





## The Concrete Garden

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Concrete is an extraordinary material. I know of no other that is as versatile, strong, durable and inexpensive. Nor, for that matter, do I know of any building material that can be so easily manipulated into so many shapes and sizes. A lacy flower pot or the Aswan Dam are both made of concrete, and this is about as wide a range of structures as can be produced from any substance, yet concrete is such a common material that we seem to take it for granted. Because it is so common, it is difficult to think of it as a beautiful material. However, many very beautiful structures owe their quality to the wise and imaginative use of concrete; so too, can the garden.

I have titled this article "The Concrete Garden" because it is about my experiences with concrete while building and maintaining my own half-acre garden in El Cerrito, California, just north of Berkeley. I have used over one hundred fifty cubic yards of concrete in building its cliff, its benches, slabs, steps, stepping stones, planters and pools, which together make the principal and permanent back bone structure around which the other elements of the garden, including several thousand kinds of plants, is organized. A half-acre garden organized around one hundred fifty cubic yards of concrete should qualify as a "Concrete Garden."

## Ideas

The concrete work in my garden is, I believe, generally successful and possibly unique. The most influential source of inspiration for the use of concrete has been nature and most especially the granite glacial washes of the high Sierra. Years ago I drove around the Silver Lake area and was captivated by the visual strength of the landscape. The dark green islands of conifers against the light grey sea of granite carved by glaciers had an unforgettable power. Years later, the strong, dark and light color patterns of that landscape inspired the principal color motif and unifying devices of my El Cerrito garden. The darker green plants from my collection were grouped to make the "islands of conifers," and the light grey of the granite was interpreted through concrete and light grey plants. Even though there was a great deal of natural rock on the property, I chose to use concrete because I could manipulate it into the rounded, irregular flowing forms that I had remembered from the Sierra.

Recently, I returned to the Silver Lake area to make a comparison of my garden with that dramatic landscape. I found the area to be even more powerful than I had remembered. Its scale was magnificent; what a beautiful natural garden! I was assured once again that only nature can create a natural garden; this is a thing that man can not do. However, man can take ideas from nature and use them in the manipulation of the elements that make a garden. For example: though the scale of my garden was quite different from that of the Sierra natural garden, there was a similar flow of form and contrast of color, something I had striven to capture. Although the Sierran landscape worked in its scale and my garden worked in its scale, they both had a sequence of horizontal lines that seemed to rise and descend with similar ease. Making all of my concrete structures with dominating, broad, level surfaces had produced that feeling in my garden, one of the things that a return to the mountains had proven. I took many photographs of natural granite — of ripples, cliffs, slabs, steps, pools and even a beauti-

fully proportioned natural bench. When I compared these items in the photographs with my concrete work at home, there were some rather remarkable similarities in color, texture and shape that were quite consistent.

## Concrete

I have tried to use concrete as a kind of stone; I have not tried to imitate natural rock, but I have looked at natural rock formations in order to understand what kind of rock concrete really is. In some very real ways the concrete is much like granite. Granite and concrete are both a light grey color, though the concrete is more uniform and has a slightly more brownish tint. The texture of both is of a very similar gritty nature. This similarity of color and texture was very evident when I saw a stack of concrete blocks that had been piled on granite near a small cottage under construction. From a few yards away, I would not have been able to distinguish the two if the concrete had not been in squared blocks. I wish I could say that it is significant that both concrete and granite start as a liquid, but granite has been mutilated by so many forces that there are few signs left to indicate that it ever was a liquid. So, the fact that the form of glaciated granite seems also appropriate to concrete will have to suffice. Since granite, liquid origin or not, is a beautiful kind of stone, the fact that concrete resembles it gives some indications of the ways in which concrete can be used to make a garden more interesting, useful and beautiful.

