

*There are few enough landscape architects, and little modern literature about landscape architecture. Though English gardening, through the influence of Jekyll and others, has again made contact with its own rich tradition, contemporary practice (except in the matter of flowers) has added nothing important. This is where the work of Garrett Eckbo, who is the outstanding American landscape architect, becomes significant. To orthodox gardening theory he has added a modern technique without finding it necessary to make a clean break between past and present; he has bridged the gap between traditional and modern theories. In this article he states his case for the first time for English readers, with particular reference to the small garden, whose problem he considers most directly relevant to the wider problem of the physical environment.*

## LANDSCAPE DESIGN IN THE U S A

as applied to the private garden in California

THE WORK OF the modern landscape designer is controlled and directed by three main factors—space, materials, and people. This may seem obvious enough, but some attention to these factors is essential to any consideration of the theory and practice of modern landscape design. The first, then, is

### space

Space, in the present context, means the layer of air above the surface of the earth in which people live, work and play. The organization of this space is the basic problem confronting architects and landscape architects alike, and it is the absence of any theory of positive space-form out of doors that makes so much landscape work dull and incoherent.

### materials

It is only through a proper use of the materials available to the landscapist that comprehensible form can be given to space; conversely, it is only through a proper organization of space that landscape materials, whether structural or natural, can be given the opportunity to develop and display their full richness of character and quality. 'In the nature of the material' is a phrase which applies to landscape design as much as to any other art. That is to say, landscape materials must be used in the way that their several qualities demand, without being distorted or forced out of character to fit preconceived formulæ. Thus, among structural materials, wood must be seen as a free and flexible frame structure independent of the ground (whose moisture contains the germs of its decay), while brick and masonry are, as it were, bridges between the artificial structures in which they are used and the mother earth from which they have come. Turning to the unrefined materials provided by nature, the landscape architect must think of the earth not only as the floor of the space at his command and the root-medium for the plants he may wish to use, but also as a stable sculptural material with a

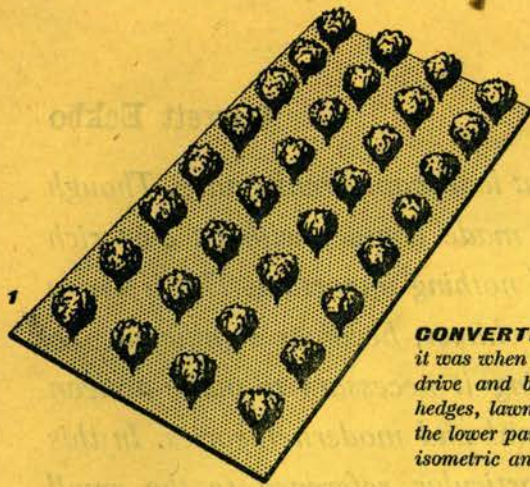
pyramidal quality based upon the angle of repose of cut and fill slopes; of rocks and boulders as a continuation of the bridge between finished masonry and the local strata; of water, not only as a provider of coolness and repose or motion and life, or even as a translucent veil which intensifies the colour and texture of any material across which it is drawn, but also (because one does not step into a pool without careful preparation) as a positive space-organizing element which controls physical movement, knocking a hole in the site, but does not block the movement of the eye. Finally, we must think of plants as an endlessly varying series of living units, each with its specific cultural requirements, and each with its specific qualities resulting from size, rate of growth, silhouette, structural form, texture, colour and fragrance.

### people

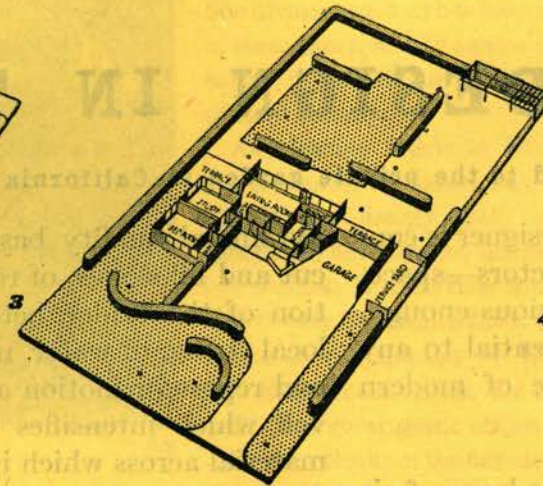
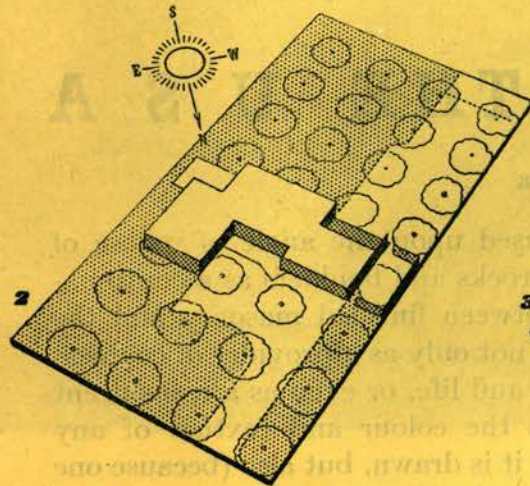
The object of all landscape design being to produce an environment suited to human life and enjoyment, an understanding of people is a very necessary attainment in the landscape architect's make-up, and this understanding must extend both to people in general and, specifically, to the clients for whom he is working. Certain of the great landscape gardeners of the past, such as Capability Brown and Humphry Repton, were notoriously spell-binders, able to persuade their clients to embrace projects which sometimes proved beyond the means of their purses. That, no doubt, shows one kind of 'understanding.' What is needed today is an understanding of people's spiritual needs and of their subjective reaction to their surroundings.

