architectural drawing that came from their sketch. The plans are immensely different from family to family. There were very particular qualities, problems, life experiences, expectations, and desires, in each individual family. It is that, above all, which I wanted to protect and encourage.

I have found that people who are used to today's standardized apartments are sometimes skeptical about the importance of this kind of thing. Is it really helpful or necessary? Is it worthwhile?

The real importance is strongly underlined by something that happened in one of the early sessions. As usual, I had given a group of about seven or eight men and women a piece of paper and asked them to draw the apartment they wanted for their families. Put what you want in it.

It did not take very long for them to put down what they thought would be an ideal apartment for their family.

To my great surprise, two of them were openly weeping while they did it. I asked them why they were crying and received this answer: "We are people who have been living in mass housing in Nagoya. It was almost unthinkable, almost unimaginable to us that our ordinary necessities could be put into a building in such a direct way. Therefore we are upset, because it is so beautiful, the possibility of real life, such a freedom, for our children, is almost too much to bear!"

What an extreme comment on the state of the world: that people should weep, merely because they are allowed to sketch on paper the apartment layout that they wanted for their family. Their tears came long before any implementation. They wept, not because this was the practical realization of a dream ... but merely because someone was taking them and their family seriously enough, to allow this possibility to exist, even in their minds, and on a tiny square of paper.

Even I, with my assumptions about the importance of this kind of thing, was astonished that the process had such a direct impact. There were tears in other people's eyes, too. Nearly all were overcome with emotion, just at being able to draw what they thought might be the ideal apartment for their family.

But the story has a tragic ending. Finally, although 84% of the families voted to have this project, although costs were the same or lower than the standard highrise buildings of the municipality, and although the city of Nagoya had promised to meet their wishes, in the end the officials of the municipality refused to complete the work, and the families were forced to live in standard mass housing after all.



## 9 / A FACTORY AND ITS INDIVIDUAL WORKSPACES

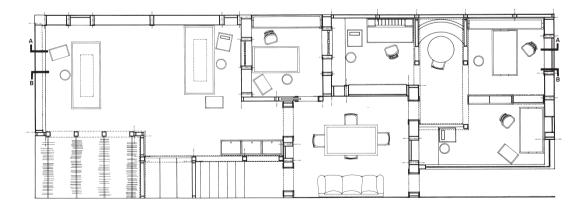
In 1987, my company built offices and workshops for a small children's clothing factory, Sweet Potatoes, in Berkeley, California. The part of the factory we built was the research and development section where new designs and methods of fabrication were tested.

We started by using a layout process in which the factory team — about fifteen people worked together to divide the area into groups according to the centers that were needed; each area for a work group was then laid out by three or four people, within these general area designations; and within those roughly worked out work areas, each individual sketched out the workstation which was most comfortable to them.

We then built the workrooms directly from these on-site sketches, using an advanced system, similar to the system we later developed for Herman Miller (see pages 386–97). In this process the workspaces were built cheaply, customtailored to the configuration as a whole and to the needs of the individuals who worked there.



Factory workspace in a clothing factory, Sweet Potatoes, Berkeley, California, Christopher Alexander, Gary Black, Artemis Anninou, Kleoniki Tsotropoulou, 1988.



Plan of the Sweet Potatoes factory