. This feeling was the wholeness of the site, its overall feeling character as a whole, as it then was. I asked myself what act would intensify that feeling? After walking all four sides of the site, many times, I gradually began to feel a mountain growing there — like a rock: nothing near the ground, and something high on that rock. This sensation arose directly from the site as an answer to the question that I asked myself: What will intensify the feeling here?

Second step Next, I asked myself, Where is the main hall? I began to see an immense hall, at the top of the rock, visible from the outside, visible from the inside.

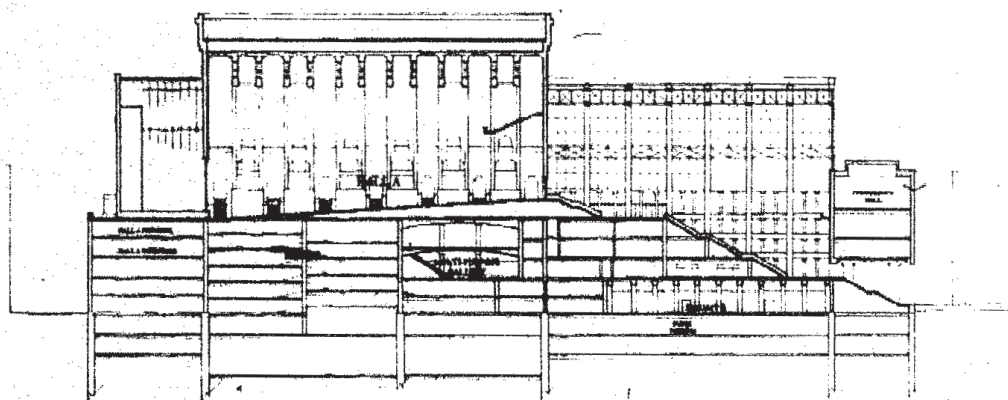
Third step I began to ask what the approach was to this immense hall. Then I asked myself more — how does one enter the site? What is the approach to the hall? I asked what would intensify the feeling of the site and the emerging rock, and hall, the most. I began to see an immense stair, passing through seven stories: leading to the hall at the top.

Fourth step I asked what the character of the hall itself might be, to intensify the feeling of the emerging building so far. This immense hall, almost the size of a football field — has columns which are themselves the size of rooms.

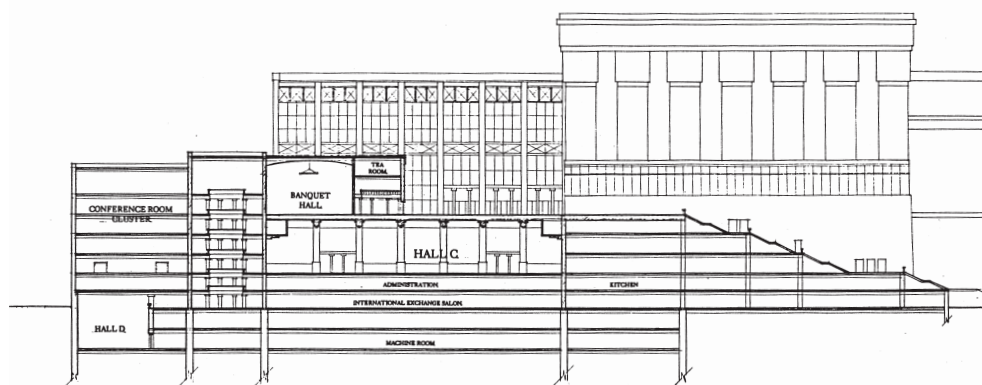
The use of feeling, in these steps, is not romantic, or arbitrary, or willful. Rather, in each case, the feeling arises *as an observation about the existing wholeness*, and moves to an observation about some direction of formation which is indicated by the wholeness: *it is where the wholeness itself leads the situation*.