### specific conditions

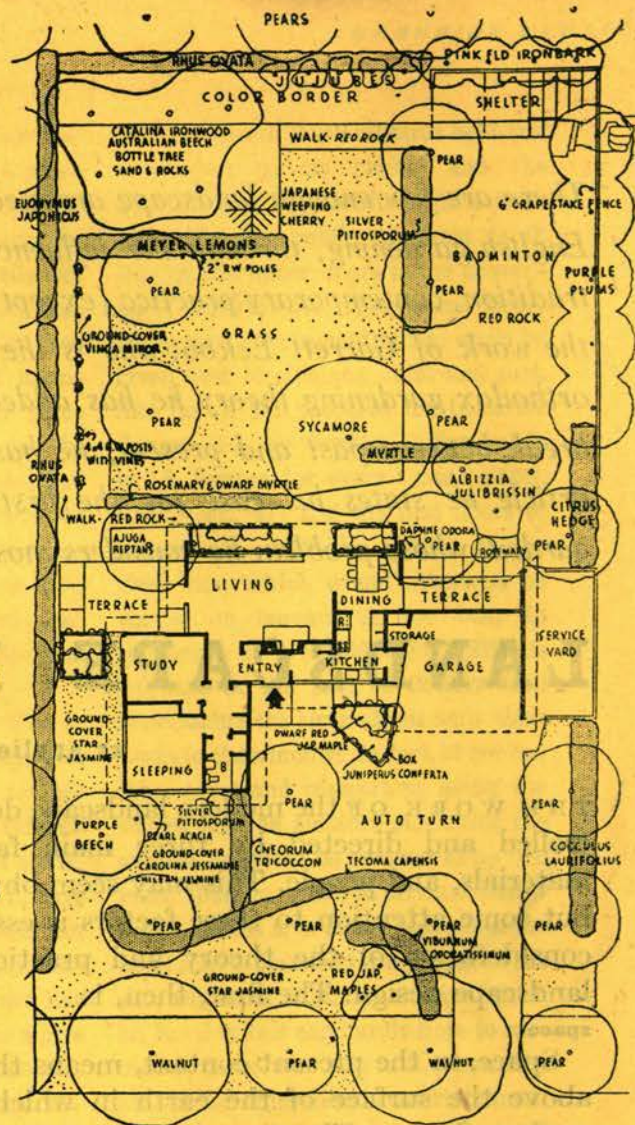
Such, then, are the general factors with which the landscape designer has to deal. But when he comes to the particular there are, in addition, the specific conditions of each job—the topography of the site, the disposition of its plants and rocks and water and



**CONVERTED PEAR ORCHARD 1**, the pear orchard as it was when bought by the clients. 2, site layout of the house, drive and badminton court. 3, the planning of the house hedges, lawns and garden shelter. 4, the planting plan. On the lower part of the facing page is the landscape architect's isometric and a photograph of the garden as it exists today.



Scale in feet 0 5 10 15 20 25



buildings, the character of the neighbourhood and the community inhabiting it, and the needs and desires of the clients for whom he is to work. The value of his solution of the problem will depend on the care and feeling with which he analyses these specific conditions. What is more, it is only by proceeding from the general to the particular in this manner, by first examining and comprehending all the factors common to all the problems in the field, and then by focusing the understanding on the individual problem, that a sound tradition is to be evolved. For this is the way in which the great historic traditions of landscape design were evolved.

**historic traditions**

Perhaps the longest lived of these traditions was that of the formal axial garden, handed down from ancient Egypt and Assyria to Greece and Rome, and thence to the peoples responsible for the great gardens of central Asia and the Mughals in India, and culminating with a splendid flowering in the Baroque gardens of Italy and France. The English romantic movement of the eighteenth century, coinciding with the growth of revolutionary ideas in other fields of human activity, broke away from this formal tradition in favour of a kind of naturalistic design which was not so much an imitation of nature as a subjective interpretation of it. In the Colonial period in America attempts were made to produce a synthesis of these formal and informal precedents,

with some success; but this promising start was soon to be drowned in that nineteenth-century wave of historical nostalgia, measured drawings and authentic reproductions, from which, in the landscape field, we are only beginning to recover.

There are other important historical traditions of landscape design which are treated briefly, if at all, in the official history books. For instance, there are the highly refined garden traditions of China and Japan, with their sensitive handling of material and their free, but in one sense highly formal, arrangements. And there is the tradition of the private enclosed *patio* or court garden, common to nearly all the warm countries, particularly around the Mediterranean and in Latin America; imitations of this are legion, but it has seldom been properly analysed or understood. Finally, there is a great and world-wide democratic tradition, of immense potentialities, which has been almost completely ignored by minds in search of academic formulæ and ready-made plans.

