streets. Because of the living process, it creates positive space in the streets and in the courtyard. This was only common sense, but it was nevertheless unusual by the standards of 1987.

Throughout the emergence of this building plan, and building form, the steps taken are visibly structure-preserving. It is not only the pro-cess of taking one center at a time which gets results, but the larger fact that every step preserves and enhances the structure which had been reached up to the step before. To the extent that the building has life, it is for this reason. There are plenty of mistakes in the building. But it represents progress towards a new ideal.


7 / LAYING OUT A VERY LARGE BUILDING COMPLEX: THE EISHIN CAMPUS

I shall now show how the creation of the site and volume plan for the Eishin Campus in Japan followed a similar but more complex sequence of structure-preserving transformations. The process had two components.

First system of centers: defined by the pattern language. The first component was a pattern language worked out by our team after extensive interviews with teachers and students, and then approved by the school as a whole in a general assembly meeting. The pattern language defined, in generic terms, which new centers ought to exist in the new campus.[2] Here are five very important centers defined by our pattern language:

1. ENTRANCE *The entrance to the inner precinct begins at the outer boundary. At a key point in the outer boundary, there is a gate. This leads to an entrance street.*

2. YARD *Where the entrance street meets the inner boundary, there is a second gate leading to a public yard.*

3. UNIVERSITY CENTER *Beyond the public yard and through a third gate is the essential center of the university.*

4. HOMEBASE STREET *Leading out from the university center, was the high-school street of classrooms: the homebase street. The homebase street is a wide, lively, sunny street formed by the individual home room buildings where the high school students have their classes.*

5. THE LAKE *Opening through gates on another side of the university center is a lawn. This lawn,*
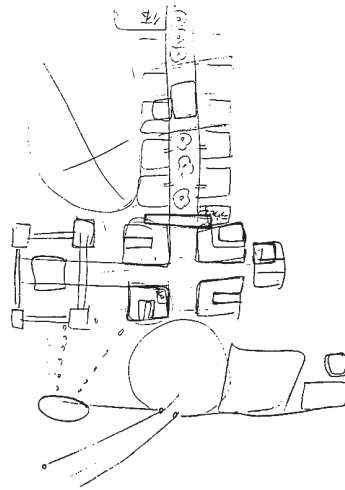
One teacher's diagram showing the major centers defined by the pattern language. In diagrammatic form we see ENTRANCE, YARD, UNIVERSITY CENTER, HOMEBASE STREET, AND LAKE. *The diagram shows how this teacher understood the way these main centers might fit together in an imaginary site plan.*

especially for the use of college students, is surrounded by the college buildings and leads directly to the lake. The lake is a peaceful place to rest.

Second system of centers: defined by the land. The second component of the process was a system of centers that existed in the *land* as it was before we started. This system of centers was defined by the site, *by the land itself.* In 1982, as soon as the pattern language had been approved by the faculty, we began the site plan. The site-planning work was done mainly on the site.

Each time I went to Japan, I went out to the tea fields in Iruma, and walked and walked, just waiting, trying to see how the pattern language might best come to life there. Each time I sat there for hours, trying to understand the structure of the situation. Sometimes I sat there all day.

The wholeness which existed on the land at the time we started (when the land had just been bought from the farmers) included the following five centers: Natural point of entering, Swamp, Flat spot, South ridge, Walk to the South ridge.

1. NATURAL POINT OF ENTERING *One had a natural desire to enter the site on the southeast corner, and walk towards the northwest.*

2. SWAMP AND LOW POINT WHERE GROUND WATER ACCUMULATED *The lake we were going to build had to be at the low point of the site, and we therefore knew its position from the contours.*

3. NATURAL FLAT SPOT *There was a natural spot, somewhere near the low point and the lake, where the main square might be.*

4. RIDGE *The ridge was the most beautiful center of all. It was the place everyone went to most often, and loved most, because of the view of the distant hills, and the coolness of the breeze in summer, and an inspiring freedom one felt there.*
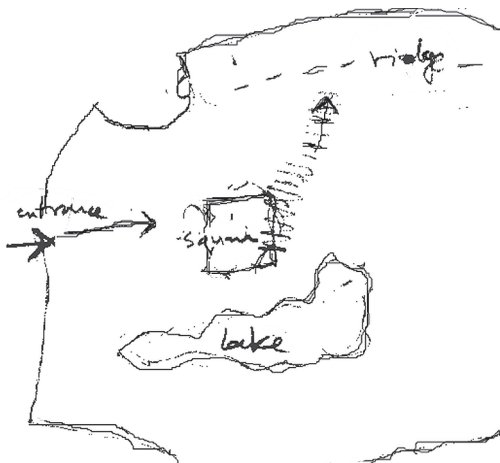

Diagram of the five key centers on the site: Entrance, Lake, Square, Path, Ridge.

5. WALK TO THE SOUTH RIDGE *There was also — felt in the land — a natural walk from this low point towards the ridge, a walk from north to south, slightly uphill, and slightly curving. This was also inherent in the site, and could be felt by everyone.*

Repeated visits to the site by different members of our team, and by the various teachers of the school, strongly confirmed the reality of these centers. After a few weeks there was no doubt these were the most salient features of the site.

