

# Site, Space and Structure

by Kim W. Todd. New York: Van Nostrand Reinhold, 1985. 189 pages; \$25 paperback.



by Paul Hanke

Space that is planned, say the publishers of this book, varies considerably from space that "just exists." This cryptic commentary provides the key to the organization of Kim Todd's book, which focuses on the analytical *process* of site planning.

While the author frequently illustrates major points (with good *and* bad examples) and gives detailed techniques for implementing a design, this is not a "how-to" landscape book in the sense of Garrett Eckbo's *Art of Home Landscaping* or the Sunset-type books. Not only does it lack comprehensive critiques of completed landscape designs, but there is nary a word about specific plants to use for various landscape purposes.

Instead, what it offers is a comprehensive view of the process to follow in successful site design. This process includes analyzing the problem, developing and evaluating proposed solutions, and considering in detail such factors as space, climate, energy conservation, circulation, grading and drainage, and appropriate plant materials.

Todd opens with a chapter devoted to the design process itself, from programming to implementation and final evaluation. Even in this general overview, the author provides practical, specific advice.

Recommending what notes to make on early drawings, for example, Todd points out that it's not enough to note simply "cold wind" on the drawing without commenting on the *problem* this creates—such as "harsh walking conditions for pedestrians." He advises not to prescribe a windbreak at this point, because a better solution may be found after considering all the natural, manufactured, social, psychological and aesthetic factors.

From this general overview, Todd proceeds to more in-depth consideration of the basic elements of site planning, often weaving information into several interrelated chapters.

In discussing negative (open) and positive (enclosed) spaces, the author notes that the quality of three-dimensional forms is determined in part by lines (jagged mountains or rolling hills, for example), and that spatial perceptions differ among people. These perceptions can be modified by natural forces like the seasons or by conscious design of ground plane, overhead canopy, and vertical landscape elements.

I myself have observed how "psychologically exposed" and physically uncomfortable decks seem compared to old-fashioned porches with a roof and railing, for example. The difference is astounding. It seems that even a simple trellis would improve the livability of most of the add-on decks seen today.

Again in this chapter, Todd includes useful rule-of-thumb guidelines for establishing a sense of scale, stating that outdoor spaces require eight to 10 times the physical area to achieve the same "feeling" as the equivalent indoor area. Rules of thumb also are given for distance, such as how height affects space perception and the design of openings.

We must also consider whether visual elements or human activities will dominate the outdoor spaces, views and "vistas," says Todd, so that the design can be organized along various axes and achieve a balance between the formal and

the informal.

Perhaps most important—at least in terms of the space Todd devotes to it—is the transition between the built and the natural environment. Attention to this zone, be it large or small, helps to unify the design and ensure its overall success.

One example of this thesis can be found as you approach Boston from the interstate. The city seems to resemble a bag of architectural pieces that have been carelessly dumped into the environment. But the view is quite different in many neighborhoods, which are unified by many common elements despite variations between buildings.

Attention to detail is also important, Todd notes. For instance, benches without backs, which we see much too often, are more useful as "sculpture" than practical seating. And they often are poorly placed without regard to sun or shade, or private or exposed settings.

The next chapter is devoted to climatic analysis and energy conservation, precipitation in the four major climatic zones in the U.S. and how to control such forces as wind, sun and temperature. Detailed, practical consideration is given to subjects of interest in cold climates, such as windbreak design and natural snow fences.

The circulation of pedestrians and vehicles (motorized and nonmotorized) is analyzed in the following chapter, which looks at the pros and cons of linear, grid, radical and "organic" circulation models.

The importance of "progressive realization" (i.e., changing views as we approach a building) is discussed, along with the relationship between speed and appropriate landscape detail. This chapter and those that follow end with specific discussion of how the design process outlined in Chapter 1 applies to the subject at hand.

Useful, practical information is included with theoretical discussion and examples, such as formulas for exterior stairs and the design of horizontal and vertical curves, parking-lot dimensions, surface runoff and cut/fill calculations.

The discussion of plant materials comes rather late in the book, reflecting the fact that these are but one element in successful landscape design. The discussion is broad, focusing on such concepts as the effects of scale, texture, color, seasons and plant forms rather than the use of specific plants. General guidelines for low-maintenance design are given along with a discussion of the "architectural" use of topiary and hedges.

The final chapter on grading and drainage is the most technical, and in that sense perhaps the most useful. Several case studies are included along with a chart showing slope limits for activities and applications.

While much of *Site, Space, and Structure* will seem basic to anyone with some experience in site analysis and design, it provides a fine overview of the field and a comprehensive look at how all the elements relate. There is sufficient technical information—and especially design methodology—to make the book a good reference for planners, environmental designers, civil engineers and architects, although professional landscape architects may find that it has limited usefulness. ■