

## THE PRINCIPLES OF LANDSCAPE DESIGN APPLIED TO GARDENS

*Presented before the Southern California Horticultural Institute,  
October 9, 1958*

THIS IS A TOPIC which, at first glance, might seem to be very controversial because of the fact that design, and taste in design, can mean something different to each who observes or concerns himself with such matters. Design is what the individual sees and puts into any arrangement of objects or forms or patterns or colors when he undertakes to compose them in a manner he hopes will be pleasing. We do not all see eye to eye. Our backgrounds, experiences, education, all vary. These matters of training, as well as those of individual temperament and potential, affect our attitudes, our likes and our dislikes. Furthermore, both the abilities and the tastes of any individual, however talented he may be, incline to run rather a wide gamut of variation during the period of his lifetime.

So it is, in considering the principles of landscape design, that one must avoid personal likes and dislikes and consider only the basic controls which govern design. The principles are sound and fundamental. All artists, whatever their bent, have the same materials with which to work as do their contemporaries. Only that spark which the individual artist is able to provide can make one design different from another, if a common program and use requirement is established for the problem. From the same stock of ingredients may come products of highly varying quality.

Education has a great deal to do with both tastes and our abilities. Therein lies both a danger and a wonderful well of opportunity because we are inclined to enjoy and appreciate the things to which we have been educated. We usually like that to which we are accustomed and which we have been taught to like.

I recall an incident that occurred during World War II when I was driving the highways for countless miles on war housing work. I stopped to "give a lift" to a Marine with a busy thumb. Usually such beneficiaries of a weak moment immediately filled the car with an eye-smarting haze of thick smoke or fell asleep when they hit the cushions. Not this boy! He was alert and alive to the beauties of the roadside after having spent some months in Guadalcanal. And Guadalcanal he did not like. His first comment was, "My God, it is good to get back where they have billboards. I didn't see a billboard all the time I was in Guadalcanal. I come from Chicago where they have good billboards." What price background, education?

If one were born and raised in a stable, then a stable would be home sweet home to him. Thus it is important that we provide desirable surroundings for our children—and ourselves. And also it is important that we disassociate merely personal likes and dislikes when we consider the principles of design.

It probably is good that to the first title of this talk was added the afterthought,—"Applied to Gardens", since it pins it down a bit and makes it possible to talk of but one phase of the work encompassed by the profession of landscape architecture. *Landscape architecture deals with the planning of space, its use, and the placement of objects upon or within it. It is land or land-use planning.* At the turn of the century it was defined as "The Art of Fitting Land to Human Use and Enjoyment". Please note that it is a recognized art, by that definition and by general acceptance by the other arts. Initiated as a course of instruction in the most advanced schools of our country, late in the nineteenth century, it had an innocent beginning relatively free from complications. Quickly, however, it developed a side-arm of City Planning and other types of specialization, some of which have outgrown their humble beginning until they scarcely admit or recognize



the little red schoolhouse where the profession got its start. Now the well qualified landscape architect may engage in the design of home gardens, public gardens, parks, recreation areas, industrial grounds, schools, institutions, cemeteries, subdivisions and city planning of various sorts.

Although already quite specialized, landscape architecture probably is the youngest of the accepted professions, having been recognized as such, in this country, for little more than half a century. In other eras of culture, back through the centuries, it seemingly was the trend of the times for an artist to operate in many fields, not just in one branch of design. The architect also was the sculptor, the painter, the landscape designer. He produced a total product rather than just one phase of a given undertaking. And it was good, if we can judge from what has been left unto our day. Now the tendency is for collaboration of the many, each a "specialist" in some particular phase of all that it takes to complete a total project.

This comment, however, deals primarily with gardens and the principles of landscape design as applied to them. As landscape architecture probably is the youngest of all professions, so is gardening the oldest of professions,—as old as man, himself. Gardens are as old as the records and date from the Garden of Eden. The first garden was started when one of our ancestors crept from his cave and consciously planted a seed in the accumulation of debris which he had piled about its entrance. From then on our profession was in the running, though a bit embryonic. There are records of gardens that go back as far as 3000 B.C., the temple of Karnak in Egypt perhaps being the oldest one of note. The gardens of the Great Mughals, the Hanging Garden of Babylon, the lovely gardens of the Orient, those of the Renaissance in Europe (without reference to correct chronology) all are part of the garden heritage. In the great Euphrates and Tigris valleys of today's Iraq, are remnants of irrigation canals that are 1500 years old, with indications to suggest that those people knew much about the ways of plant growth in an arid land.