————

Thus there are two quite different systems of key centers.

First, there is the system of centers which is defined by the pattern language. These major centers are the building blocks of the new project. In the case of Eishin, they included, for instance, the entrance gate, the entrance street, the university center, the high-school homebase street, the main square, the back streets, the judo hall.

Second, there is the system of centers which exists in the land. This system is created by the land forms, by the roads, by directions of access, by natural low spots, natural high spots and by existing trees.

It must be emphasized that *both* systems of centers always exist at the time one starts a site plan. The first system is generic; it exists in our *minds* and in the day-to-day experience of the people who are going to have the new school. The second system exists in the *land*, on the particular *site* where the project is to be built. Each of the two systems of centers is real.

Together, when fused, they will govern the plan which has to be made. The process of site-planning is the process of, somehow, finding a way to make these two systems of centers become one — a way in which the system of centers defined by the pattern language can be placed, so that it enhances, preserves, and extends, the system of centers which is already in the land. In this specific case, and in general, the crux of the

problem of making the site plan lies in the task of *reconciling* the two systems of centers — that means finding a new structure which unfolds from the existing wholeness, and which then *embodies* the centers of the pattern language within the system of centers that exist on the site.

ANOTHER WAY TO PUT THIS IS TO SAY THAT IN ORDER TO PRESERVE THE STRUCTURE OF THE LAND, THE NEW CENTERS COMING FROM THE PATTERN LANGUAGE MUST BE ESTABLISHED IN SUCH A WAY THAT THEY FALL NATURALLY IN PLACES THAT COINCIDE WITH, OR ENHANCE, THE NATURALLY OCCURRING CENTERS OF THE SITE.

In this particular instance it was *very* hard to find. There seemed to be no natural way of arranging the university center and home-base street, as we had them in the pattern language, in a fashion consistent with these five facts about the site. Indeed, only one part of the relation between pattern language and site was obvious; the lake, demanded by the pattern language, would have to be identified with the low point of the site, that is to say, the swamp. That was uncomplicated and straightforward. In all the plans we tried, the new lake appeared in the position of the swamp. But in other respects the mismatch was difficult. In many of the plans shown in these early diagrams (see for instance diagrams illustrated on page 176), the key centers are in positions different from the existing centers on the site. These diagrammatic site plans look internally coherent on *paper*, but would have violated the centers on the land and would thus have violated the integrity of the site itself.

Even after several months of work, we still did not know how to place the major centers of the pattern language in such a way as to preserve and enhance the existing centers on the site. Again and again I visited the site, trying to see how the centers of the language might be made to coincide with the real existing centers of the site. We couldn't solve it.

Finally, in Berkeley, we had a breakthrough. In order to think about the problem while away from Japan, we had made a series of topographic
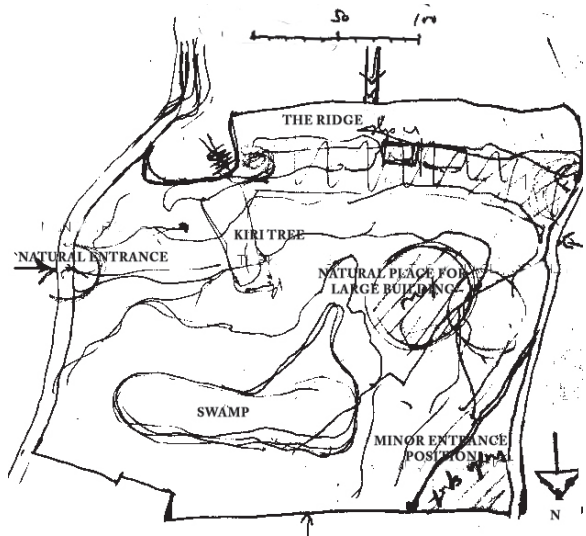

Another view of the system of centers existing on the land before our design emerged: again the main entrance, the ridge, the swamp (which was to become the lake), are visible, together with a beautiful Kiri tree that formed an important place, and a natural spot for a minor entrance in the northwest corner, together with a natural place that later became the spot for the gymnasium.

models of the site. We had one in our office in Japan, at a scale of 1:100. We had two in Berkeley, one at a scale of 1:200, the other at 1:500.

After one of my visits to Japan, all of us in the Berkeley office spent several days playing with the 1:500 model. We had pieces of balsa wood cut roughly to the size and shape of typical buildings or building wings. We played with them on the model, constantly trying the same variations I have shown in the diagrams, trying to reconcile the centers of the pattern language with the five key centers on the site.