**a world-wide tradition**

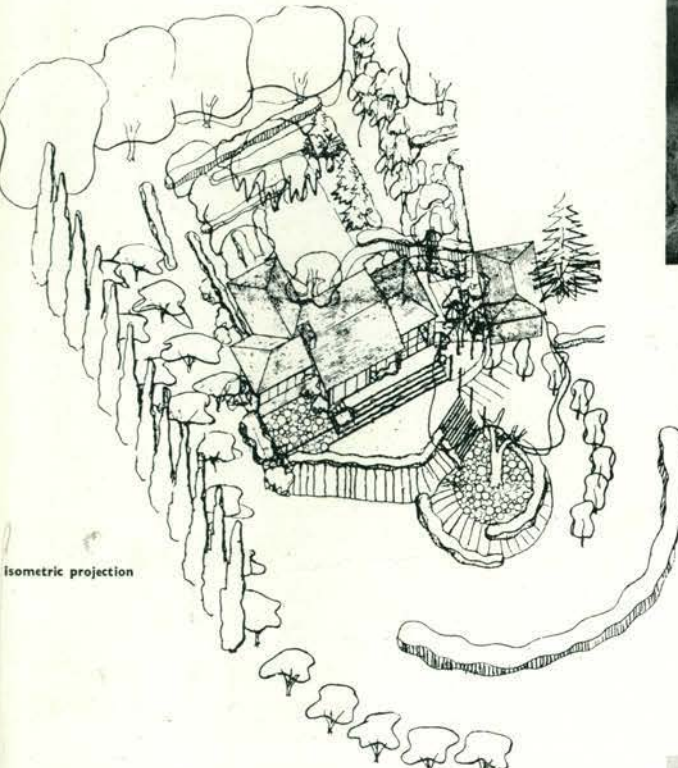
This last is nothing but the tradition of the productive and fully developed rural countryside. In it we are presented with a pattern which, with local variations, is continuous around the world—and has been so ever since man settled down on the land to cultivate it. It is a pattern in which man and nature meet to cooperate to their mutual advantage, in which the ground

**A HILLTOP GARDEN**

at Mount Diablo, near Lafayette, California

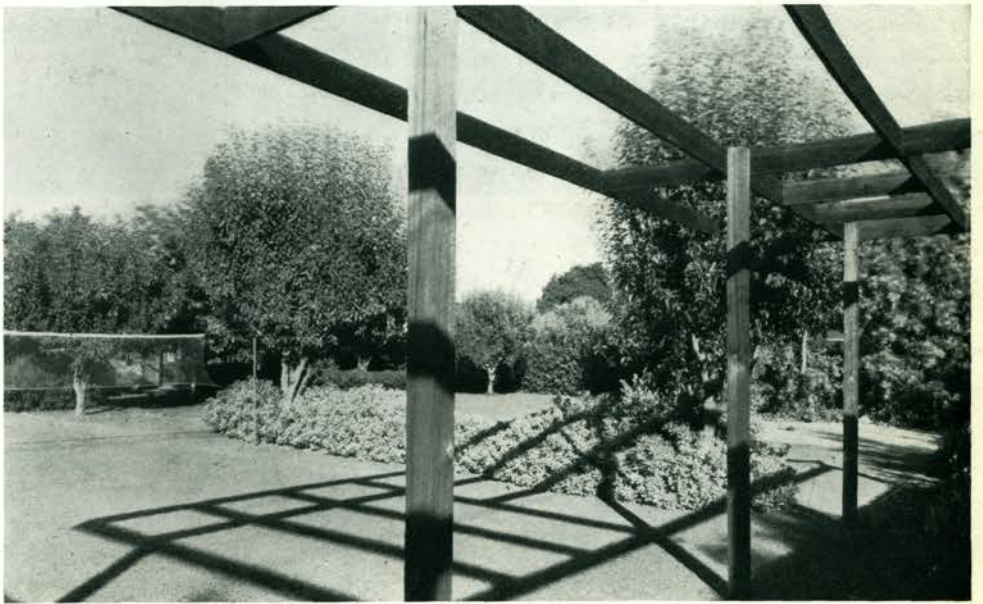


In the landscaping plan the aim was to establish a close relationship between indoor house space and outdoor garden space, and this is achieved by the terracing of the slope up to a flat planted entrance garden, which gives access to a narrow house verandah and screened porch. The house is sited on a knoll, and the garden falls away sharply to a meadow 15 ft. below, which is bordered by a stream. The terracing steps are planted with creeping thyme which demands little attention. A dominating feature of the garden is a large weeping oak, and through its branches is seen a fine mountain view. Surrounding the bole of this oak is a circular area paved with redwood butts, and from this a screen of redwood posts, supporting climbing roses, leads to an escarpment up to the main terrace. Above is the planted terracing of the garden.