For example, in *step one*, the feeling of the building arising out of a rock plinth comes about like this. Part of the fact about existing wholeness, on that site, was that the wholeness itself has a large, slab-like, flat volume of space — a center — which exists in the site as it is today. This virtual slab of space was induced, I think, by the Shinkansen tracks curving around the site. Thus there was, already, a center of this kind in the site. The configuration of a rock or plinth arose from the slab of space, directly, as that which would strengthen this configuration which existed.

In *step two*, the building itself, high on the rock, arises in the same way. The hall will be felt and seen as a vision from the passing trains only if it rises out of that rock. Again, the move



Longitudinal section, facing west. Tokyo International Forum, Christopher Alexander, Artemis Anninou, 1989

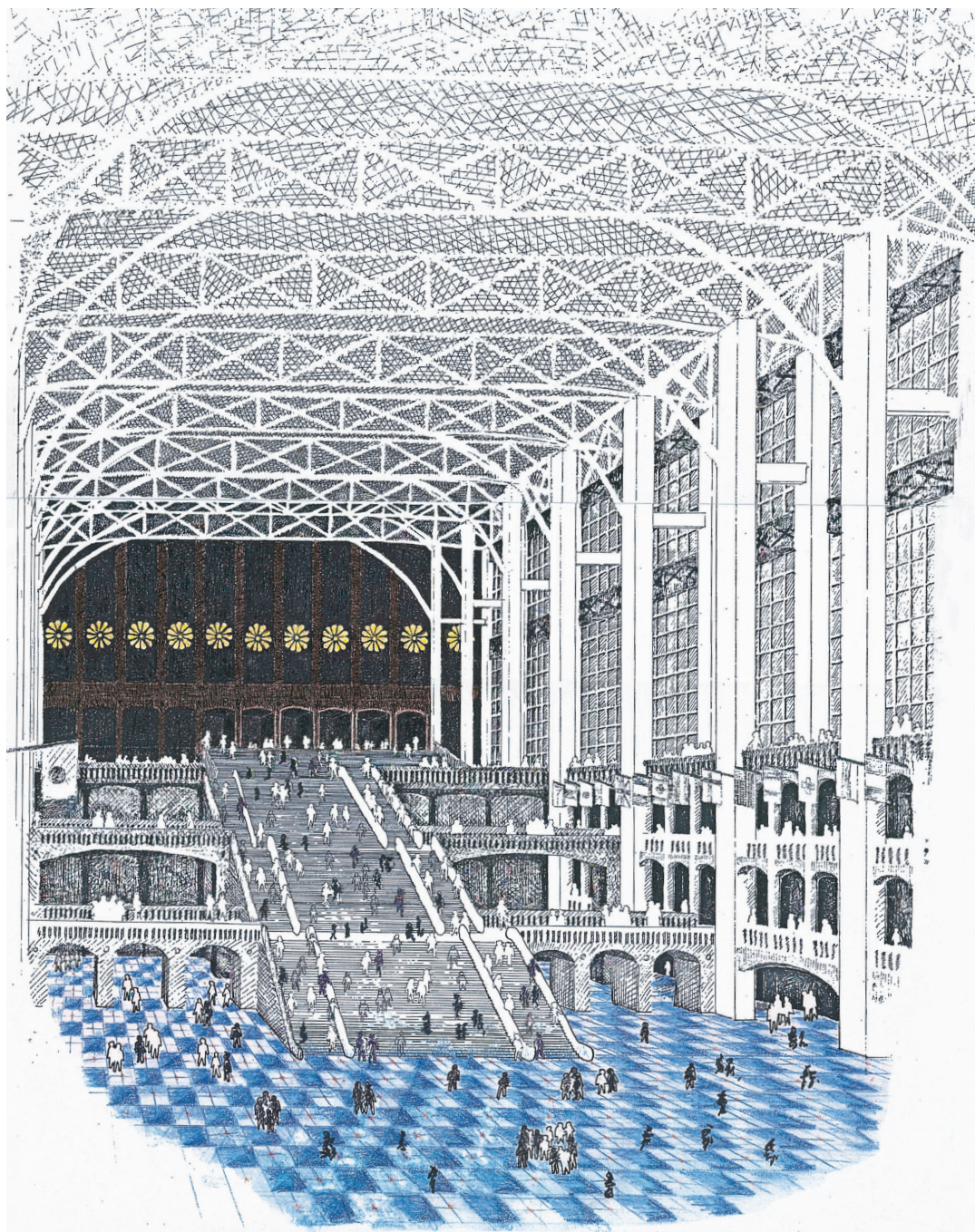


Longitudinal section, facing east. Tokyo International Forum, Christopher Alexander, Artemis Anninou, 1989. Other plans and elevations of this building may be seen on page 417 of this book and on pages 418–19 of Book 2.

which intensifies the feeling most, is the one which intensifies the configuration as it exists.

In *step three*, the entrance, starting on the street at the east end of the site and going up towards the citadel-like hall, once again starts with the feeling of the wholeness as it is. This includes the fact that the east end is the major approach to the site: the fact that the site is longer east to west, and that the approach thus naturally goes, from east to west, rising. When this aspect of the wholeness is intensified, we get the great lobby and great stair, leading to the hall at the top. Again, the act which introduces most feeling into the site is the one which solidifies and extends the presently existing wholeness most vividly.

In *step four*, the Assembly Hall at the top is almost the size of a football field: 70 meters long, 50 meters wide. When one contemplates that immense space, without knowing its detailed structure (to do this, you only need to go out and stand on the street, in a place which is big enough so you can imagine the inside of the hall), you are very conscious of its length and width. The feeling of it which is present in you includes its existence at the top of the long staircase, on the top of the rock, seven stories high, above the city of Tokyo. When you begin to contemplate the feeling of magnificence which might exist in this hall, you become aware, inevitably, of a rhythm of columns and beams. Just the structure alone needed to support the roof



