the end at the beautiful view into the forest, I saw four spaces, not three — four beads, one after the other. As I closed my eyes, and focused on the experience of looking down the chain, it seemed more profound to me when there were four rather than three; it seemed a more serious "chain" leading to a more profound climax at the end. But when I asked them, they said, no, there are really only three rooms.

I did not let go of my contribution to the evolving communal vision. In order to make this sequence valuable as a structure, I insisted that a sequence of four beads was more profound than three. They asked me what is the function of the third one—the small one. I told them I did not know and that we might have to find a function for it—but that I believed its existence was essential to the wholeness of the structure. That is what we did.

Finally, when we started to work out the plan (this was some days after the evening session when the vision first materialized), it turned out that the third "bead" became the natural place for the stair to come down and for the entrance to the garden porch. In fact, as it turned out, the plan would have been impossible without it, since this small anteroom (with an inlaid compass rose in the floor) finally became absolutely necessary as the meeting point of staircase, porch entrance, dining room and living room. But it was very curious that this space, so essential to the final design, arose for reasons that came from the field of centers itself, not from so-called functional reasoning.

The key, then, was the vision of the magnificent room which was to form the end of the sequence. The whole house is oriented towards it, the last bead on the necklace (illustrated on page 419, as we later built). The room was finished and painted by the owners. It has the intensity which comes from its minor centers. Ann Medlock and John Graham did it; they were brave enough to put into it what they wanted and what they had always dreamed about, not what would work on the market, or what they could get back from the bank if the mortgage foreclosed.

The design of the room started with its position at the end of a string of beads, at the end of a long path through the house, the tranquil spot, looking into the forest, with windows on three sides. Then a focal point at the end, an alcove, which made a place to sit.

Then the main fireplace, in the middle of the eastern wall, forming the focus of the middle of the room. Then beautifully proportioned windows on the west, wide to make the center in front of the fire its substance, and a seat under these windows, strengthening this center even further. Then lesser windows on the east, which do not interfere with the fire.

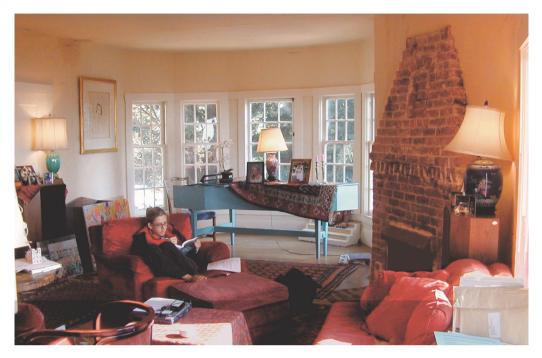
Then bookcases at the end where one comes in: you walk through a hole in the bookcases, and the bookcases seal the room.

Finally, the ceiling, a regular grid, with a small flower in the middle of each panel. Not trivial. A system of centers which complete the largest center, calm it, and make it whole.



5 / THE MAIN CENTERS OF A ROOM: INTERNAL ELEMENTS WHICH CREATE THE ROOM'S LIFE

Now we come to the internal organization of the room, and the creation of the interior centers which define the room. This is the most subtle aspect of room design. It is extremely hard because, in many cases, the centers which have to be created, and which define the room, are almost invisible. Here we encounter a special version of the fundamental process. The vast majority of rooms are roughly rectangular. Each one has a door, windows, a floor. Where, then, should it get its life? The vital centers which govern the life of the room are nearly invisible pieces of space which exist as centers, yet — usually — have no clear boundaries,



The living room, including lamps, armchairs, window, harpsichord, flower, kilim, paintings and photograph, Christopher Alexander, 2701 Shasta Road, 2003.



The living room at Shasta Road. In this room, the placement of shape, walls, fireplace and windows create major centers as shown by the two x's.

sometimes no obvious defining marks. Like still places in a stream, they are nearly imperceptible in the configuration, yet all-important.

So the secret of making a room with life depends more mysteriously on centers than the structures we encounter in other parts of the environment. It depends on our ability to make living centers appear, almost without seeming to, within the very simple structure of a nearly featureless rectangle of space.

For each room, we must first learn which are the crucial spots in the room: then, with a combination of movement and light, make that spot become a living center.