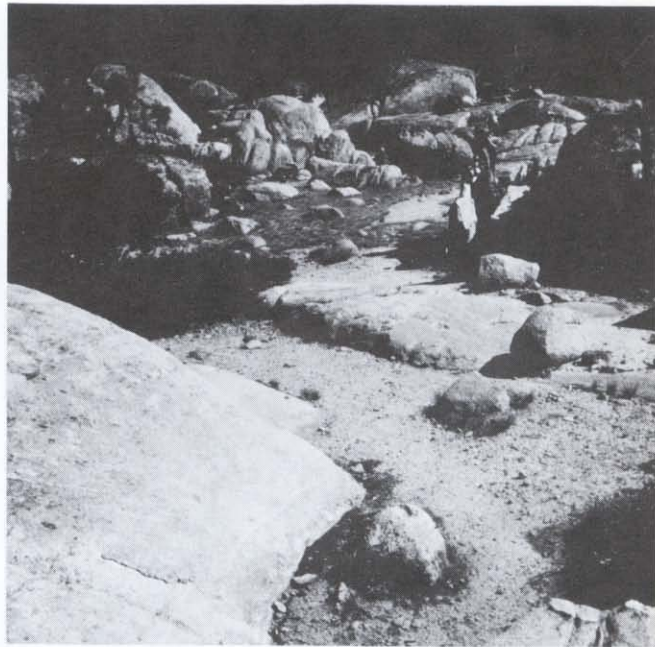
The one characteristic of both concrete and natural rock that I find most appealing is the sense of permanence and stability that both can lend to a garden. Both have an indestructibility that gives them this quality. When natural rock has a weather-worn look, its feeling of mellowed permanence is emphasized, giving the suggestion of time continuum when used in the garden. This effect is impossible to duplicate in a new material. However, there are ways of treating concrete that can give a similar impression.

It can be troweled and textured into rounded, softened shapes that suggest the weathered and gentle irregularities that are so attractive in natural rock when it is combined with plants. An effectively ancient-appearing surface can be produced through varied texturing of concrete. This encourages an irregular growth of algae and mosses, and within a very few years the surface will appear quite mellowed and aged.

Concrete, like any other kind of rock, has its own distinct characteristics. It is as strong and as durable as almost any kind of rock. It can be molded, troweled, cut and reinforced. It hardens when exposed to air and can be prepared in such a way that it will set underwater. Its light grey color can be varied according to the materials used to make it, including the addition of special coloring agents. Its viscosity and the time it takes to harden allow for endless variations of form. Concrete is a very versatile medium.

At this point I would like to interject some of the ways of manipulating concrete that most appeal to my tastes. As may already have been noticed, I get most of my inspiration from nature; nature opens my mind. I much prefer rounded irregular shapes and textures that have a hand-made quality, with slips and undulations that give a natural appearance. I do not like hard edges, and I am bored to death when I have to construct a form (mold) for making a concrete shape. Besides, when I finish a concrete structure with hand troweling, I know directly what it is going to look like. I do not have to wait for wooden forms to be removed in order to discover what may be either a drastic mistake or unusual beauty. Hand troweling has immediate results. I also like large and generous concrete garden structures that reach out under the plants where they become mulch for the roots and have an easy to clean, weed-free surface. I feel that large benches and wide paths are more gracious and inviting to those who use them. Most of all, I like to have the freedom to vary size and proportion in order to have a free-wheeling control over the elements of the over-all design. I also like to use concrete with natural

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Glaciated granite near Silver Lake in the Sierra. Note the shapes and texture of the rock. Photographed by the author.

An interpretation of glaciated granite done in concrete. Note the bench in the lower left-hand corner, slabs with a natural rock in the middle ground and the pool near the top with planters above. Photographed by the author one year after planting.



rock. I find it a challenge to make the combination look integrated and comfortable. The fewer the restrictions and the fewer the rules, the more freedom I have to solve problems in a way that is interesting to me and, I hope, to others.

