#### THE SYSTEM OF PRODUCTION

If we are to put this situation right, to bring our production systems into order, we must therefore concentrate, essentially, on this human problem of the distribution of control. What we must find is a system of production which is capable of giving detailed, careful attention to all the particulars which are needed to make each house 'just right' at its own level, at its own scale, and which is yet at the same time efficient enough, replicable enough, and simple enough so that it can be carried out on an enormous scale, and at a very low cost.

Specifically, we believe that there are seven kinds of control which play a crucial role in the production process. To identify these seven types of control, we may ask the following seven questions:

# 1. What kind of person is in charge of the building operation itself?

In today's production system, there is no one person in charge. There are various officials, architects engineers, and contractors, each one carrying out his duties, but without any one of them having any overall view of the whole. What results, inevitably, is a bureaucratic and inhuman situation in which feeling cannot prevail, because each person's feelings are submerged by the bureaucratic process.

However, for adaptation and control to be correct, it is possible to imagine a new kind of master builder who controls all aspects of planning, design, and construction in a very immediate way—but who has direct charge of no more than a few dozen houses at a time, with direct responsibility to the families who are going to live in those houses, and with the power to respond directly to their wishes.

# 2. How local to the community is the construction firm responsible for building?

In today's production system, the actual contracting is most often carried out by large corporate combines, with offices and directors far from the neighborhood. Of course, these men and these organizations cannot be responsive to the wishes of the neighborhood, or to the individual families.

However, for proper adaptation to occur, it is possible to imagine a system of decentralized builder's yards, one or more for each small neighborhood, every few blocks, each one responsible for the physical development of the local neighborhood. This is a human solution which places control within reach of the people who are affected.

# 3. Who lays out and controls the common land between the houses, and the array of lots and houses?

In today's production system, this is a process carried out in an entirely abstract manner. The city controls the common land between the houses. The administration responsible for the building project lays out this common land by assigning it to a draftsman. The subdivision of the land into lots or apartments is done by an official in an office entirely remote from the real situation. Inevitably, what is created by this process is inhuman and abstract.

However, for proper social connection between people and their community, it is possible to imagine a building process in which groups of families, of a size small enough so people can talk to each other and reach agreements, can themselves work in clusters, have control over their own common land, and lay out their own lots according to their own designs and their own wishes. This is a human solution which places control over the essential issues in the hands of the people who are most affected by these issues, and who understand them best.

## 4. Who lays out the plans of individual houses?

In today's production system, the individual houses are most often designed by architects, remote from the people, often not even able to know the families, because very often the families have not yet bee chosen; and the houses are designed to be standard—as well designed as possible of course, but essentially standard cells. This is bound to be inhuman. Families who are vastly different in their needs live in boxes designed for average families, all with the same walls, the same windows, the same shaped bedroom, the same shaped kitchen.

However, it is possible to imagine a much more flexible process in which families design their own houses, or apartments, within a fixed cost limit, and with certain necessary ground rules, but in such a way that each house is a celebration of the spirit, a mark, on the earth, of that family and its special story. These houses would not only be treasured by the families who designed them, so long as they live there, but because the houses have a human touch, because they emerge from some specific human situation and have the touch of life to them, they would also be more human, more full of life, for any other family who comes to live there in the future.

## 5. How are the construction details themselves actually produced?

In today's production system, it has become common to expect houses to be assembled fro mass-produced components. Some of these components are small; others are very large. But the variety which can be produced by mixing components is always still variety 'within the system,' which tyrannizes the design, so that we have twenty different boxes, instead of one kind of box, but they are still all boxes, still all essentially the same.

However, to avoid the tyranny of parts over the whole, it is possible to imagine a system of construction, technically far more advanced, in which what is standard are the operations (tile setting, bricklaying, painting, spraying, cutting, etc.), but where the actual size and shape of what is done can vary according to the feeling and requirements of the individual building. This is more human because it allows the builders to make a work of art which captures feeling and spirit—in contrast to the building assembled from fixed components, which must always be, and always seem to be, some kind of mechanical box.

#### 6. How is cost controlled?

In today's production system, the importance of cost control is used to centralize as many operations as possible—design, construction, purchase of materials—and to drastically limit local initiative or local spirit from entering the buildings.

However, to prevent cost control from inhibiting reasonable and careful design of individual buildings, it is possible to imagine a more flexible cost-control system which benefits from local initiative, which allows each house to be made, step-by-step, within a fixed budget, but without controlling the exact way in which this budget is spent, thus allowing each house to be different in the ways it needs to be in order to satisfy the family.

## 7. What is the day-to-day life like on the site?

In today's production system, the site, during actual building operations, is merely a place where 'the job is being done.' There is no special cause for happiness because houses are being built; none of the workers have any immediate connection with these houses or any special pleasure in them: for them it is 'just a job.'

However, to overcome the vast alienation of these 'housing projects,' it is possible to imagine a much more human situation on the site, in which the spiritual importance of these houses becomes a real and effective daily part of life, in which the families themselves contribute to as much or as little as they want to, but in which the construction process is a 'house raising,' a time of special importance for these families, lived through by the families and the builders together in a way that celebrates its importance and its happiness.