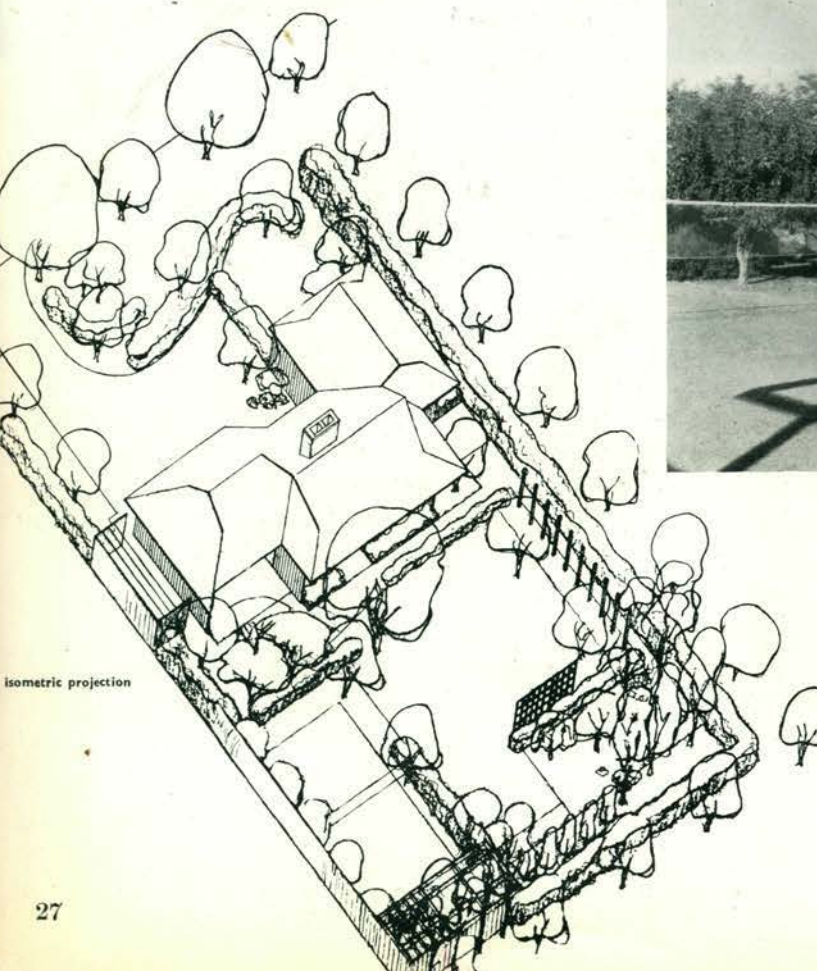


**CONVERTED PEAR ORCHARD**

at Menlo Park, Palo Alto, California



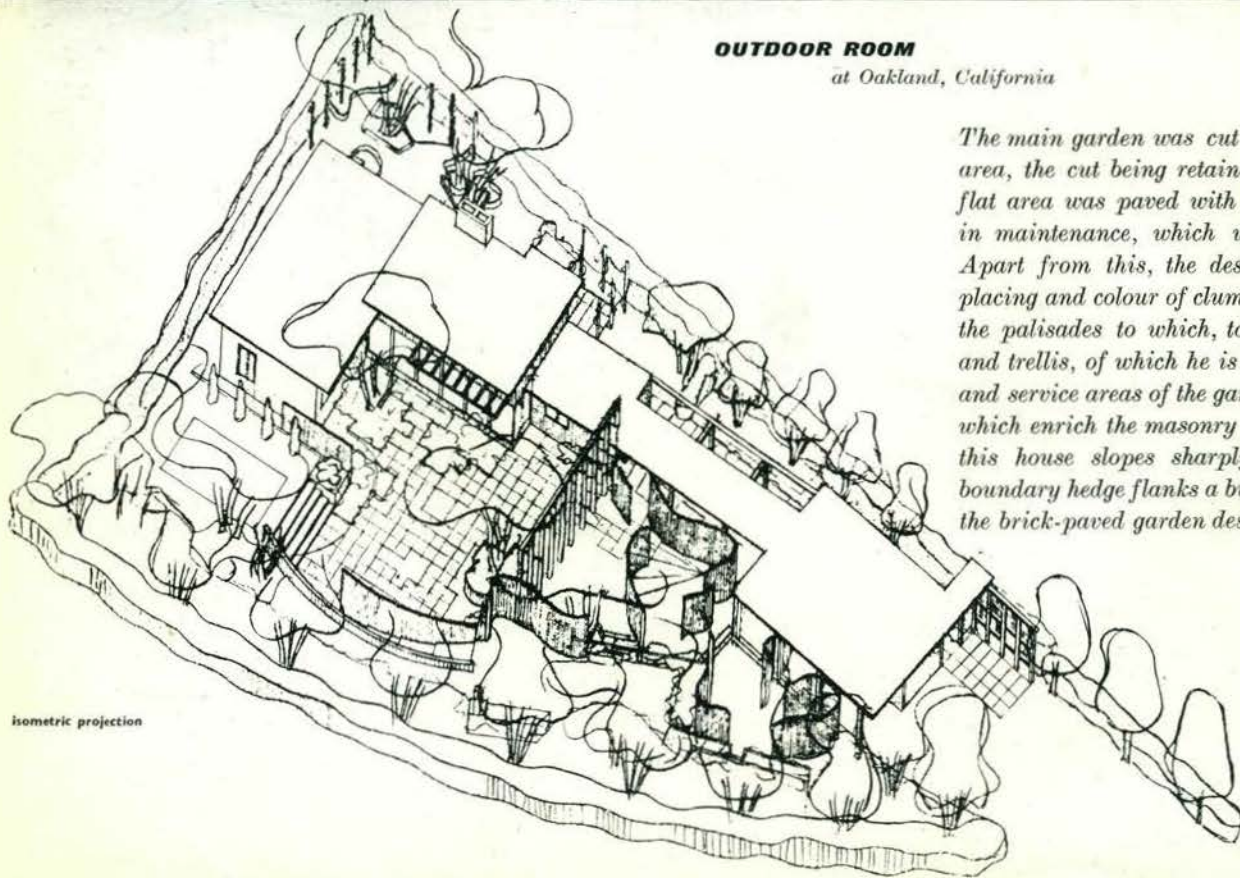
This style of garden gives a sense of space and variety by the alternation of open and enclosed areas. The flat site was originally a pear orchard. Maximum use was made of existing trees, adding other types for shade where necessary. At the front of the house the approach is paved, and the rest of the area, screened by a curved hedge, is covered with small plants. Access to the main garden is across a tree-shaded paved terrace, which in turn leads to a badminton court and a pergola. Garrett Eckbo makes great play with grape-stakes, ordinarily used to support vines, and which are rough split from wooden poles. The paved court also leads to a lawn, beyond which is a secluded sanded area containing tall eucalyptus trees. Above is the pergola and lawn, and on the facing page are plans showing the development from the original site.





