

*Cast-concrete ornaments in the wall frieze of a classroom at Eishin. Each building has a different ornament. Christopher Alexander and Hajo Neis, 1984.*

ment, marble dust, and marble chips to match the three colors on our painted paper samples — and when we had samples which matched the colors correctly, we went ahead and laid the floor.

In this example, the color and geometry are inseparable. The rough geometry first inspired the color. Then, exact study of the color showed

us a set of crucial proportions which had to be maintained for inner light, and these proportions directly generated the pattern.

We see how the design of the floor, the color, and the geometry all arose as a result of the structure-enhancing transformations in the place where the floor was to be built.



## 5 / OTHER KINDS OF ORNAMENT

The ornamental structure most often comes from the material, and from the way a thing is being made.

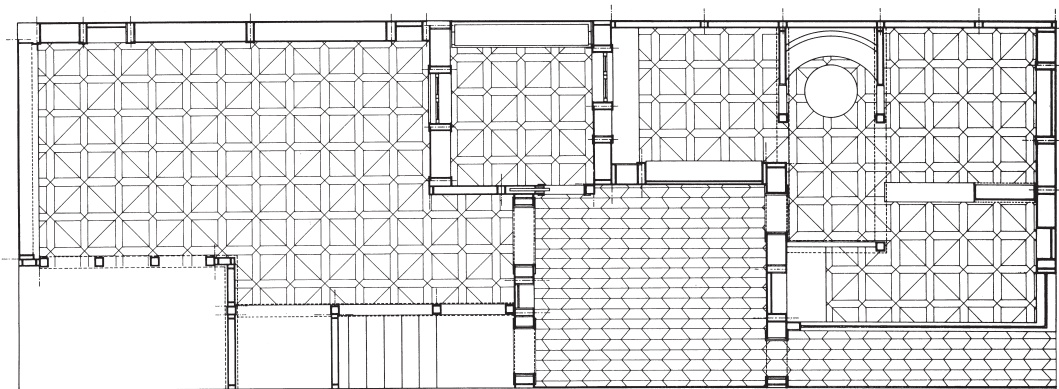
In the floors for the Sweet Potatoes clothing factory, I made a series of designs, all out of pine boards that could be cut and fitted with a chop-saw. The only precondition for this series of ornaments was that the client could accept minor inaccuracies in the way the boards met. If they

had to meet perfectly, the process would be very expensive, both in the cutting and fitting — virtually prohibitive. But by getting the clients to agree that minor cracks might occur between the boards and then be filled with beeswax, the range of different floors and designs that could be made was quick and easy — and charming.

The cast concrete ornaments on the classroom buildings of the Eishin campus (above)



*Floors in the Sweet Potatoes Factory, Berkeley. Christopher Alexander and Kleoniki Tsotropoulou, 1986.*



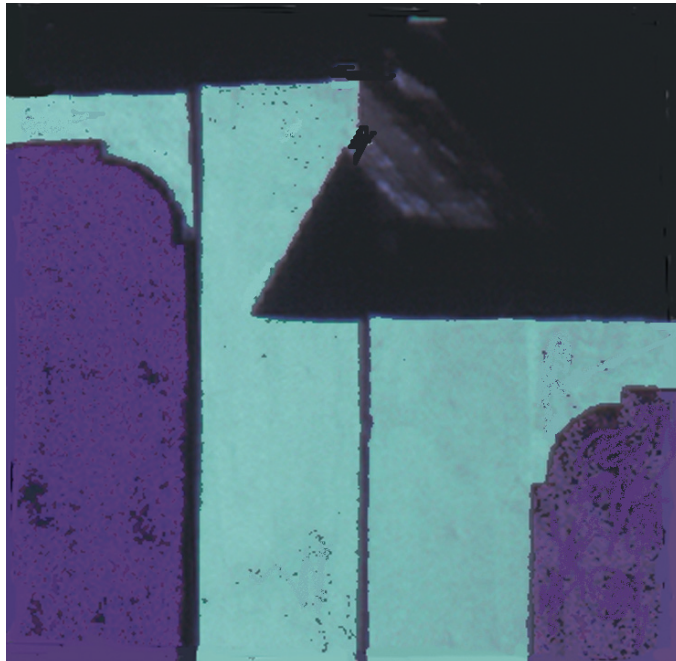
FLOOR PATTERNS

*Variety of floor patterns in the cheap cut-plank wood floors for Sweet Potatoes Factory. Christopher Alexander, 1986.*