## The Design

In designing the concrete work of the garden, I have tried to treat the concrete structures in such a way that, should the viewer think that an object is rock but, on closer inspection, discovers that it is concrete instead, he will not feel deceived. The viewer should feel respect for the integrity of the concrete and its form. There have been five basic techniques that I have used in my attempts to gain this response: one, I have used only the textures that can be accomplished with a trowel; two, I have avoided the use of molds; three, I have used no artificial color; four, I have used shapes that lend themselves to a hand-made, troweled look; and five, I have used concrete only for making those installations that would ordinarily be done in concrete anyway. These include benches, slabs, stepping stones, steps, pools and planters. I believe that the fifth technique is the most important; because we generally consider concrete to be a structural material for useful objects, and since these are all generally functioning (though they are also decorative) structures, the fact that they are built of concrete makes them seem reasonable and appropriate, even though they are not made in the usual way. By contrast, I would not make rocks for a rock garden from concrete; although, conceivably, they could be done successfully if enough thought were given to their design.

The concrete structures in my garden include two hundred steps. One hundred twenty-five of them are needed to descend the seventy feet of fall from the street to the bottom of the lot; the others help to make alternative paths. Hundreds of stepping stones, along with the steps, make the paths that give flow and easy access to all parts of

the garden. Many slabs make the twelve "rooms" (broad, secluded areas) on various levels. There is a cliff sixty feet wide and up to twelve feet high at the bottom of the garden; its facing includes forty-five planters. Fifteen concrete benches are installed along paths and in the "rooms," either for rest or for viewing the garden and San Francisco Bay. They are all easy to sit upon and resemble single natural rocks more than any other type of structure in the garden. Sixteen pools of various sizes reflect the sky and surroundings, giving points of emphasis to the general flow of the garden design. These six basic structures are sometimes hybridized into pool-benches, slabsteps, planterbenches, poolplanters and other variations that help integrate the concrete installations into more interesting and pleasing relationships, often with a touch of the unexpected.

Making the structures appear as natural parts of the whole garden was a matter of texture, contour and placement. To do this I used two ideas: one was to sculpture the concrete shapes in such a way that they would suggest bedrock. Then, to help give a rhythmic flow (artistic movement) to the total form of the garden, I tried to contour the structures in such a way that they would suggest a dry riverbed; the pools might have been excavated and textured by rushing water and the positions of the benches might divide and corral its flow. These ideas were very handy references for establishing a dynamic and unifying form for my garden.

The sculptured effects of the concrete were achieved through shaping and proportioning the structures so that the changing light of the day and of the seasons would emphasize various aspects of their forms and so that each shape would have a harmonious but suitably strong relationship to the others. To make the structures appear to be part of bedrock, I contoured all shapes so that they tapered from the base upward. Thus they were largest at the bottom and seemed to come from deep in the earth, softer parts having been worn away by water and ice. The tapering included the edges of the slabs, steps and stepping stones that were later

covered with soil in order to create a more convincing feeling of bedrock. The total effect of the structures was that of a rock outcropping worn away by water.

Most of my concrete work has been experimental. I have been willing to do almost anything to get the effects that I wanted. Just as in the use of any art medium, many mistakes have been made and a lot of material and effort seemingly wasted. However, concrete is relatively cheap and mistakes are usually easy to cover up. Adding more can make a structure stronger, and if too much has been applied it can (with some difficulty) be broken and used elsewhere. Experiments can be costly, but if the knowledge gained is useful enough and the final results exciting enough, they are worth it. Because of my experiments I have become increasingly efficient in handling my mistakes.

## The Mix

The formulas for concrete mixes are determined by the purpose for which a structure is to be used. Concrete for benches, steps, slabs, stepping stones and planters was made from a mixture of five parts river or stucco sand to one part cement. The pools required a richer mixture to make them hold water. For the nonporous sides and bottoms, a mix of four parts sand to one part cement was used. I avoided using mixed aggregates (mixtures of sand and small rock that make concrete stronger and more economical) because the pebbles make contour troweling very difficult. Since no forms (molds) were used, except for the overhang of the waterfall, the mixtures were kept as dry as practical. I added only enough water to make a mixture sticky, yet firm enough to hold its shape when lifted with a shovel. Concrete of this consistency is easy to shape with a trowel and, with a little caution, will harden without collapsing. I used both triangular and rectangular trowels, the triangular for most curved surfaces and the rectangular for the flatter surfaces. I experimented with coloring the mixes but abandoned that in favor of the color

effects achieved through texturing and contouring. Finished natural concrete in this way makes use of shadows and encourages the development of a moss and algae embellished patina.