Tokyo International Forum. The main staircase leading to the enormous Assembly Hall, whose chrysanthemum trusses are just visible at the top of the stairs. The interior of the Assembly Hall is illustrated on pages 442-43 of chapter 13.

is immense. When we concentrate on this configuration, which would exist in the finished hall, then what emerges, and what will intensify the feeling most, are massive beams, massive col-

umns, so big that they contain rooms themselves, and ornaments within the beams. The columns need to be this big to contribute effectively, through levels of scale, to the feeling of the room.

The transformation which intensifies the configuration most, arose directly from the wholeness of the configuration itself. The beams, giant Vierendeel trusses, six meters deep, are pierced by huge chrysanthemum-shaped voids

to save weight, and to create a play of light within the darkness of the ceiling. The interior of the massive Assembly Hall, as I imagined it, is shown in Annie der Bedrossian's drawing on pages 442–43.



6 / EUROSTAR

It is helpful to look at a similar building, also spanned by huge trusses, and with an ethereal structure overhead, recently built in London for the latest generation of ultra-high-speed trains. Although done in a very spare, technical vocabulary, this building shows something of the results of careful adaptation which can arise in a highly technical idiom. The curving platforms, necessitated by rail layout and minimal space, created a challenge to the lightweight high-strength space frame, which curves in three directions and is able to adapt to the uniqueness of the site, thus creating something approaching a highly adapted canyon wall, or a canopy of tropical for-

est in Brazil. The technical challenge has been carefully and beautifully met.

I have deliberately introduced this example, which uses a spare, cold arrangement of steel members. Though not based on centers, and somewhat lacking in construction detail that has feeling, still the wholeness of the situation is reinforced and strengthened by the presence of this wonderful roof. It shows — as other buildings illustrated in this book show, too — that the principles which are outlined in Book 3 are not style-specific, and that there is a realm of design where buildings have great simplicity and yet create the adaptive complexity this book is mainly aiming at.



The Eurostar Terminal, Waterloo, London. Architectural design Nicholas Grimshaw, engineering design Anthony Hunt, 1993