There have been many types and styles of gardening throughout the centuries. For the most part gardens have been designed for pleasure, enjoyment, leisure, peace and tranquility, for protection from the outside world and expansion of family life within their walls. The Roman atrium was a forerunner of the modern patio. The gardens of Babylon and the Moorish gardens of Spain expressed reaction to the harsh environment of their surroundings and made use of the sound and sparkle of water movement. The Italian gardens of the Renaissance reflected the society and environment of their time and stressed seclusion from outside influences. The Grand Style of le Norte (much copied by others) was a reaction to the lavish court life of that era. English gardens ran the gamut, copying many other styles and developing their own idea of the country park,—introducing the romantic and melancholy into some of their parks, by use of dead trees and gloomy objects. Even this country developed highly stylized garden design of considerable merit in the New England, the Southern and the Monterey Colonial eras, much of which still exists in original or copied form. Now comes the contemporary garden in an upsurge of creative design.

A design, of any kind, is neither good nor bad because it is traditional or contemporary. Whether or not one likes it may be purely a matter of taste, perhaps one of education—depending upon which billboard he was exposed to in his youth. However, the basic principles of design remain constant and apply to any style or type garden one may fashion. Regardless of its type, those which have been successful and have remained as satisfying examples of the art of garden design, always have expressed a way of life of a people and have been adapted to the climatic surroundings and environment of their location. Thus, each of those which are mentioned in this talk, was an expression of its day, of the people and their culture and their adjustment to physical environment. Without such adaptations a style does not develop and cannot live as an expression of a culture.



Very few people are endowed with creative genius. Most of us are followers rather than leaders. We try to copy something that another has created with feeling and understanding, but which we perhaps do not comprehend. True art has a meaning and expresses many things in many ways. A mere copying of zigs and zags, an uncomprehending use of tricks and foibles does not constitute good design.

The owner of a garden should have the type of garden that his heart desires, because that is why he builds it. It may not satisfy the tenets of good design but if it satisfies the owner, he (perhaps alone) is happy. Thus it always is important to know, at the outset, why one is building a garden. If the owner interest is dominantly horticultural and he wants only a plant museum, should that not be his privilege? If his garden is for social entertaining, or for personal seclusion, it should abet such uses. And if enough gardens develop along similar lines to express a community, a local or a national way of life,—then is a style developed. But the purpose, the reason, the program for its design must come before the garden is built.

