otherwise described in chapter 9 as the mirror of the self. A center is a good center, or a profound center, when it seems to be a picture of my own self. However, in order to probe this idea, to establish this idea concretely, and to put this idea into the objects, buildings we make — indeed, into the world we make — I must have the utmost clarity about what it means. What it really means is this: A center is a valuable one when it makes me feel the ultimate existence of the world, most deeply. Everything hinges, in the end, on my ability to make this happen. It therefore depends on my ability to experience it, to feel it, and to act upon it. And it also depends on my ability to understand what it means, in the most concrete fashion. Dozens of examples are given in Book I, chapter 9.

7. Yet another way of talking about the basic criterion of Book 1, chapter 9.

8. This description of the feeling in the library comes from an unpublished manuscript by Joel Garreau, "Christopher Alexander," written for RESTORATION MAG-AZINE, 1997.

9. Even so, there is a deeper question here. Just *why* a building which is profoundly based on feeling, should solve, simultaneously, these seemingly unrelated functional aspects is a profound mystery. This mystery touches the most unexpected aspects of the nature of space and the nature of matter, and will be examined again in Book 4, chapter 2. For the time being, I simply want the reader to be conscious that an approach rooted in feeling will go to the most vital practical nature of environmental structure. It engages *the* underlying nature of the whole environment, *the* most fundamental aspect of the physical world.



APPENDIX / THE HARD WORK OF CREATING AN ENGINE THAT PRODUCES GENUINE FEELING

I cannot emphasize strongly enough, that the production of a work which has feeling, may be imagined as the creation of an engine which makes this certain kind of feeling. It is careful, empirical, cool-headed. It succeeds, or not, in the degree to which this created engine is able to work, function successfully—that means that when the engine is finished the feeling appropriate to the context pours out from the engine, just as is appropriate to the place and time where the engine is placed. The hard work involved, the coolness of this work, is perhaps the most surprising thing, which must be understand by any architect.

As before, I shall give an example from painting, because in painting, somehow, the engine-like character is visible more exactly, and with less confusion. It is a painting of anenomes. I hope the example will show how the search for profound geometry, even in a small thing like a painting, is the core of the hard work, and, when successful, ultimately then becomes the core of its success.

When I first saw the flowers, what struck me most about them, as a whole, was an intensity, a glowing darkness in the reds and blues, underlined by the black centers. It was a feeling almost as if black-eyed peas had been unloosed to give life to the glowing reds and blues.

I began the picture by making a few small sketches of a handful of anemones in a jar. In each of these small sketches I was really just drawing the flowers as I first saw them, but looking for some glimpse in the work, of the kind of geometrical engine, which would be capable of creating the feeling which I have just described in the onlooker. These sketches are rough, hasty, and were made only in an effort to explore the possible geometric order which might create feeling: thus, as diagrams of the possible "engine," to find out what kind of engine will work successfully.

The sketches (page 398) were tiny, each one no more than 2 inches by 3 inches; one is even smaller, done with colored crayon on a tiny rectangle marked out on a board. All I was looking for was the way a geometrical structure in a picture might create the feeling which these flowers actually created in me. In the early sketches there are just hints of what might work. For instance, in the first there is a way in which the hints of dark masses,



First sketch



Second sketch



Third sketch



Fifth sketch



Fourth sketch



Sixth sketch



Anenomes, the finished painting

separated by light thin boundaries, has the capacity to touch a certain feeling. In the drawing with the spoon, we see the individual flower heads and petals, showing a capacity for some kind of feeling to be generated. Finally, playing with the arrangement, searching for an arrangement which makes the color speak, I found a sketch in which the pattern of black and white, like a beat in the background, allowed the color of the anemones to come to life. There, the feeling of the intense color and the "beat of the black-eyed peas" comes to life for the first time: This is an engine capable of creating that atmosphere. When I had done it, I realized that I had found, for the first time in this series, a thing which