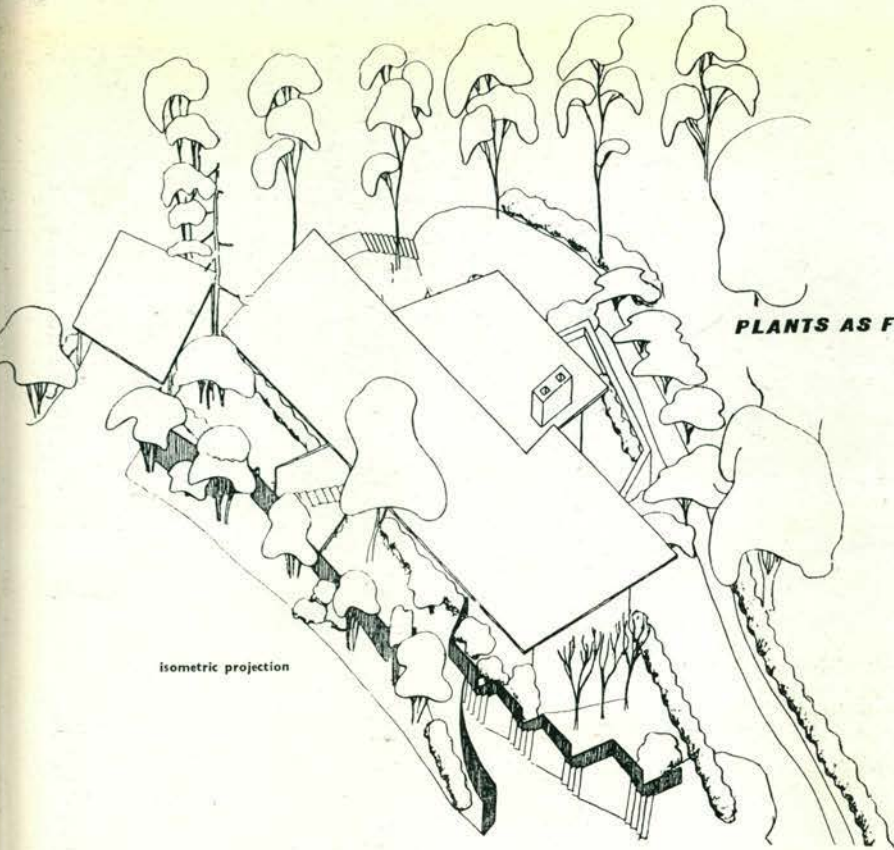
### OUTDOOR ROOM

at Oakland, California



isometric projection

The main garden was cut out of the slope to provide a level area, the cut being retained by a stone wall 4 ft. high. This flat area was paved with brick in order to minimize labour in maintenance, which was a requirement of the owners. Apart from this, the designer has depended largely on the placing and colour of clumps of various trees to gain his effects, the palisades to which, together with screens of grape-stakes and trellis, of which he is so fond, are used to hide the garage and service areas of the garden. These create interesting shapes which enrich the masonry of the walls. The triangular site of this house slopes sharply upward, and the long curving boundary hedge flanks a busy road. The photograph above is of the brick-paved garden designed, in effect, as an outdoor room.



**PLANTS AS FURNITURE**

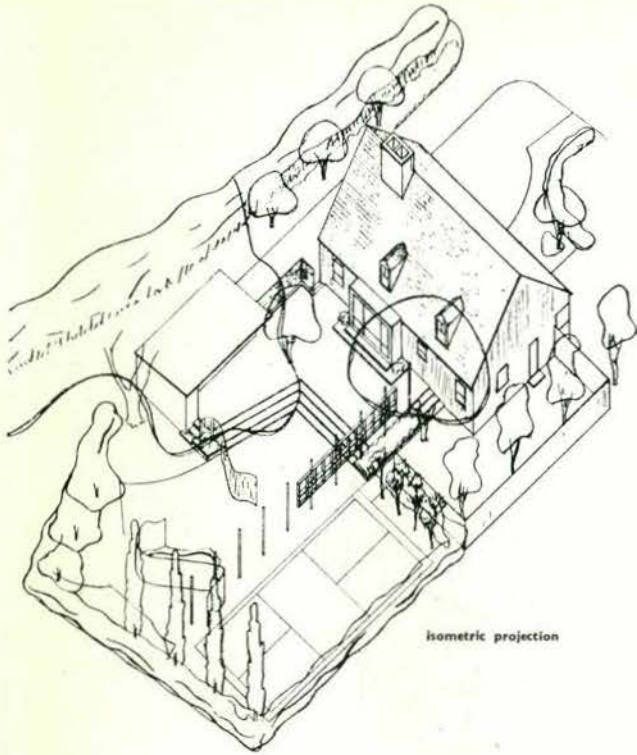
at Mill Valley, California

*Another example of terracing, with planting carried out in small areas of flat garden space, where a highly concentrated effect is gained by the concentrated use of plants in pots and shrubs. This site is very steep and narrow, and offers a superb view along a valley. It was originally covered with heavy natural growth, most of which was cleared away, although some good trees were retained. To give easy access to the house, and to provide flat garden space, careful terracing was required. Flights of steps, forming the main way from the house to the lower part of the garden, are of redwood, with landings of red rock, and a grape-stake fence acting as baluster. In various parts of the garden other flights of redwood steps lead to small tree-shaded terraces of a secluded character. These, and the level garden adjoining the house, are covered with crushed red rock, rolled to a hard smoothness and needing little maintenance.*