Gradually one element emerged: the fact that the home base street might be more powerful as an approach *to* the university center, than as an entity approached *from* it. This was hard to see, because it implied reversing the main sequence of centers given by the language. But when we tried it, it was clear that the sequence of centers got much better from doing it. Playing confirmed it strongly. Now the sequence of centers in the language, which we had taken as fixed, was suddenly reversed. Previously we had them arranged in this order: ENTRANCE STREET — UNIVERSITY CEN-
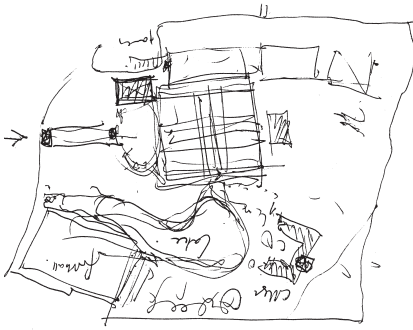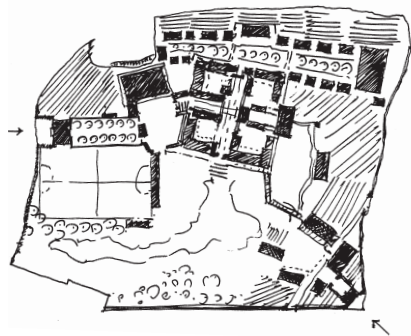
The university center is the main thing
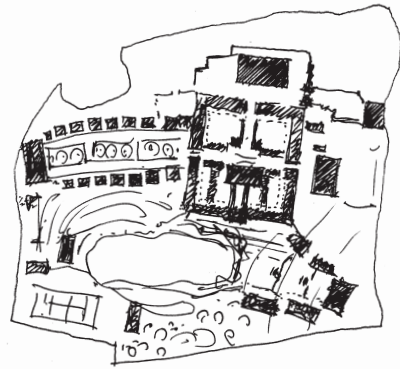
High school homebase street leads to the university center
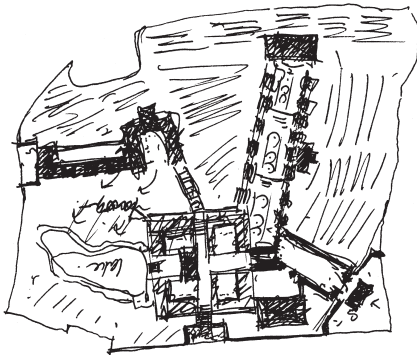
University center leads to the highschool homebase street

Another arrangement

TER— HOME BASE STREET. Now we had *this* arrangement instead: ENTRANCE STREET — HOME BASE STREET — UNIVERSITY CENTER. This difference of organization seems simple but it dramatically affected the situation.

A few days later we reached the second crucial breakthrough. All the time we had been imagining the university center as square in shape. It had appeared this way from the time of our earliest diagrams and we had continued to imagine it like this.[3] But the problem was that the main center on the site "the most beautiful spot" was *not* square. It was the ridge along the south edge of the property. Suddenly we realized that the university center could actually *be* this ridge. The moment this second break in perception was made, the whole thing fell into place immediately. Goaded by frustration, and by the mental energy of the group situation, I suddenly placed all the bits of balsa wood into a new configuration. Everything was in its place. We had the rudiments of an idea.

The model with its precarious bits of balsa wood, just as it was, glued down, was kept for more than a year. It had subtle relationships, curves, lines, caused by the speed and freedom of the moment. They were very hard to draw, but they inspired us. After a few days, we were sure that, at least on the model, everything seemed fine.

Now, of course, I had to go back to the site to see if the site itself told the same story as the small model. I had a great deal of apprehension getting on the plane to fly to Japan to check it out. Would the site confirm this vision? Or would we have to start again?

I got to Japan on November 1, 1982. It was clear at once that, in principle, the new idea of the site plan we had seen for the first

The balsa wood model at 1:500, as it was after the breakthrough. The entrance to the campus is on the left; it leads to the main yard and great hall and lake, and then leads to the homebase street, and up to the university which lies on the ridge (at the top of the photo). The two systems of centers are finally reconciled.

time on the Berkeley model really did resolve the problems, and created a system of centers that was in harmony with the existing centers on the site.

Later phases filled in details, and provided the structure of individual buildings, building locations, connections. But these all took place within the general framework of the layout that has been described. As we worked through these details, paths, streets, lake, bridge, and buildings — all of them — were laid out with flags so that we could judge their rightness or wrongness

with our own eyes, and adjust them until they felt just right. I mean by this phrase *that the layout felt just right to a person walking about in the land*. To achieve this, we used two hundred flags — yellow, white, red — on six-foot bamboo poles to make the thing become real. Remembering our flags at Eishin, and speaking about the impact the flags made on him, Hisae Hosoi, managing director of the school, told a journalist, many years later in halting, slowly considered language: "We could feel . . . the actual buildings . . . standing . . . there."[4]

<div align="center">❖</div>

7A / COMPLETION OF DESIGN AND CONSTRUCTION ON THE EISHIN CAMPUS

From that point on, the process was straightforward.[5] The important thing is that all designs — building positions, siting, and volumes, and exterior spaces — were decided by what we had done

in the land. The attitude of mind with which we approached design and construction, whether on small models, or bigger models, and the attitude we maintained throughout planning permission