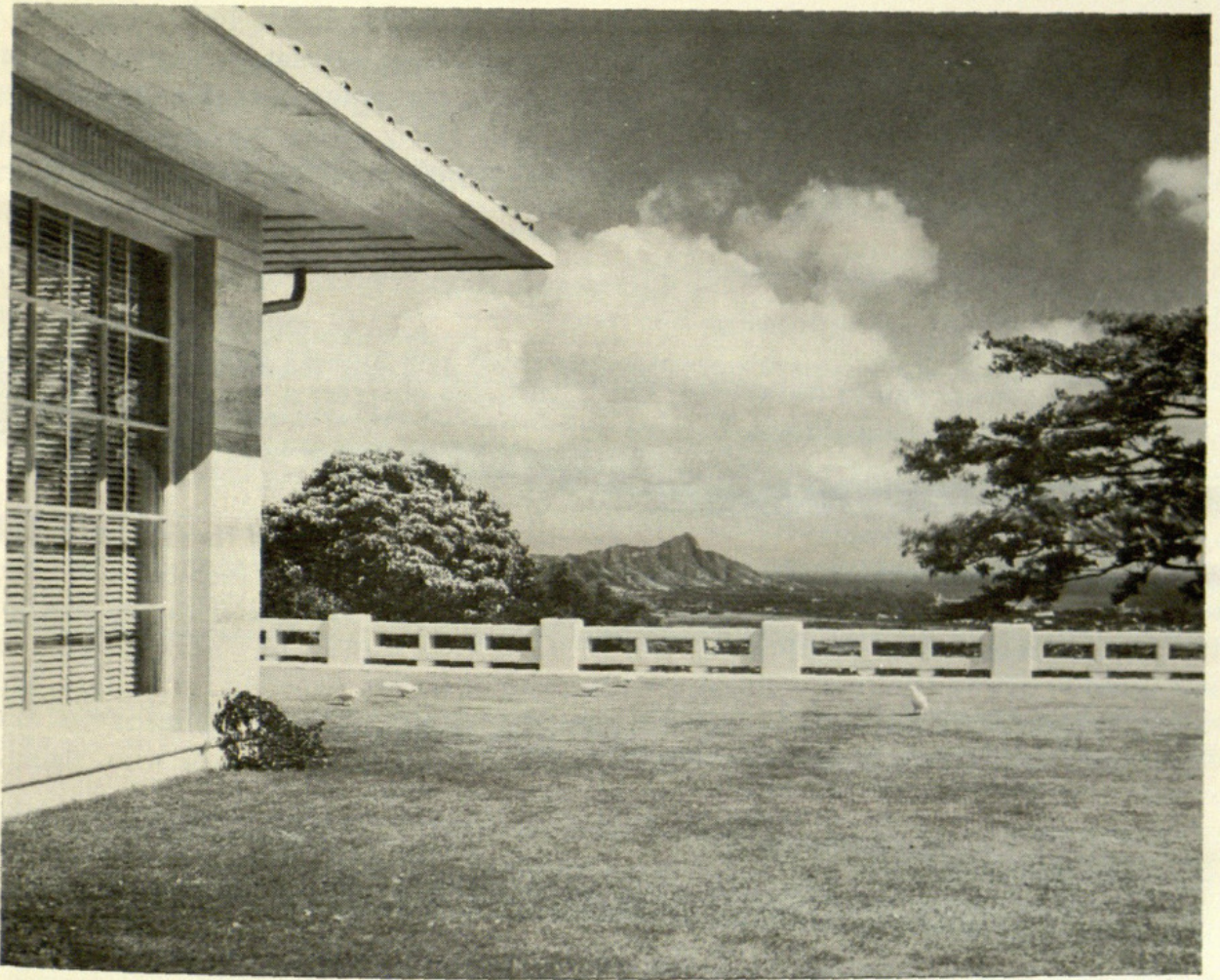
A copy of any style, transplanted into a new land and different society, is a legitimate thing for anyone to possess but it is never more than just a copy of something else. It does not express anything vital within the current life of its new setting. Perhaps it may be a collector's item, justifiable only as such. Only as the designer is able to free himself from the copying of other work or other styles does he, himself, become a creative artist; and to be creative he must design to fit the conditions at hand. Since all designers have the same materials with which to work, it is the way these materials are used and put together that establishes the success of their effort.

Materials from which gardens are designed include space, air, land, sky, trees, forms of many kinds, textures, colors, architectural objects, sculpture—anything that is seen or used. With the purpose of the garden in mind, the designer seeks good space composition in the arrangement of his materials. He must recognize the need, the way of life, the program of plan and design before he starts. Without such understanding he expresses the wrong meaning.



LEFT: Framing a garden view focuses attention to a chosen spot and creates visual unity, a dominant note of interest. Honolulu, Hawaii. RIGHT: A garden for the collection of plants. La Mortola, Ventimiglia, Italy. Main axis to garden, *Echimus*, *lavendula*, *spiraea*, *cercis*. Cornell photos





Subordination of immediate foreground and enframement of distant view, brings outside landscape features into the garden. Honolulu, Hawaii. Cornell photo.

If a physician were to diagnose a patient's symptoms incorrectly, and prescribed on the basis of his diagnosis, he would be treating the wrong ailment and might not succeed in a cure. Similarly, if one fails to analyze the garden problem and need, it is very possible that he may build a garden without much meaning or use efficiency. He must adjust his pattern and detail to the site, its topography, its size, shape and surroundings as he "applies the principles of design" to his problem.

These design principles are constant for all of the Arts—for music, painting, architecture, sculpture, home decoration, dress design, whatever may be. They seek unity, with interest, and become concerned with balance, rhythm, repetition, sequence, texture, form, accent, contrast, color, dominance and subordination. If one is familiar with any one of the arts he may apply the basic principles that govern that art to any of the other forms of expression.

Although unity is sought in all design, absolute unity may become monotony, just as utter lack of unity does become chaos. In a musical score, complete unity of note and tone may be tiring; and so the composer introduces a bit of contrast in the form of staccato or allegro to give animation to the composition. He adds sparkle by injecting accent, contrast and color, and change of pace. Crescendo and diminuendo contribute variety and the elements of dominance and subordination enter into his composition. From these comments it will be apparent that I am not a musician but I try to make a point. These same values enter into any design and most surely apply to a garden.