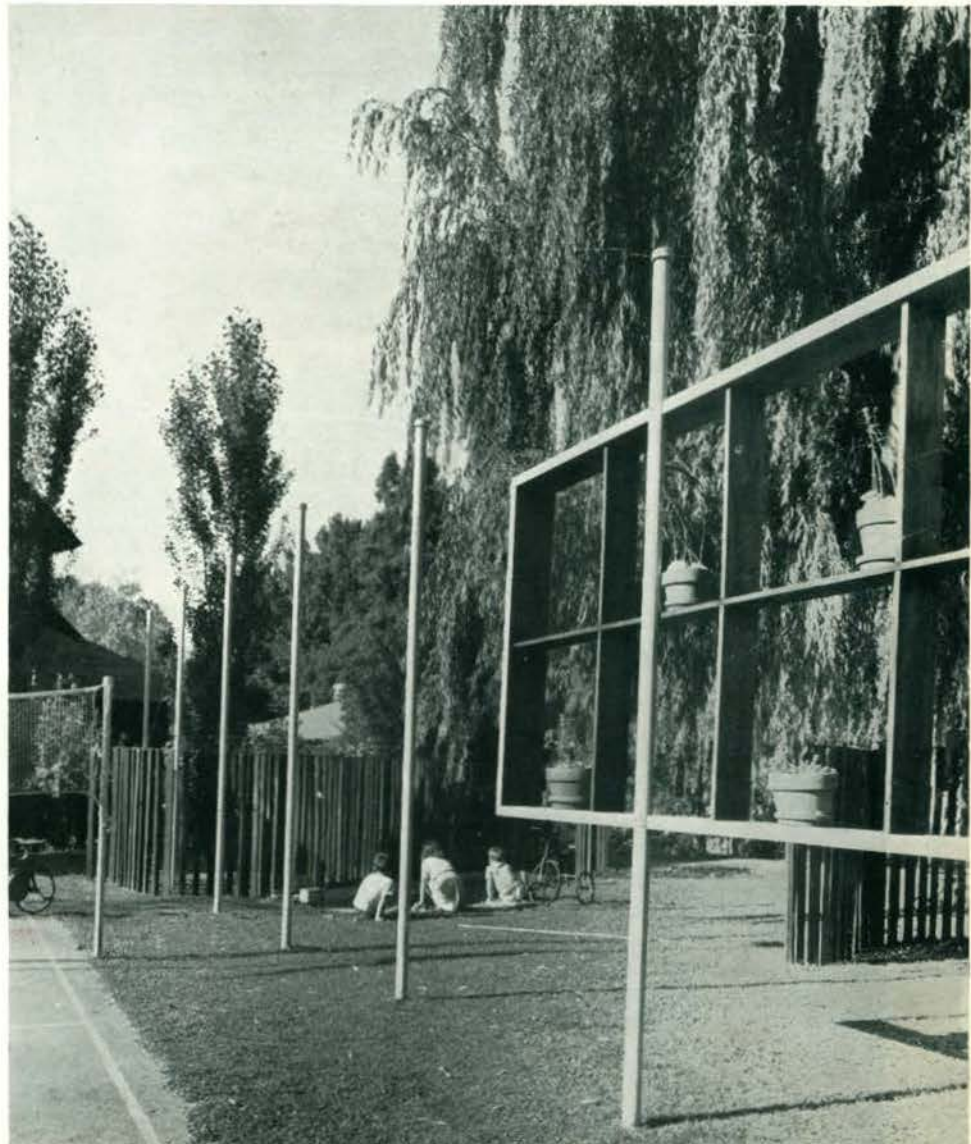
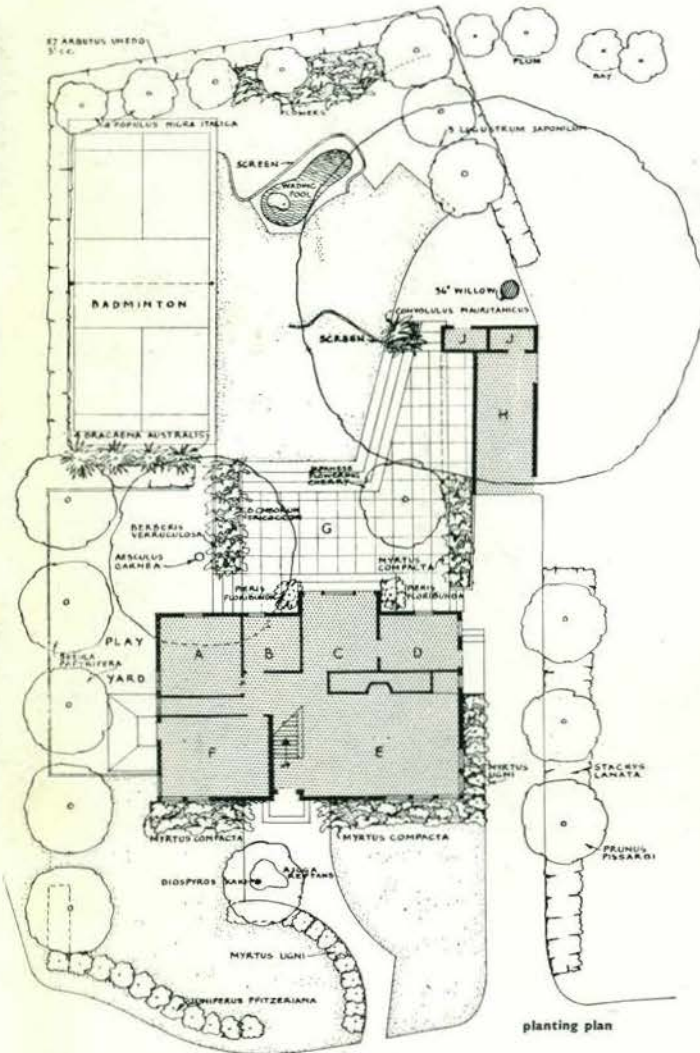


**FURNITURE AS PLANTS**

at Ross, Marin County, California



Here Garrett Eckbo has made deliberate use, as a purely decorative feature, of poles, frames, and grape-stake screens. From the house, across the lawn, marches a row of poles, and a deep trellis is hung from them, enclosing the paved terrace and providing a frame for potted plants. Screens of grape-stakes add interest to the lawn, which includes a children's wading pool. A very large weeping willow dominates the garden. The site is flat, with the house standing two feet above the general garden level, the difference being met by broad, easy steps. These shallow steps divide the garden and lawn from the L-shaped paved terrace connecting the house and shelter. The photographs show, top, the shelter and the paved terrace; below, poles and trellis, with the wading pool and grape-stake fence.



