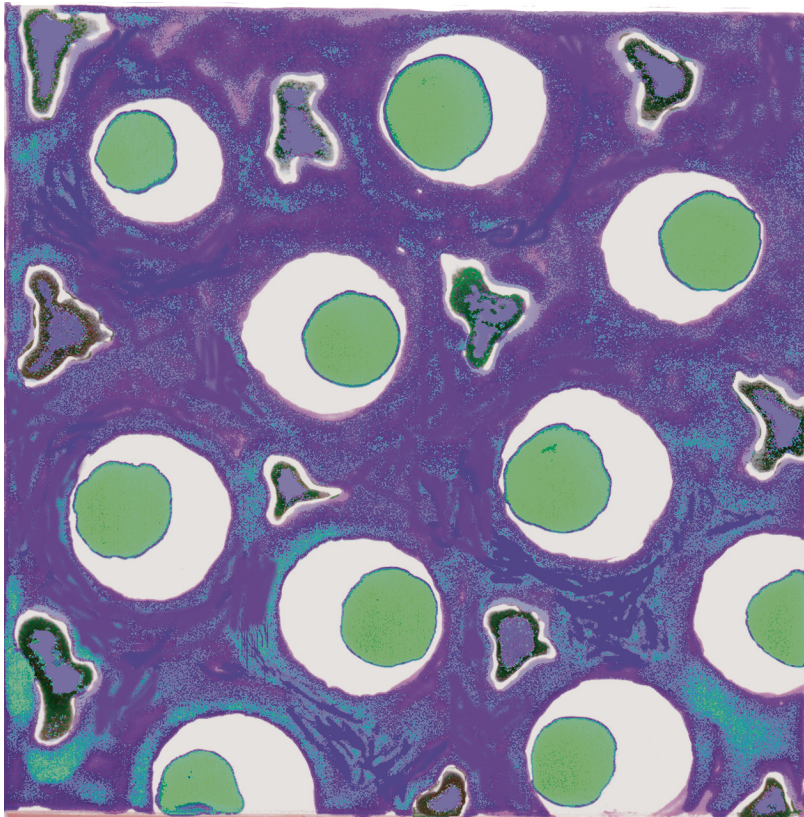




3 / PROCESS AND GEOMETRY:
THE ORIGIN OF ARCHETYPAL FORM



The tile with green eyes. Ornamental tile from my workshop, Christopher Alexander, 1984.

I have called these four books *THE NATURE OF ORDER*. By this I mean to say that all living structure in the domain of buildings, as in other domains, will have a recognizable *order*, a certain way it looks.

We cannot hope to create such living order in buildings merely by concentrating on the way our buildings look. We also cannot hope to generate true life in buildings and streets unless what results from our efforts does have

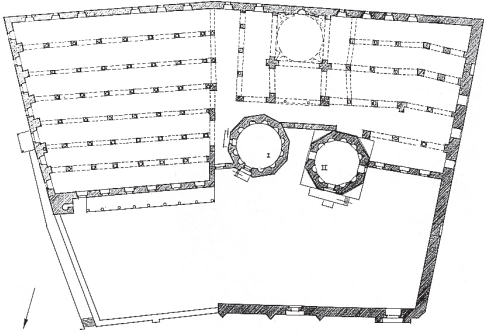
the structural and geometric marks of life and living order in it.

It is therefore important to discuss the actual geometry that comes from living process — what used to be thought of as *style*. What style of buildings should we expect to find if we construct a living order?

The question is profound. If we want to make living structure in the world, we need to be able to characterize architectural geometry so