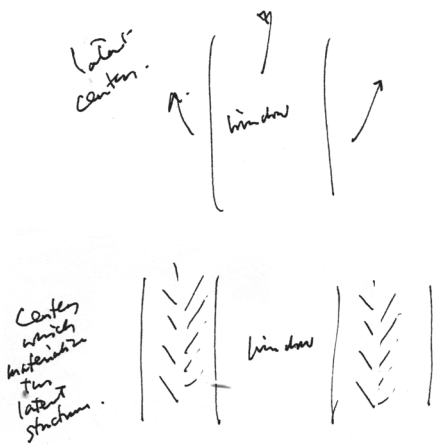
*Ornamental detail of a cast column capital for the Julian Street Inn, California. Christopher Alexander and Steve Murray, 1989.*



*Martinez house. The curved white part is an ornamental concrete layer, shot in gunite, using a simple jigsaw-cut piece of plywood as a form. Christopher Alexander, 1984.*



Brick pattern, arch, window muntins, and thistle ornament at West Dean. Christopher Alexander and John Hewitt, 1995



The latent structure in the wholeness (above) which gives rise, naturally, to the bricks making an upward-pointing herringbone next to the window opening (below).

have a similar quality. We made molds for a small segment of ornament and then inserted these pre-cast molded concrete blocks into a

chase left in the main poured concrete wall. It was not expensive because, again, the technical perfection was left rather free-and-easy.

In a third example, an ornamental panel I put on the exterior walls of the Martinez house, I cut a simple piece of plywood as a form for the curved end and then used this, in combination with a straight board, and a fine nozzle on the gunite gun to make the ornaments. What I did was to shoot a half-inch layer of fine concrete in the area above the form-board, making an ornament which stands out proud from the surface by about half an inch. All in all, to make eight of them on eight walls of the house took only about half an hour. Cheap and elegant, easy to do — and fun!

In the north wall of the West Dean building we see many ornamental methods. The entire way the building materials are used is ornamental. Bricks, flints, cast-concrete columns, a brick arch, a specially cut ornamental thistle-shape cut from soft brick material, and bands of stone.



This was done very much by trial and error: we laid it up dry, as we went, to see what would complete the existing structure in the most harmonious way. However, it is worth paying attention to a couple of details. The brick was laid in a diagonal herringbone pattern. This is an old traditional method. But the fundamental idea that an ALTERNATING REPETITION of this kind is a natural way to embellish a flat rectangular panel comes straight from structure-preserving ideas. On either side of the window opening a latent structure appears which is asymmetrical, pointing away from the window, and upwards (see upper diagram, page 597). Thus, the mor-

phological field which is there, before the bricks are laid, already points to a structure of this kind. The bricks just implement, embody, that structure. That is why they look harmonious. And the thistle shape we had cut to go above the arch (photo, page 597). That is an archetypal center, it has GOOD SHAPE, and many smaller STRONG CENTERS within its own perimeter. That is why it strengthens the arch shape, ties it into the horizontal bands of stone and concrete — and thus makes POSITIVE SPACE. Again, that is why this looks so harmonious there, because it comes from a structure that was already there, latent, before we invented this embodiment.



6 / HAND-GLAZED TILEWORK

Elsewhere (chapter 19) I have made it clear that color is an essential part of building. Paint, which is our modern way of making color, has a very short life. The very use of paint already implies that color is not being taken seriously.

If we put the amount of effort into color, which is required— days and days of concentra-

tion — to get the light to shine just right, it is discouraging and impractical to accept that the paint might have to be repainted after a few years. It would in any case be difficult or impossible to get exactly the same colors again. The very use of paint, too, somehow implies a short-lived building — once again, at odds



*Hand-painted, hand-glazed tiles on the fireplace of the Upham house. Christopher Alexander, 1986.*