## Benches

The benches were certainly the most difficult to build because their nearly vertical sides tended to collapse. The first step in constructing them was to build a core that would later be covered with concrete. This core acted as an armature to give stability to the shape while the concrete was still soft. Of course, it also conserved concrete and got rid of a lot of debris. I built the core by stacking rock, old stucco, old bricks, tin cans, bottles or nearly anything except wood (wood expands with moisture and will crack the concrete). In some cases I even used chunks of soil. I must add here that much of the soil on my property is a spade-defying mixture of humus and rock. Most of the rocks are much too small to be used with plantings but make a fine core for a garden bench. There are literally tons of rock, old concrete and stucco hidden in the concrete structures of my garden.

When the size and shape of the core approached within two to four inches of the intended dimensions of the bench, it was dampened and then covered with a coat of concrete at least two inches thick. I began with the top surface allowing the excess to drop off the sides. This overflow was used to start the walls. Building the sides was always a hold-the-breath-and-pray kind of gamble, but usually the most exasperating, and the most luckless benches turned out to be the most interesting. Collapsing sides was a sickening event that happened to some part of every bench that was at all satisfying. I learned to put up with exasperation and eventually to devise a variety of techniques that would give me less trouble. First of all, I would toss or press the concrete onto the core with my hands, then smooth it out with a trowel, using mostly gentle downward



View of the garden showing slabs, benches and pools.

strokes. Concrete applied to a vertical surface in this manner develops a kind of cohesion that tends to prevent collapse. Once the cohesion had been established, only very little pressure could be applied with the trowel or it would give way. Another method that was usually successful involved the use of added concrete. I built an excess of concrete from the bottom up, then cut away the extra, using the edge of the trowel as a knife. If a side did collapse, the process had to be repeated, only this time I would allow the concrete to set slightly before carving away the extra. I tried to finish the sides so that their angles varied from seventy to ninety degrees. I could sometimes devise an overhang on the sides if I waited the right length of time for the concrete to firm up. This took from one to six hours of waiting. I usually started benches in the morning so there would be plenty of time to study the texture, the shape and the shadow effects. I often had to change contours by adding more concrete or by cutting some away. Then there was always the ever present problem of collapse that would take time to repair. I made the total shape of the bench look as though most

of it was buried beneath the ground and the visible part look interesting and inviting. When the contours of the bench satisfied me, I smoothed the surfaces carefully. If the surfaces were too dry, I would sprinkle them very lightly with water in preparation for the finishing touch. As a finish, I sprinkled an uneven layer of dry cement (no sand) on the wet smooth surface, making sure that the parts that would receive the most wear, such as the top, were more heavily sprinkled. This top dressing, after it stood long enough to become wet, was then smoothed with the trowel until it was a shiny surface. This last procedure produces an irregular texture that is interesting and ages beautifully.

I always inspected the concrete work the morning after pouring, for then it was firm but still not rock hard (it takes about three weeks for the chemical changes to complete most of the hardening process). Also, at this time, minor irregularities were easily rubbed smooth with the trowel or with a gloved finger. These irregularities did not show up while the mixture was still wet and shiny. Finally the edges of the base were evened off and the bits of waste easily removed.

After the concrete had hardened, should the shape of the bench be unsatisfactory or should the earth settle under it, as happened to two of my benches that were built on fill, I could still add another layer of concrete. To do this, I first dampened the surface and added a new coat of concrete at least one inch thick, covering an area large enough to wrap around, or grasp, the old and hardened shape. None of these "caps" have cracked or loosened, and unless one examines them very carefully, it is hard to see where they were added. Such is the versatility of concrete.