First of all, by the simple etymology of the word, a garden is an enclosed space. It does not become a garden until it is enclosed. Enclosure thus provides the first sense and awareness of unity but, alone, may not create interest. So following the program one then



decides what is to be the purpose and dominant motif of the garden, how the subordinated elements are to contribute to that dominance and how interest and variety can be introduced to animate the design without loss of unity and functional efficiency. Faithfulness to idea and purpose is very important, particularly since there seems to be a human tendency to collect things. If all plants and objects within a garden carry individual interest to the point where they attract attention to themselves they become competitive and can very quickly defeat the principles of design by approaching or creating chaos. If a lady designs a dress well, she does so with more concern for the ultimate effect than for the quantity of lace, ruffles and embroidery she can bestow upon the tout ensemble. So it should be with the garden. Use what you already have of experience, and apply it to the design of the garden. One sometimes observes a tendency to confuse a multitude of details with design. It takes more than a collection of gadgets to create a garden.

And then there is color. Design can be done in color, just as in form, space, line or texture, but the garden designer must consider the complex use of all these factors. His problem is not simple, and color is a medium that carries tremendous impact. In fact the power of color is so great that it, alone, may make or ruin a design. It carries psychological, as well as, visual significance. We all know that we can be "tickled pink" or turn green with envy, purple with rage, white with fear; we feel blue, act yellow and sometimes get a dark brown taste that dissipates but slowly. Such metaphor is not idle chatter but carries a deep connotation which should be heeded well by those who "dabble in color".



Entertainer's Garden, Demonstration Home Garden, Los Angeles State and County Arboretum. Circular colored stepping stones lead to a small mirror pool. From the raised deck patio, one can look out over the entire garden. Structures are of concrete, cement blocks and redwood. Colors are many, pastel in tone, gay and very pleasing. Denis Kucera photo.



Mental hospitals, industrial plants and "practical" business men have learned the significance and value of proper color use in relation to human reactions and efficiencies. When a highly exciting color film is shown in the theater and warm spotlights are used, the air-conditioning units of the theater are taxed to compensate for increased body temperatures of the audience, incited by the color. After such a show has closed, condensation gathers on walls and ceilings to cause plenty of trouble for the technicians.

The same principles apply to the use of color as apply to all other media of design. Color presents excellent opportunity and material for establishing unity, accent, focal interest, rhythm, harmony, contrast, scintillation, and so on. Since it can be dynamite however, it is important that it be used only with skill and intelligence. A little intense color might be very good in a situation where excessive use of color would destroy the composition entirely. Let's say that a suit of clothes has a hundred times as much material in it as has a single necktie. Then, if a red necktie is par excellence as a coup in haberdashery, is a red suit one hundred times as good? *Que dicen, amigos?*

Now, how do garden design and horticulture relate one to another? Each is dependent upon the other if it is to achieve its highest expression, and yet they are entirely separate professions. Training or skill in either of the two does not insure one's understanding of the principles that govern the other. A good landscape designer may be a poor horticulturist and knowledge within horticultural fields does not qualify one as a landscape architect—although there seems to be much lack of understanding of such fact. With building construction, a skilled mason or carpenter, who knows his trade well, seldom considers himself to be an architectural designer. So it is in landscape work, a knowledge of plants does not suffice to certificate one as a designer.

With gardening as perhaps the oldest profession of man, it would seem rather logical that the best results in garden building might be achieved by the "wedding" of garden design and good horticultural practice. Each will profit by its consideration for the other. To realize its highest development, each must depend upon the other. The landscape architect and the horticulturist should join hands and work together, rather than as independents who assume responsibilities for which they may not be trained.

It may be helpful quickly to enumerate some of the common pitfalls to which many of us fall heir in building a garden. They would include, but not be limited to, the following:

- (1) Lack of a precise program.
- (2) Failure to hold to a firm objective.
- (3) Overcrowding of things within a design pattern, with too many items of individual interest.
- (4) Lack of a dominant feature or motif, in relation to which other details are subordinated.
- (5) Confusion tending toward chaos, instead of simplicity and unity.
- (6) Failure to provide proper enclosure and to screen from view the neighborhood distractions of many kinds.

Although it is oft misquoted it still is good, and I would like to close these hurried and inadequate remarks with words spoken by Francis Bacon, about three hundred years ago, who said: "God Almighty first planted a garden and, indeed, it is the purest of pleasures. It is the greatest refreshment of the spirit of man, without which buildings and palaces are but gross handiwork: and man shall ever see that when ages grow to civility and elegance, man shall come to build stately sooner than to garden finely, as if gardening were the greater perfection".





Cornell, Ralph D. 1959. "The principles of landscape design applies to gardens." *Lasca leaves* 9(Winter 1959), 2–7.

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