underlined in the carpet gallery at the San Francisco Museum (pages 426-27). This very large and highly complex room has no windows. It was built to exhibit 88 ancient Turkish carpets. We start, in this case, with the carpets themselves as the latent centers, and the movement of the people walking around looking at them. From these ingredients, the centers of the room, in plan and section, then come into being. In this instance, because the room is so big, it is powerfully made of smaller centers, about a dozen of them . . . strongly articulated, each one powerful as space in its own right. As you see from the plan of the gallery (page 425), each wing of this very large room is given a focus and an orientation, too: the most important carpet in each

group, is placed at the end, so that one walks towards the most imposing, most serious, most electrifying and most grave center.

Then the deep gray (almost black, touched with red) color of the walls allows the carpets, each one, to function as a source of light, hence as a center; and the room itself is made of wings which allow you to focus on these spots of light, glowing in the darkness.

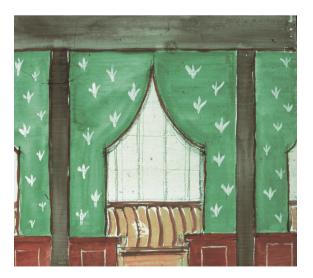
We see here, in an exceptional case, how a room is formed by the centers which draw one in, and which draw one towards it. In each room, one has to ask not only what centers form the source of light, but which most important centers lead me on, focus me, orient me, while I am sitting or standing in that room.



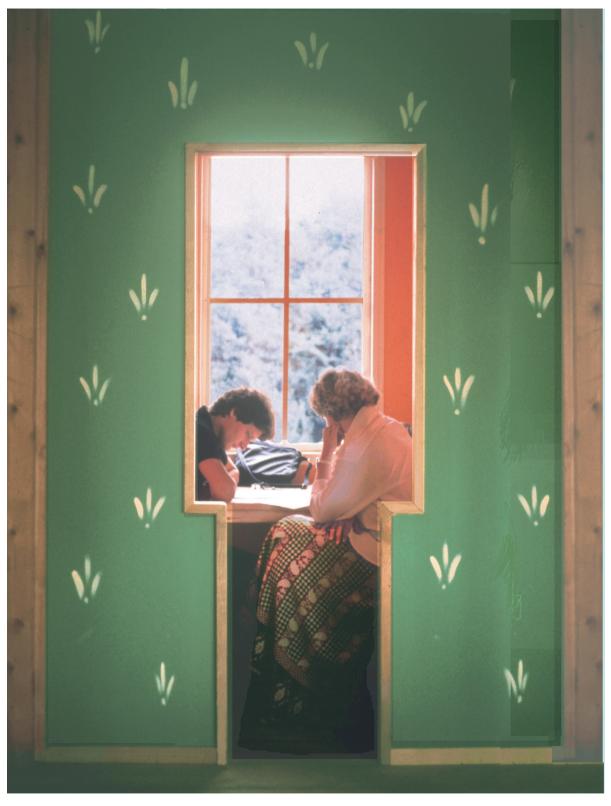
## 7 / FINE STRUCTURE WHICH DETERMINES THE INTERNAL COHERENCE AND FEELING IN THE ROOM

In this work, the room is to the house as the house is to the land. Just as you have tried to make the volume of the house sit in the street or in the land to complete its wholeness and extend it, so now you must make the rooms of the house

sit within the house and land together, completing *them*, extending *them*. And as you do this, you must also start the unfolding of the physical structure of the building too, so that its columns, beams, walls, arches complete the volume of the



Early sketch for the alcove fronts of the Linz Café. Gouache on wood panel, 5" x 5", Christopher Alexander, 1980.



The Linz Café, Linz, Austria. An interior alcove with hand-painted surface with color and flowers. The fine structure is created by the keyhole opening, its edge, the ornaments, the window and the cross in the window, and by the table.

Christopher and Pamela Alexander, 1980.



Café interior and balcony, Linz Café, 1980.

rooms, just as the volume of the building completes the land — so that in the end all together, rooms, walls, windows, roofs, terraces, form a physical structure which completes and enhances the roughed-out volume of the house, just as the roughed-out house completes the roughed-out land which existed there before it.

To get the rooms right, finally—a place whose centers are themselves living—the physical, geometric, built structure of the room and its interior organization must together form living structure, too. That means that spaces, the organization of spaces, and now its counterpart, the organization of solid material, must together form a coherent living structure. Although this seems obvious, and although it is part of the classic core of all traditional architecture—it is surprising how this has been almost lost and almost forgotten in the maelstrom of 20th-century work.

Here, once again, the fundamental process has a massive role to play. But in this case, the process of forging living centers, when it is focussed on the space and volume interaction of the structure, asks us to carve space, as if from rock, until the counterpart of space — the solid material structure that we think of as its physical container, its engineering structure — also comes to life to make each room alive.

Here the fundamental process *obtains* space and structure—the entity we may think of as "space-surrounding-structure"—from repeated application of the fundamental process to the volume of the building and to its emergent rooms and corridors and halls.

What I mean is this. The way you now start working out the interior of the house—its overall plan, rooms, entrances, walls, ceilings, columns, window seats—at each step you do something to some conception of the building that is growing in your mind.