Usually the main center of a room is defined by two things: (1) it is a quiet spot in the pattern of movement and (2) it is a place near the light. A room has a good center when such a place, a place quiet with respect to movement, a quiet backwater in the flow of moving people, and the intense oriented place towards the light, are one and the same and embellished, when possible, by other features (ceiling, floor, furniture, builtin furniture, a focal point).

I have given a more detailed explanation of some of these issues in Book 1. But let us now talk a little more about the process, and the way we can get the right centers from the room by unfolding.

Human beings are naturally attracted by light, move towards light. That means, as a room



Students in a classroom of the Eishin school. Here the main centers are 1) the students themselves 2) the windows 3) the blackboard and the teacher 4) the view of the next-door building. The strongest center is a soft light, formed by the many, many small windows, and reflected from the next door building. You see the rapt attention of the students looking at the teacher. I believe it is caused by the softness of the light, and the presence of a living center in the windows.





Main centers in the classroom (left) and arcade (right).

begins to find its shape, the sources of light are — whether pre-planned or not — as a matter of fact latent centers in the emerging construction. If the building is able to unfold, it is these latent centers which will dominate our understanding of the wholeness in the newly forming room.

The fundamental process therefore takes these latent centers (to begin with, really just

places which seem that they will be foci of light in the room) and makes them into "something."

On pages 412 and 413, we see two rooms dominated by their light. In each case, the place where the light comes from is expanded, embellished, made more real, made into *something*. What starts as a latent center that has potential becomes, under the impact of the fundamental process, a more developed complex center that includes a window and the space that it creates.

Of course, to make it a *strong* center, the fundamental process then takes this center through further steps which develop it with detail, sills, bays, glazing bars, in order to make it a significant living center in its own right.

In both cases, the window is not a hole in the wall but a definite volume of space: a very large volume in the Upham's living room (page



Arcades of the college buildings, The strongest centers are: the bays of the columns, the proportion of the cross section, and the break in the arcade, the columns themselves. Each is formed to be a powerful center with its own life. Eishin school and campus. Christopher Alexander and Hajo Neis, 1987.

413), and a rather large one, too, in the Sullivan's living room (page 412). In the first case the space formed is then strengthened by the architecture—the shape of the room, its light, and so on. In the second case, since this window naturally fell in the middle of a long wall, otherwise unarticulated, I made a very deep, red corduroy sofa: we built it as a piece of furniture for lolling, reclining, sitting, together with a group of other

red corduroy chairs to form a circle next to this window—but permanently built in as part of the architecture of the room.

Once the center formed by the light is a coherent space in its own right, as in these two examples, the shaping of it then creates the space which animates the room.

Consider, now, a case where there is a room whose size and position are defined — say a large



The dining room of the Sullivan house, opening onto an outdoor terrace. Here the main centers include the generous table, the wide opening to the terrace, the outdoor terrace itself, the two vertical cabinets at the corners of the room, (only one visible) and the overhead trellis on the terrace. Christopher Alexander and David Soffa, 1992.

rectangular room with access and windows already determined. What now, when we consider the interior volume, will create some focus in the room, a real feeling of centeredness, within the space itself, something I can relate to when I am in the room? We have to find a space within the room, which, of itself, creates orientation and focus. Some of this may be done by providing a window that is a beautiful center in its own right, with deep walls, a big sill. We see that in the Sullivan living room. Or it may be done by giving a smaller space, a niche, alcove, or other substantially and defined place, opening into the room or within the room. That again may be seen in the Sullivan living room.

But the most difficult — and the most typical — problem is the plain rectangle, without em-

bellishment, not done by a window, not done by an alcove. Here the key center that gives (or does not give) life, will be a still spot which paths pass but do not go through, a place which is oriented towards light, perhaps oriented towards a natural focus like a fireplace or television or a desk or a computer. But for these things to work there must be a comfortable space — the most comfortable in the room — the natural oriented spot of the room which can hold a television, or a desk, or a computer. In certain cases even a picture or a hanging can create such a focus; but if so a niche or a particular marked bit of wall has to be provided which has just the right tranquility. Above all, the vital thing is that one can be clear from the beginning where the focus of the room is, and that it is a strong center in its own right.