Very few of my concrete structures have cracked, even though only the pools have reinforcing material in them. However, where a crack did appear, it could add to the interest of the surface. If a crack happened to be unsightly or raw, I would fill it with concrete, then use the point of the trowel to indent a place for a new crack to appear (a crack usually continues to widen). This procedure gave a worn look and the new crack would be in the right place. Kidney-shapes or hooked shapes tended to crack the most frequently, so I either avoided these shapes or designed weakened and indented places for the crack to form. In some cases a crack could be filled with dirt in which a small plant could grow. This proved so interesting that I sometimes built part of a core with soil and designed a crack or hole in the concrete to receive a plant.

## Steps

The steps were built in much the same way as the benches, except, of course, that they were much smaller and the risers were not so likely to collapse. I also used a kind of core of rock and debris to save concrete and to make the more difficult risers remain stable while the concrete was still soft. The sides of the finished steps were curved off irregularly to give the feeling of being partially buried, that is, part of the bedrock. Each step was carefully separated from the others, making room for tiny plants to grow between them. I varied the risers of the steps from about

four to eight inches in order to give a more interesting and natural appearance and to give a subtler rhythm to their movement. Not only does this give the steps a better flow of design, but it makes them far less tiring to the one who uses them. They also range in length and width from twelve inches to four feet, depending upon the fall of the land or the cadence that I wanted to create. The surfaces were finished with the same sprinkling of cement used on the benches, except that the steps were left a bit rougher to make the treads less slippery when they are wet.

The irregular and slightly undulating surfaces of the steps, stepping stones and slabs make them most comfortable for walking, much easier on the foot and leg muscles than the sternly regular ones of our public sidewalks, floors and steps that exercise only a set pattern of muscles. In making the walking surfaces I generally used only my eyes and standing water as leveling devices. This guaranteed that the treading area would undulate at least a little. Also, this irregularity of surface gave a pleasant, handmade look, natural and unpretentious.

## Slabs and Stepping Stones

Large slabs and stepping stones were poured in place directly on the ground. Each was at least three inches thick and did not exceed six feet across, thus avoiding the stress that would require reinforcing wire. The slabs, like all the other concrete structures, were elliptical in shape in order to give a continuity to the ultimate form of the garden. The sides were irregularly curved off to look as though the slab were merely an exposed surface of a buried rock outcropping. The surfaces of the slabs, as well as of the stepping stones, were finished with a sprinkling of cement just as was done with the steps. The only general difference between the stepping stones and slabs was the difference in size to accommodate either path or a "room." The morning after pouring, excess concrete was cleaned away. The spaces between structures were later filled with soil, ready for planting.



## The Cliff

The cliff required considerable excavation in preparation for the planters. Most of the digging was done with a bulldozer, which removed topsoil and cut away many cubic yards of rather soft sandstone. I had to finish the job with pick, shovel and jackhammer. The excavation left a seventy-degree rock-faced cliff twelve feet high at its highest point, tapering to about four feet high at the outer edges of the garden. It had an overall width of about sixty feet. It was broken into three sections by two staircases that curve upward and away from either side of the base of the highest point of the cliff, a pair of rather grand staircases inspired by an old, romantic Italian garden.

I wanted the cliff to be faced with planters so that it would look like a sequence of solid rocks with plants growing between them. Inventing a method of building the planters for the cliff was a matter of research, trial and error. After considering forms (molds) (too cumbersome and stiff), special additives (none would help prevent collapse) and reinforcing material (wire mesh and steel rods were too clumsy without forms) I finally devised a method using small rocks and concrete to build the planter walls, with soil piled on the inside for support while the concrete hardened. The planters were started at the bottom of the cliff and built in place one above the other. Each was stepped back six inches to one foot from the one below it to allow room for soil and plants. To start the construction of a planter, I made a foundation of concrete about four inches wide and about two inches thick. On this base I started a wall of small rocks and concrete about three inches thick with the concrete spilling out between the rocks. By using rocks of different sizes I could easily curve the walls of the planter to suit the design of the cliff. As the rock wall was built upward, soil was installed on the inside between it and the cliff so that the wall of the planter leaned against the soil at an angle of about eighty-five degrees. By building up the wall and the soil at the same time, I was able to reduce the number of

