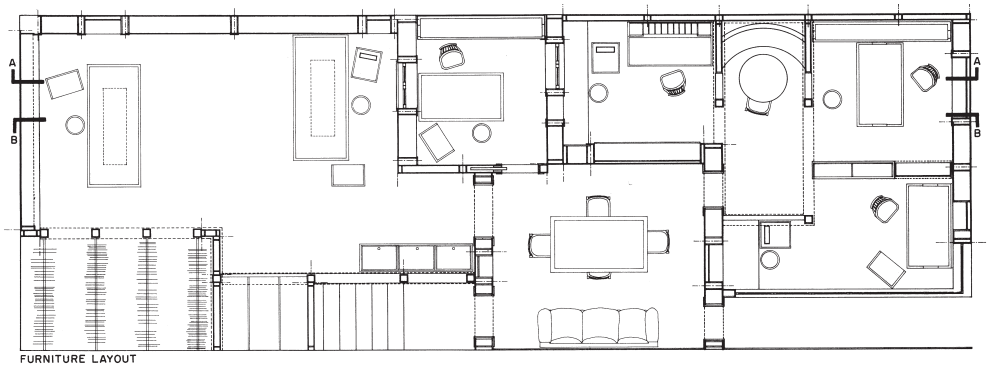


Subtle rectangles in the differentiated plan-form of the Sweet Potatoes factory: This is the plan of the factory shown in the photograph on page 333.

from within this much larger infinity of possible configurations. It is — for this reason — able to create genuinely adapted results which, incidentally, also look more natural and more organic, because of their unfolded character.

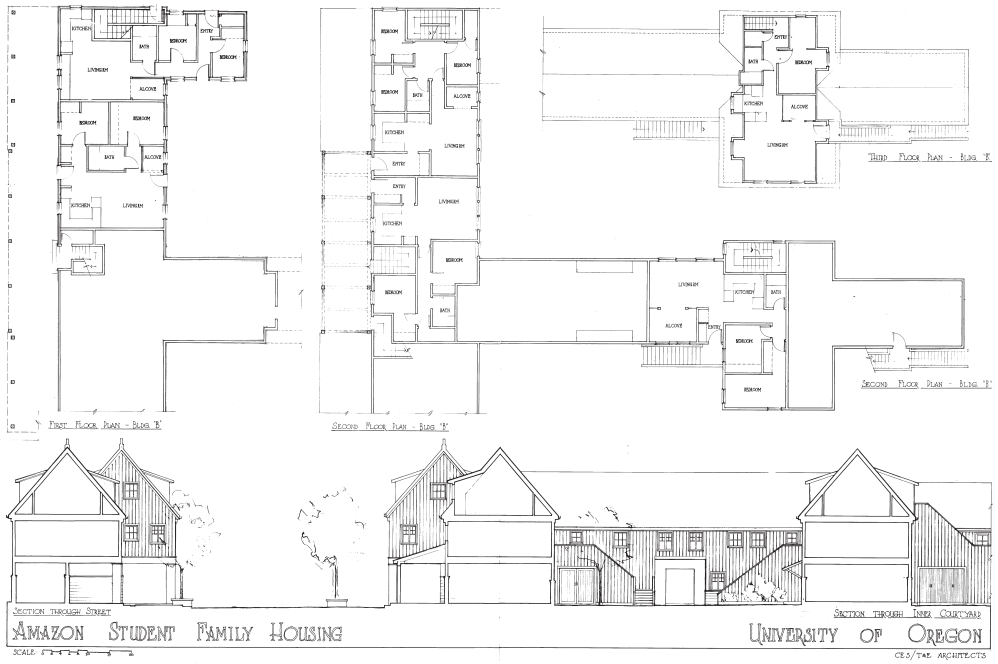
What emerges from differentiation is not a loose, funky, rounded, kind of organicism. The buildings which the fundamental process creates, in the sphere of building, are still dominated by rectangles or near rectangles — because the rectangle is, after all, the main shape of easily built inhabited space that has positive space on both sides of every wall. But the differentiated complex of rectangles is a richer and more subtle texture of configuration, a more profound morphological substance. This may be seen in the photograph of Jerusalem (page 329), where traditional forms are chiefly made from such complex rectangles. Like the furniture layouts, the building configurations which arise from a differentiating process are better-adapted. They come closer to doing what is wanted, fit the circumstances, and pay attention to the vastly larger system of constraints and needs and local centers, which is needed to create true living structure in the world.

4 / EVERY LIVING PROCESS IS — AT ITS CORE — A PROCESS WHICH IS DEVOTED, THROUGH ADAPTATION, TO MAKING EVERY PART UNIQUE

Why is uniqueness of all parts in a living structure so hard to understand? I am constantly astonished that students — even artists and architects who seem to understand wholeness — continue to have trouble understanding the balance of repetition and uniqueness.

I remember one group of students, advanced students, very good students, who had been doing beautiful work with me. Professor Hajo Neis and I asked them to make a model of a housing project we were working on: 300 apartments, a big site. We asked them to make a model at 1/4 inch scale — rather large. Each building was about seven inches high; the whole model was the size of a room: ten feet by fifteen feet.

For a week the students struggled. They made many cardboard models, but there was nothing very worthwhile there, still just a bunch of cardboard buildings. Nothing particularly good. The students were frustrated. They didn't know what to do. They couldn't grasp what it was they hadn't done. I kept asking them to do better. But they had no idea what was actually needed to make it better.



