

lives, and the extent to which an architecture is formed in the face by means of the fifteen transformations. It is an architecture which

ancient builders knew, but which too many of us have now forgotten — because the process used today is not a living process any more.



## 8 / ARCHITECTURAL IMPLICATIONS

What is the essential difference between Matisse's successful process and the unsuccessful process typical of our professional architecture today? Suppose an architect at a large commercial office like Skidmore, Owings & Merrill is drawing his design, and then makes the claim that what he is doing is just like the Matisse process.<sup>17</sup> Can we answer? Is there an objective distinction between the one process and the other?

The critical difference is the absence of feedback. In Matisse's process, each step is a small step forward from a previously existing reality. The next step is taken as a feedback and as a response to the reality of the actual painting, as it emerges. That is what keeps the thing on track, and what keeps making it better. *Matisse is watching the actual painting; his hand is hovering over it.* He drops down one more spot of color, in response to the real thing. Each move he makes is based on the direct feedback from the real thing, and the real feeling as a whole, which the evolving painting creates. The process therefore has a good chance of making the real painting better all the time.

The architect drawing at his table or on his computer is an entirely different case. The architect is drawing the building. But since it is not the real building which is being formed, *nor any simulation which might come close to creating feelings and sensations like those which the real building will ultimately create in the user's mind, the architect cannot tell, while he is drawing and from what he draws, what would really be going on in the actual building if it were built.* He gets no realistic feedback from the drawing on paper because one cannot judge the real behavior, the nature of the real building, by looking at the lines on paper. Of

course, this architect, if challenged on this point, might claim that this is just where his experience lies: that he can tell, from the pencil lines, what the real building would be doing and that it is this ability which makes him an architect. But this is a polite fiction. It is a polite lie on which our 20th-century architecture was based. The truth is that *no one* can tell what the three-dimensional reality of the building is going to be based on a few pencil strokes or a few lines on a computer screen. You cannot tell what the light is like, what the view is like, where the plants will grow, where you feel like walking, where you feel like sitting, what natural intuitive response a group of people will have to a particular room (if it is too high, too low, too wide, too narrow, too strangely shaped, too distant in feeling from the garden or from the room next door), where the sun is going to shine on the floor in winter, whether one can hear sounds from one room to the next, and so on — a thousand things. And it is because of this ignorance about real things that we do not get feedback from the pencil sketch.

That is why what we architects do with our pencil sketches is *not* in the least like what Matisse did when he painted the *Woman in a Chair*. At best the architect is drawing something, and his next step is a reaction to the drawing. Each pencil stroke is thus only a reaction to a previous set of pencil strokes. Since it is not, at any step, based on feedback about reality, there is every chance — one might say there is a certainty — that this process is going to go off the rails. It is the lack of continuous responses to reality which makes the process used by big commercial offices highly vulnerable, and which makes it — inevitably — unsuccessful.



*Emoto Apartment Building, Komagome, Tokyo, Christopher Alexander, Hajo Neis, Ingrid King, 1987. This full-size three-story mockup in Tokyo, done in paper to study the effect of the elevation design and materials on the street at actual size, was done to make sure that the street was helped by the building. Mockup by Hajo Neis.*

That is the idea we must aspire to in architecture. We must imagine a world where, whether it is a building, or a street, or a room, or a bridge, the conception, design, and the construction — and ultimately the maintenance too — go forward in very small steps with feedback, so that they can be corrected. It is this self-correcting aspect of the building process which has all but vanished in recent times.

To create a living world, successfully, we

must again find ways of making all building processes move forward in this experimental, responsive fashion. That one thing alone, as a kind of bedrock for all design and all planning and all building, will change the world. We must reject the statist conception in which the future is planned now, and embrace a new world of architectural design in which the future of each building is not known, remains open to experiment and change, and above all to success.<sup>18</sup>