For instance, it is more important to get the rooms right, one by one, than it is to have a coherent "plan." Don't worry about trying to arrange the overall plan — that is not unfolding but manipulation. Instead, start with the most important room. Put it in the most important place, towards the garden, or the sunlight, or the river, or the street - whichever is most appropriate. Let it take its own form. Don't worry about the rooms around it. Then do the same for the next rooms, get them right. When you do things this way, some places will be a little bit of a shambles. There will be left over spaces, funny bits and pieces where you can put closets, toilets, storerooms. Don't worry about the plan so much. Just make each part really beautiful, in its position, in its quietness (at the end of a passage for instance), in its light.

What you want most is for the individual rooms to be individually wonderful, glorious.

It is useful to see, concretely, how this focus on fine structure works to create a room. Suppose, for instance, that we have determined on a site, the best place for a certain major room. We have stood in that place, determined, from the inside, so to speak, that this is a good place, a beautiful spot, with a significant relation to the land. In the fundamental process we then take a next step to



Shadowy atmosphere in the Linz Café, Linz, Austria. Christopher Alexander, 1981.

strengthen and embellish this center we have formed as a decision in our imagination.

Obviously, we want the light of that room to be beautiful. We must therefore clear away enough space around the edge of this room so that it will be possible to allow light in the room to be beautiful — we must make beautiful windows. Inevitably, then, the room has now taken a certain prominence in the emerging plan. It "sticks out," it has a substantial part of its perimeter exposed, and that begins to shape the building around the room.

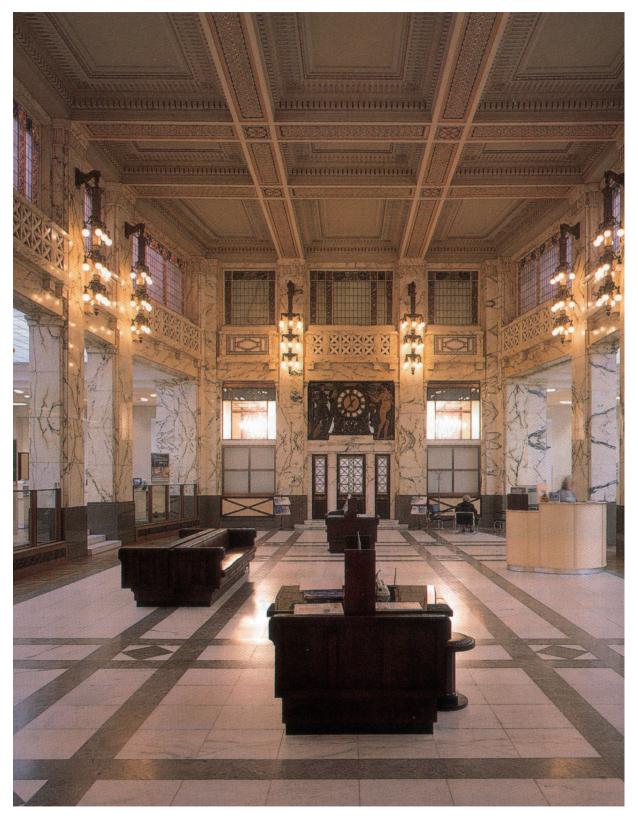
In similar fashion, if there is some part of the land which is to be approached from the room, again, this is already clear at a very early stage — and we begin to visualize another strong center, perhaps a terrace, or a lawn, with steps, and with a french door.

So, even before the building is fully designed, we have rather substantial ideas about several major and emerging centers in the room

and connected to the room. That is, for instance, how the big bay window of the Upham house living room appeared. To start with, before the house was conceived, that spot was already a meaningful place on the site. Then room and house were shaped — their perimeter defined — to make this center as strong as possible from the inside.

But now all these are understood as transformations on the physical material of the room—its walls, columns, ceiling, beams, floor, their thickness, their substance, their relief and depth.

The same effect of light, and the role played by windows, is shown in the classroom from the Eishin campus (page 422). The soft quality of the light, the friendly, open atmosphere of instruction—the easy-going learning atmosphere—all of them come essentially from the way the windows are made. These windows form the center in the room. The focus on the windows gives the room its dreamy atmosphere; the hard



Bank-Austria building interior, Vienna. The fine structure is used, perfectly, to intensify the structure of the building as it was. The placing of the lights especially, and the ornament in the floor, the articulation of the columns and beams to emphasize the beauty of the structure, all help to make the refurbished room magnificent.

Rebuilt and refurbished by Hermann Czech, 1992–97.



Remarkable room in the Yahapath Endera Farm School for orphan girls, Hanwella, Sri Lanka, by Geoffrey Bawa.

concentration of the blackboard and the teacher's platform is reduced. Again, the main life-giving centers in the room are those made by the windows and its subdivisions.

In the arcade of the college (page 423) the same continues, in a different form. Here again, the principal centers are (1) the volume itself, formed by the square cross-section (intentionally made a bit low to intensify it as a center); (2) the openings which are square bays between columns, letting in light; and (3) the columns themselves, rather substantial and reflecting light (yet again), thus contributing their impact on the luminosity of the place. Likewise in the three examples on these pages. The attention to living structure — the need for articulate centers to be formed at many levels, and in useful ways, shows its appearance in these two projects by Hermann Czech and by Geoffrey Bawa, once again generating the characteristic structure we are beginning to recognize.

In the office of the Martinez house we see it once again. The windows form centers which create a 'target,' hence a center, in the far wall and



Room, light, furniture. An office in the Martinez house. Christopher Alexander, 1987.

in the side wall. With them, the pair of columns with the three-dimensional center in space that is