A portion of the Amazon project for student housing, University of Oregon, 1992, where one can see how every part, and every space, has become unique, because of its particulars.

I told them it was all in the geometry. My saying this, over and over again, did not help. They still didn't get it. It was, to them, just words. They kept on with their nice ideas, with the attempt to make it ecological, or socially good, or beautiful. But none of this did much good. What I really meant by saying "It is in the geometry" was not getting across to them. They became bored, then finally started getting angry with me. I let them stew for a few days, in the hope they would discover, for themselves, the core of the essential point.

Then after they had worked for a few days, I once again looked at their model with them. I remember looking at one particular place in the model, a zone no more than about three inches across in the model (standing for a twelve-foot diameter in real life). I said: "Imagine standing here, at this spot. Let us ask the question, *Is it wonderful to be here, just at this spot?* Please, really stand inside this place, ask yourself if it is wonderful here." And of course, after examining it honestly, they saw "No, it is not. Of course it isn't." So I said to them, Let's work at that one spot, until it *becomes* wonderful there, in that one small spot, twelve feet across, for a person being there. Three or four of them worked at it, seats, view, good surface, enclosure, and so on. Finally they had made it nice. In the model you could feel how nice it was. So then I said, OK, now you are done with that. Let's now take another place, ten feet away (two-and-a-half inches away in the model). Is it wonderful to be in *that* spot? No? Then work at that one, too, until that second spot, too, becomes wonderful, wonderful to be there, standing there, walking there, sitting there. And then, later, "Are you done with that one? Now go to a third spot, and then a fourth, and so on, keep on going like this, until every single spot, every spot in the whole area you are designing that a person could be in, is wonderful."

After a while, the whole thing became at least *good* — and sometimes, here and there, even wonderful. And in this whole, it was, of course, the *geometry* that made or did not make it wonderful at every spot. It is because every single place had an appropriate and intelligent adapted

There is simplicity and repetition. There is widespread repetition. But when one looks carefully, you see that still, every part is made so that it is unique. Model of part of the Amazon housing, University of Oregon, 1992.

uniqueness, caused by its real adaptation to circumstances. When *that* is done, you feel each place as a real thing, and can see its reality enough to make it really good.

This point is so simple. There is nothing complicated about it. It seems rather astonishing that all this complexity boils down to something as simple as this. It is a little bit like the proverbial slap from a Zen teacher. The student thinks it is all complicated, deep, profound. He twists his head this way and that way, trying to "get" it. Then the teacher finally slaps him to wake him up, as if to say, "Stop thinking about such complicated matters: Just eat, just walk, just sleep." Or (in the case of architecture), *Just make it nice at every spot*.

Following this rule, the geometrical structure, which creates life, living space, is not too hard to make. All you have to do is pay attention, keep on paying attention, work at it, and work at it, and work at it, and gradually each center gets transformed, and life enters the structure.

So why is it so hard to explain? One reason that it is so hard to explain is that each time you do it, it comes out differently. Each case is unique. What does it need to make *this* space have life? It comes out differently in every part, and differently as a whole according to its context each time you do it? That is the whole point. Life is unique. We could even say: *Life is exactly that property of space in which each spot becomes unique according to its place in the larger scheme of things*. So, if there were a spatial formula which would explain in detail how to make living space, it would fail, because, by virtue of being a formula, it could not succeed in treating each place as unique.

But there *is* a formula of living *process*. If you pay attention to the wholeness, intensify it, intensify it some more — gradually then it becomes unique.

In a further discussion of this living space with my students, after the same class of students finally succeeded in making some life happen, throughout a larger model, one student, Rueta, who had experienced the process, told me: "I got there, but I don't know how I got there. It is like reading a book, over and over, and then finally I have absorbed its meaning, but I do not know just how or when this happened." Another said: "I understand it now: but I do not know at what moment I understood it, or what happened. It is like an enlightenment. Suddenly it seems obvious, and the difficulties are gone."

The main thing is that you have to pay attention, work hard, look at each case as unique. That is the most important part. You just have to try and understand what would be living space, each time, whatever you are trying to do,

and accept the fact that every time the result always comes out different. In our Amazon housing for the University of Oregon, a project for about 300 apartments, no two groups of buildings were the same, no two apartments were the same (see drawing and photograph on pages 336–37). Even in this infinitely repetitive problem — mass housing — the living process was of such a nature that each part became unique.

Everything hinges on the understanding that every part must become unique when living processes are working. This is the key. It is a particular type of geometry which, though highly regular, has every part unique because it is true to its context and therefore to its essence. What we began to appreciate is that every repeated entity is different: that we have to look, carefully at every single case as fresh.

Making it, designing it, laying it out, is immensely hard work, harder than what we are used to — but it *works*. Indeed, finally we understand that this is the *only* thing which works.

5 / THE *SURPRISING* CHARACTER OF WHAT UNFOLDS

The many features of the Fort Mason bench, San Francisco. By making the bench reflect and extend the structure which is there, it takes on a unique character that emerges from that one place in the world.

Because of the uniqueness which unfolds, the results of living process will often be unexpected, even turn out surprising. This unexpectedness is typical of all structure-preserving transformations. Although the concept of structure-preserving transformations sounds conservative — to some people it may even sound as if you don't invent or create anything — in reality the process is very different. By preserving structure one always gets surprising results.

Consider the case of the San Francisco bench (for details see Book 3, chapter 11). I began with a clear sketch of what I thought it ought to be — a rectangular U-shape. As we began working, the structure-preserving process then taught us something quite different. Using the