collapses. When the wall of the planter reached the desired height, which varied from eighteen inches to three feet, the outer surfaces of the planter wall were plastered with concrete, then shaped and smoothed with a trowel. The cement sprinkling technique was used to give a finish that tied in with the other concrete structures of the garden. Each planter was built to fit snugly against the others; thin lines between them allowed for cracks and some drainage. With this building method I did have a few collapses but these were quite easily rebuilt, soil and all. Altogether, this technique proved to be very flexible, and I used it for making some of the other structures in the garden when the usual methods failed. The planters had enough variation in shape and size to make an interesting and rather spectacular element of the garden.

Two planter-benches were built into the base of the cliff. Their more massive proportions made the planters seem to soar upward when viewed from some yards away.

## Pools

Two pools were incorporated into the cliff. I installed a recirculating pump with a hidden pipe through the planters to deliver water from the bottom pool to the top one, where the water then fell nine feet with a cooling splash back into the bottom one. This, of course, brings up the subject of making the most technically difficult concrete structure in the garden, the pool.

My pools are all elliptical in their surface shapes. The concrete walls and floors are curved into each other so that there are no angles or square corners. I try to make the inside shape as pleasing as the surface shape. Again, hooked or kidney-shaped structures, especially pools, are likely to crack, and I avoid them when I can; however, there are places where the design of the garden requires this shape. In one case, in the lower garden where a hook-shaped pool was required, I solved the problem by substituting a cluster of three pools.

Pools must hold water without any leaking. So, as stated earlier, they require a richer mix (four parts sand to one part cement) in order to make sure that the concrete is not porous. The shape of the pool is determined by the excavation. It must be large enough to allow for the four inch (six inches for large pools) thickness of the concrete floor and walls of the pool. The inside of the hole must be carefully smoothed to receive the first layer of concrete. This will help to make sure that the concrete will be of even thickness. After the surface of the hole has been smoothed out, it is lined with heavy wire mesh, the larger the pool the heavier the reinforcing material required. For small pools under four feet, I use chicken-wire, and for larger ones I have used wire fencing, wire mesh, or sometimes reinforcing rods. A pool should hold in one piece without cracking, even if the earth around it should settle or slide. Therefore, when in any doubt, I add extra reinforcing material or extra concrete, because once the walls have hardened they are very difficult to modify. A crack in a pool is never really repaired.

The excavation and its fitted reinforcing material is then covered with a layer of concrete two inches thick. The wire mesh must be between two layers of concrete, and in order to get it there where it can do its job, it must be very carefully pulled up through the first layer of mix. The reinforcing material must line the first layer of concrete, and since it is fitted before it is poured, little time is wasted in refitting. A second layer of concrete, also two inches thick, is poured over the reinforcing material. So, now the wire mesh lies in the middle of a layer of concrete four inches thick. Then the mix must be tamped with feet, hands or any handy device that would help remove any irregularities or air pockets that might cause a leak in the pool. Any protruding wire must be bent back and covered. The entire concrete surface must be smoothed with a trowel. The area to be under water must be heavily and evenly sprinkled with cement and troweled to an even glassy shine. After this has dried, two coats of plastic casting resin are applied with a brush. The resin insures that there will be no leaks and

also prevents chemical corrosion of the concrete by water organisms. This resin can also be used to seal leaks from cracks if they should appear.

The parts of the pool above the waterline are shaped and smoothed to suit the design of other structures near by. They are then sprinkled unevenly with cement and troweled again. Sometimes the edges of the pool were rounded to look waterworn, and at other times they were widened and flattened for both appearance and practical considerations. This flat surface would give a place to step when trying to reach other parts of the pool for weeding and cleaning.

Most of the pools in my garden are from twelve to eighteen inches deep. Some are just small reflecting pools or spots of water used to light up an area, and others are as much as fifteen feet long and deep enough to grow water lilies and other aquatic plants.