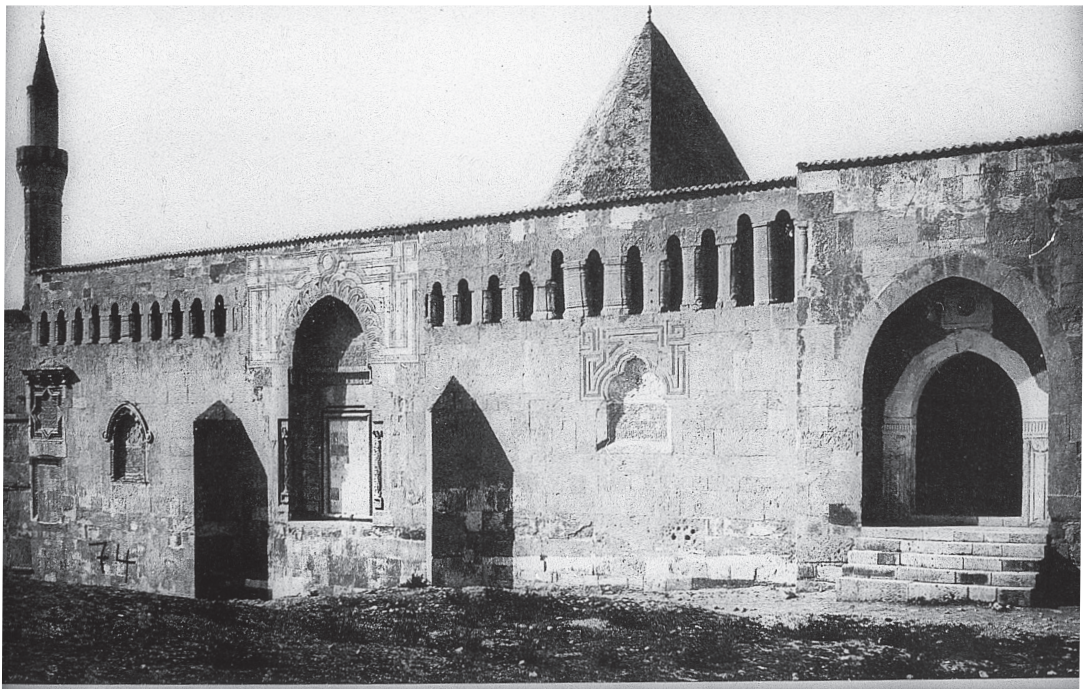
*Giant star, The Carpentry Building, Martinez. Christopher Alexander, 1986.
The origin and making of this star is described in Book 4, pages 116-17.*



The Alaeddin Mosque, Konya.



African mask: Baluba wood carving from the Congo.



Street view of the Alaeddin Mosque, Konya.



Vulture and figures on a wall, Catal Huyuk, c. 6000 B.C.



The Judo Hall, Eishin Campus, 1985.



Administration building, Eishin campus, 1985.



*The Green Bird, oil painting on wooden panel
Christopher Alexander, 1991.*



A very ordinary pathway: the entrance street of the Eishin campus. It is extremely simple—but indeed so simple that many architects might fail to do it on the grounds that it is not “interesting” enough. Yet these five elements—the walk, the gate, the building to the left, and the fence to the right, with the slight curve necessitated by the site—leave one completely satisfied. No more is needed. It creates a complexity of feeling which reaches very deep.

that we can use the characterization to check our work constantly while we are working, to see if what we are doing measures up to the standard of living structure and has the kind of order it must have.

In the vision I have been trying to portray, the structure always originates from structure-preserving process, even when archetypal form is generated from a vision or a dream. Throughout Book 3, I have tried to show, by example, how every living process must *necessarily* go forward step-by-step, must be an adaptive process which creates unity in the structure being made by adapting, shaping, pushing, pulling, gently easing the structure into harmony with the structure that exists.

I have also tried to show how a living process, by its nature, will always create something unique at every point. For each of the human beings in the world, the local environment created by unfolding will be individual, particular—never mass-produced, never cheap psychologically, never too-simple

in the alien mechanical sense, never mechanically bound to mass conceptions of the individual human being.

And this same respect for the individual, for the uniqueness of every person and every place will extend, too, to the broader structure of human society, to the richness of cultures and the richness of place. According to the description I have given, it should follow that each place will, in its broader character too, be unique in the world, simply because each place is different in its conditions within the whole.

This process invites a wholesome relationship between people and the earth: not exploiting the earth for gain, or for the egocentric satisfaction of invention, but rather steadily bringing forth the new from the old, drawing an everlasting fountain of new creation from the structure of the present and of the past. It also creates wholes, wholes of remarkable and robust character. Perhaps most profound of all, the forms—the wholes which are created—are in themselves of a certain nature. There is something so profound, so solid, and so