Key to plan of house: A, bedroom, B, bathroom, C, dining-room, D, kitchen, E, living-room, F, playroom, G, paved terrace, H, car shelter, J, toolsheds.

plan is that of man's orderly, but never arbitrarily rigid, geometry adapting itself to topography and climate, while seen in perspective it is a free combination of plants and structural elements. In it we have a landscape pattern at once formal and informal, aesthetically expressive and functionally effective—one which needs only the application of a bold creative imagination to produce another great flowering of the landscape tradition.

**the modern scene**

There are other sources of inspiration which the landscape designer may turn to good account. There is, of course, all the rich variety of modern painting, modern sculpture and modern architecture. Less obviously, perhaps, there is the complex pattern of our industrial civilization, with its bridges and dams and silos and power stations, while even the popular arts of the twentieth century, as exemplified by such things as jazz and women's hats, have their lesson for those who can read it.

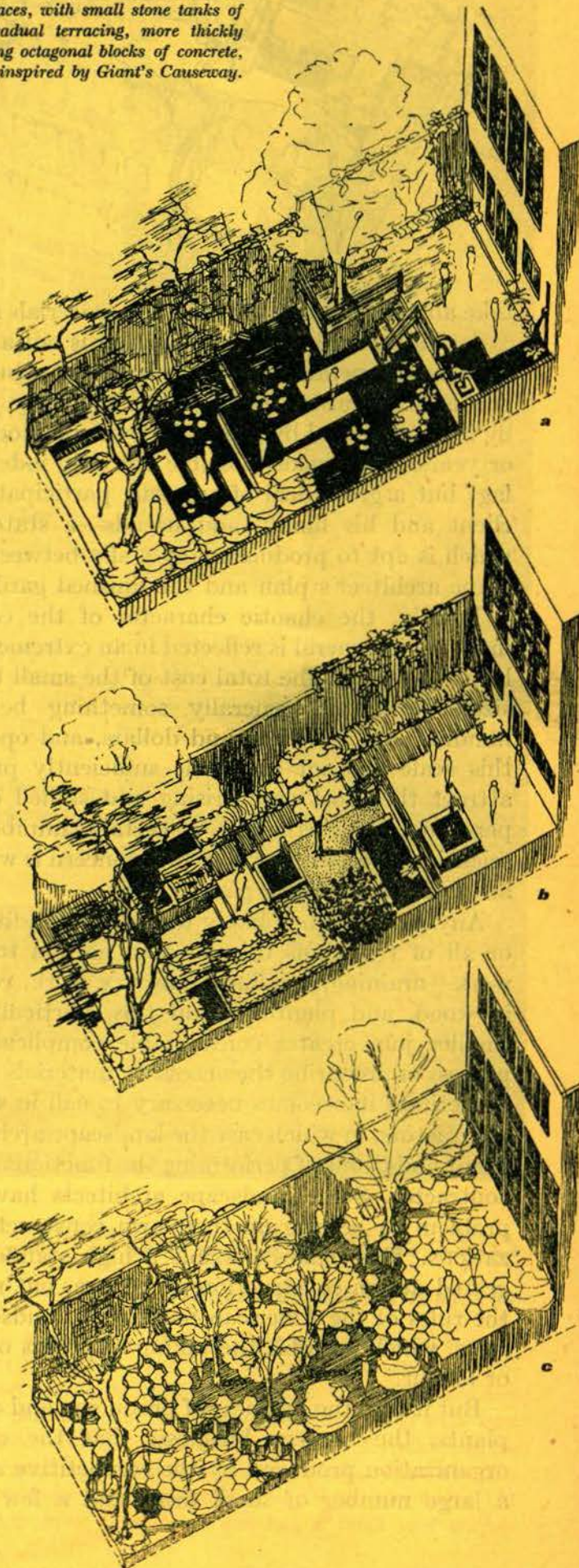
**practice in the U.S.A.**

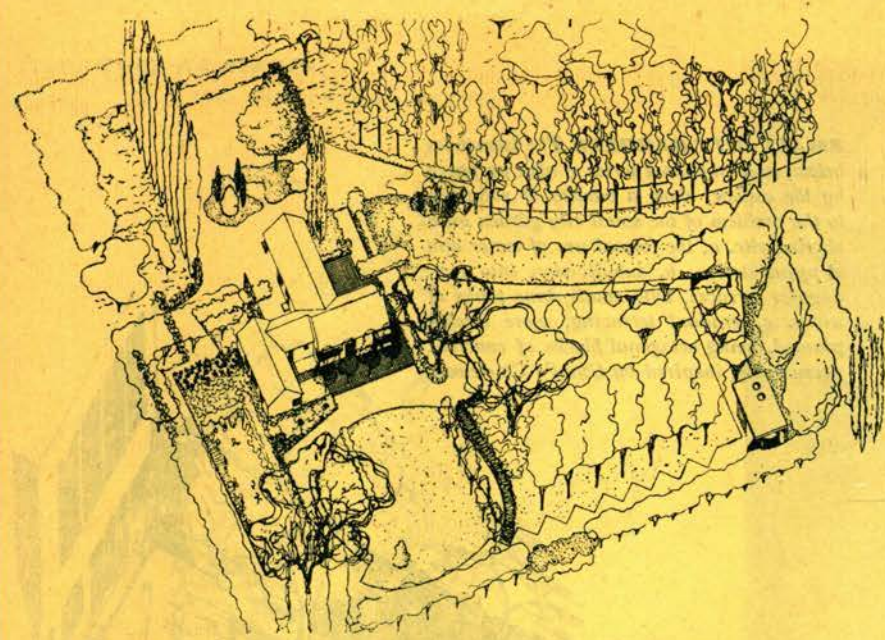
In the U.S.A., as elsewhere, it is on private jobs that the landscape designer establishes the closest relationship with his client. This fact tends to make the private garden the most intensively studied of all the various kinds of commission which come the way of the landscape designer. This in turn pushes up the time factor and the fee schedule, which has a general (though not specific) relation to time worked, and tends to make the larger and more expensive private job the most sought after. But while the large private garden may on occasion give considerable scope for experiment, smaller gardens, and the landscaping of public buildings and parks, are more directly relevant to the problems of our physical environment.