The pools have several functions in the design of the garden. The most important one is the shiny, reflecting texture that water adds to the picture. The reflecting surface gives everchanging color to the garden, depending on the direction of the light source, the position of the viewer and the condition of the water. Reflections can bring down the blue of the sky to the surface of the water; this helps to integrate the garden with its environment. The combination of the reflection of surface with the depth of the water produces mysterious prismatic color that can move the eye to an area of the garden that might otherwise be overlooked. In the sun, a pool can become a blazing light. The negative (hollow) shapes of pools add an element to the design that can be achieved in no other way. Water is a very enriching addition to a garden.

To me, a perfectly clean pool with crystal clear water lacks the depth and mystery of a pool with a healthy growth of organisms. I believe that water should be clear, as it is when there is a balance of organisms, but the walls and bottom of the pool should have the dark rich color of living things growing upon them. Only in this condition does the pool become the design element that delights

me. When the pool is new, I usually put dead leaves into the water to hasten the development of a balance of living things. What really happens is that I attempt to garden the water by manipulating the light, minerals, temperature and the kinds of organisms.

## Microclimates

The most beautifully designed structures in the world will not, by themselves, make concrete a garden. To be a garden there must be plants, so structures must be designed in such a way that plants can grow happily around them. The most important consideration is that the addition of concrete sets up microclimates. For example, it will hold heat on cold nights and keep the roots beneath it cool and moist during hot days. Its natural color reflects light and increases its intensity for plants nearby. Tall concrete structures can also provide shade and shelter. As an illustration of a microclimate effect of concrete, let me mention the freeze of 1972. It was sixteen degrees on my deck, yet plants on the cliff received very little damage. In general, those tender plants near concrete received less damage than those in other areas nearby. I have not made temperature, humidity or light measurements of these microclimate modifications; however, observation of plant performance reveals enough to indicate that more detailed study would be worthwhile. It would be interesting to know the differences between the modifications produced by concrete compared to those of various kinds of natural rock.

## Planting

The light grey color and gritty surface of concrete can be as stark and as cold as a factory unless it is specifically designed for a garden. It is true that the design of the individual structures will help immensely to obliterate the chill, but that, too, is not very effective if the plantings are not included as

a most basic consideration. Whenever I make a concrete structure, I visualize it with plants, and I can not separate these two in my thinking. Here again I go back to the granite and the riverbed where plants grow either in crevices containing soil deposits or in piles of debris left by ebbing water or deflected ice. These are the two plant situations that I use for the basic ideas behind the design of the plantings.

To help produce the color motif (strong dark and light contrast) I use grey plants with the grey concrete. This helps to take the cold look from the concrete and to integrate its color with the rest of the garden. A plant that serves this purpose very well is *Stachys olympica* (lamb's ears) with its light-grey leaves that nearly match the color of the concrete and their soft furriness that gives a paradoxical contrast of texture. The surprise of this texture combination delights me. *Echeveria elegans*, *Cerastium tomentosum* (snow in summer), *Festuca ovina* 'Glaucua,' *Achillea nana* and artemesias are some of the other grey plants that I use to blend with the concrete in order to expand and extend the light shapes of the garden. The grey plants are the most important ones, because their closeness of color to the concrete gives such rich detail, the kind of thing that makes the viewer look twice. It creates a sense of there being "more than meets the eye." I use a vast number of green and darker colored plants as the contrast for the light greys. They range in size from *Sagina subulata* (Scotch moss) to *Magnolia grandiflora*. The green plants accentuate the lines between the slabs and stepping stones and form the islands of green between and around the "rooms."

Concrete can add immeasurably to the ease of maintaining a garden; weed problems are reduced; mulching is permanently taken care of; there is a place to walk without damaging plant roots; and there is always a place to pile the prunings before they are hauled away. All these advantages leave me free to spend the many hours that it takes for trimming and shaping the plants to make a natural-style garden that looks as though it took no care at all. ❧