A perfect and dreamlike handling of a very recently built freeway interchange in Albuquerque. The simple idea of a turquoise stripe which relates exactly to the color of the New Mexico sky — is inspired. It was discovered by the chief engineer of the New Mexico State Highway Transportation Division, Mr. Steve Harris. After building the freeway interchange, he decided to paint a colored stripe; then made computer experiments on the internet to look at different colors for the stripe, asking people which they felt to be most profound. He found no agreement until he used THIS color — at which moment everyone seemed to feel that this was “it.” It looks like something visionary, perhaps originated by a Navaho engineer in the public works department. It is not. It is the result of experiments that invite people to look for the profound. Simple and profound, it alters, altogether, the experience of driving on that freeway interchange.

recognizable, about these wholes that it might almost be called a style. Yet it is not a style.²

The living processes are remarkable, because they are at once very simple and yet also deep and surprising. Perhaps most surprising of all, these processes are based — necessarily — on deep *feeling*. This would have been commonplace to people of earlier times and of other cultures. But for us, living in an age largely bereft of reliance on deep feeling, it may come as something of a shock.

In addition, the living processes which follow from combinations of the fundamental process will necessarily be generative processes — that is, processes in which the sequence of what is done follows a vital rhythm in which large precedes small, in which the whole creates the conditions for the part and shapes the parts ac-

ording to their positions in the whole. This virtually rules out the oversimplified kind of mass production of components that was common in the 20th century. The uniqueness which is the most trenchant mark of life will occur and will be supported deeply, at every stage.

Finally — and here we come to the subject of this chapter — all living processes will be governed by the emergence of a special *recognizable* geometry, a style, an “architecture.” I hope this geometry has become at least partly recognizable in the examples I have shown. It is a geometry which shows feeling; it is a geometry which shows life. In the last six hundred pages, you may see that there is something common to the examples. In some fashion they all *look* alike. The style — if there is one — of the many varying examples in the last 600 pages is not an incidental quality

which might be removed from them. This apparent “style,” this particular sort of geometry, is a particular kind of structure. It is that structure which *follows directly from the use of living processes.*

That statement is, in the end, the talisman which allows us to see what we are doing in good architecture. I state it so definitively because I know that it is only when people begin to see and feel the actual geometry of living structure for themselves, that their ability to create architecture begins to flourish.

The dream of a universal style, mentioned often by architects of the early 20th century, can

be found at last in the results of living process. It will not be found among the machine-age products of the world, not among the gigantic image-conscious buildings which resemble strangely made boxes and commercial advertisements, but among a quite new class of buildings which, in ultra-modern form, will very slightly resemble the most ancient buildings of the past — not in their outward style, but in their inward essence. They are new, and dramatic, and unknown. Yet they are part of the human archetype, and therefore known, even when they have not been seen before.



4 / CENTERS AND SYMMETRIES

In the preface, describing the evolution of centers in St Marks Square, I referred frequently to the fact that each local center, as it was being created, was, in effect, caused by the creation of local symmetries. Many (not quite all) of the local centers in the finished St Marks Square are also local symmetries (pages 6-7). Similarly, each step in the process of creating the archway of the Mexican low-cost housing project created one or more local symmetries (page 10). Each step that created the drinking glasses created local symmetries (pages 8-9).

If you look over the examples of this book, you will see that most of them have the character that their evolution was accompanied by step-by-step creation of local symmetries. And this is true in general. When centers are being created, a high proportion of them are locally symmetrical. Living process is, in part, a process of creating local symmetries.

This is typical in nature; and it is typical in architecture. In the early part of Book 2, I have commented on the unfolding which occurs typically, in nature. This unfolding, associated with bifurcations and sequences of bifurcations in morphological theory, often consists of a process which establishes local symmetries one by one. But the

question is, of course, *Which* symmetries — and which centers — do the most to extend and preserve the living quality of the evolving structure?

In architecture we may ask this question in a highly personal way. Faced with any particular moment in the evolution of a building form, which next action will most intensify the feeling? Differently stated, we may ask, Which new local symmetry that may be introduced into the emerging whole, *does the most to intensify the feeling of the whole?* The unfolding of a building form is to be understood as a sequence of local symmetry-creation in which each symmetry is introduced, injected into the emerging whole in a careful way that creates the maximum feeling, creates links to the whole, makes the larger structure more harmonious and more connected, internally, in its feeling.

As we have seen, that is the origin of living process. The production of feeling is the origin, even in nature, of all living structure. The shortest statement of what one is trying to do in architecture is to obtain the field of centers by introducing one center at a time into the whole, so as to extend the whole and preserve structure. I may restate it. We are always trying to get the maximum feeling from