The relationship between design and execution in landscape architecture is similar to that in other branches of the construction industry, in that the plans are prepared by a professional designer and are then let to a contractor, who is responsible for their execution under the supervision of the designer. This pattern, however, is complicated by several things which stem from the fact that landscape development, and particularly landscape development on the relatively small scale of the private garden, is quantitatively a marginal and inconsequential part of the construction industry as a whole.

To begin with, there is no system of professional licensing for landscape architects. This means that the quality of landscape design is not even assured that bare minimum of protection which, in the case of buildings, results from the requirement that the drawings must be prepared by a licensed architect or structural engineer. Any enthusiastic amateur or enterprising dealer or contractor in plants, stone or redwood can hang out a landscape architect's shingle. Many of these throw in their services as 'designer' gratis, and

**SMALL CITY GARDENS** The isometrics below, selected from a series of nine prepared by the author, show a variety of solutions to the problem of the small city garden on a sloping site. a, the formal use of water and stepping-stones. b, sub-division into rectangular terraces, with small stone tanks of water. c, gradual terracing, more thickly planted, using octagonal blocks of concrete, presumably inspired by Giant's Causeway.





**MINIMUM MAINTENANCE** Planning aimed at a garden requiring a minimum of maintenance. A large part of the area was covered with plants of a hardy type, of which there is a very large variety in California, and these are considered as 'ground covers.' The area put down to lawn was kept small. A terrace around the house has a surface of bituminous paving, reached by earth ramps which also include flower beds. This terrace, with its contiguous planted areas, and with small trees set in it, forms a link bringing the garden space almost into the house. The site, about 40 miles from San Francisco, is flat, and is approximately half an acre in extent. Some original oak trees existed, and these were kept where feasible. A natural meadow has been retained, as have several clumps of trees in their original state, and an avenue of eucalyptus forms the approach drive.

take all their payment in profit on materials and labour.

Secondly, landscape development is not a single constructional operation, as the erection of a building is of necessity. A garden can be made plant by plant, rock by rock, shovelful by shovelful, over a period of months or years. This makes possible not only indefinite time-lags but a great deal of amateur participation by the client and his family and friends—a state of affairs which is apt to produce many a slip between the landscape architect's plan and the finished garden.

Thirdly, the chaotic character of the construction industry in general is reflected in an extreme way in the landscape field. The total cost of the small to medium-sized garden is generally something between five hundred and five thousand dollars, and operations on this scale are not as a rule sufficiently profitable to attract the most enterprising and skilled contractual personnel. Nevertheless, a certain number of conscientious craftsmen, whose first concern is with quality, are to be found doing garden work.

Any garden job is likely to consist of a little of most or all of the kinds of operation normal to landscape work—draining, levelling, masonry work, construction in wood, and planting. And this, particularly in the smaller job, creates considerable complication in the process of procuring the necessary materials and labour. Sometimes it becomes necessary to call in several sub-contractors, in which case the landscape architect or the client finds himself performing the functions of a general contractor. Some landscape architects have met this problem by setting up their own construction organizations. This makes possible a high standard of integrated design-construction procedure, but runs foul of the rules of the American Society of Landscape Architects, which prohibit the taking of profits on materials or labour.

But it is in the business of producing and distributing plants, the nursery business, that the chaotic disorganization produced by the competitive activities of a large number of small firms and a few large ones

becomes most painfully obvious. In California there are quite 5,000 different kinds of trees, shrubs, vines and herbaceous perennials suitable for use in general landscape work. With hardly any facilities for co-ordinated research and exchange of information, and with the unpredictability of the great American consumer market (silly from constant bludgeoning with high-pressure salesmanship and propaganda), the individual nurseryman's problems in selecting, growing and distributing these plants are anything but easy; they are, in fact, pretty nearly impossible of solution in any very rational or scientific way. Thus the general run of nurserymen fall back on sharp business practice and personal predilections based on interest, whim, or ignorance. Attempts at consultation with professional landscape architects are only too often sterile, because the latter's views about plants tend to be based on purely subjective, 'artistic' considerations, and therefore even more out of touch with reality. The net result of this state of affairs is that the landscape architect who makes a real attempt to work out a scientific and creative procedure for selecting his plants finds himself thwarted at every turn by the normal catch-as-catch-can pattern.

#### the examples

It must be emphasized that nearly all the work illustrated here has been done in the South-Western States, a region whose topography and climate differ from the rest of the continent, being analogous to those of other mild semi-arid parts of the world, such as the Mediterranean littoral, Central Asia, South Africa and Southern Australia. The climate of the South-West is one of drought and heat in summer (with a tendency to fog and wind from the sea along the coastal belt), and mild weather with rain in winter. With this there is a rich variety of plant life, while sparseness of development between urban centres leaves large stretches of hill and valley clear and open. There are considerable concentrations of population in San Francisco (2,500,000) and Los Angeles (3,500,000), but the man-made environment has little of the romantic heritage with which England is so rich. Apart from the Spanish Missions and certain country districts, the physical pattern of the area, so far as man is responsible for it, is an expression of commercialism rampant, and unquestionably substandard by any measurement based on the potentialities of American technology.