CHAPTER 1

INTRODUCTION

This book addresses the most typical living arrangements in the United States and many other industrialized countries, from the freestanding house to the high-rise apartment building. The authors are architects and planners who have designed and planned a variety of residential communities. They will explain what they believe makes "a good place to live" and how this has been accomplished with different housing types in settings ranging from rural to urban.

THE CONCEPT OF COMMUNITY

The focus of the book is not unique, single-family, custom-designed houses but, rather, groups of associated dwellings that form successful communities and serve as useful models for planners, architects, and developers working on larger projects. We are concerned with the individual dwelling—its functionality, buildability, and appearance—

Successful communities come in all forms and settings: a tree-lined neighborhood in Abacoa, Florida (right); a pedestrian-friendly street in the townhouse community of Hearthstone Mews in Alexandria, Virginia (bottom left); and a view from the river of Battery Park City in New York City (bottom right). Abacoa designed by DiVosta Homes; photo by Goody Clancy. Hearthstone Mews by Torti Gallas and Partners, CHK; photo by Richard Robinson. Battery Park City, photo by Philip Dyer.

▲ *Street-level commercial space at the base of mixed office and residential mid-rise housing at The Heritage, Boston, enlivens the neighborhood and serves building residents. The Architects' Collaborative. Photo by Goody Clancy.*

and the way these dwellings when aggregated create whole streets, neighborhoods, and communities. We believe that balancing private and public space creates a good place to live. A large, luxurious house in a hostile environment can become a fortress and a prison for its occupants, just as the most beautiful public amenities cannot compensate for inadequate shelter. Chapter 2, "Housing and Community," discusses the elements that make a successful residential community.

The type and quantity of shared amenities planned for a residential community depend on the number of residents who share (and can therefore support) them. These amenities might include recreation and play areas, as well as libraries, schools, and shops. Someone building fewer than 50 new homes (whether freestanding or in an apartment building) will not be able to provide as many communal facilities as the developer of 500 or more units. But there are ways to design a community in the smallest as well as the largest project.

Communities differ widely depending on their traditions, location (whether urban or rural), and demographics (e.g., individuals or families). We believe that density (the number of households accommodated per acre) is a key to the character of a community. This book, therefore, is organized by housing types from least to most dense, from the single-family house to the high-rise building (Chapters 3 through 6). Our experience shows that a mixture of housing (and thus family household) types makes for a more lively community in most cases, and therefore this book emphasizes mixed-use and mixed-type communities. *Mixed use* refers to the proximity of residential development to schools, shops, workplaces, and cultural sites, a pattern often found in traditional small towns and cities. What constitutes mixed use can range from shops at street level in a large apartment building to the introduction of residential buildings into a shopping and commercial development to new town development with these activities located close to one another.

Mixed-type housing refers to developments that include a range of dwelling unit types that appeal to different kinds of occupants, such as studio apartments, flats, and detached homes. Many communities are both mixed-use and mixed-type.

SPECIALIZED HOUSING TYPES

This book does not cover housing types developed specifically for the elderly (retirement or assisted living) or the young (student housing). Both of these segments of the population, however, can make vital contributions to the life of any community and should be considered in mixed-type and

mixed-use developments. Elderly people and students tend to be out on the street at times when the working population is not (midday and evenings, respectively) and both enliven and benefit from downtown locations that may appeal less to families with children.

Starting with the example of the Savannah College of Art and Design, which moved into a series of renovated historic buildings in downtown Savannah, Georgia, in 1979, colleges and cities have come to see the reuse of older buildings (department stores for classrooms, outmoded office spaces for dormitories) as opportunities to repopulate deserted downtowns. Similarly, unused, older downtown hotels and neighborhood elementary schools are often converted successfully into senior housing, providing places where downsizing elderly households can stay within their old neighborhoods and live close to public transportation.

▲ *Community plaza at Mizner Park, Boca Raton, Florida. A new community hub can be created by adding housing and other uses to a failed shopping mall. Photo courtesy of Cooper Carry, Inc.*

Housing specifically designed for elderly and student populations is covered in other Wiley Building Type Basics volumes: *Building Type Basics for College and University Facilities* by David J. Neuman and *Building*

◀ *The new town of Celebration, Florida, has a successful mixed-use town center. Cooper Robertson & Partners and Robert A. M. Stern Architects, master architects. Photo by Victor F. Ortale.*

The 1957 Monsanto House of the Future incorporated new materials and construction techniques in a prototype for mass-produced housing. Photo courtesy of Goody Clancy.

Type Basics for Senior Living by Bradford Perkins (both published by John Wiley and Sons, New York, 2003). This book discusses the adaptive reuse of older structures for housing more generally (see Chapter 7, "Adaptive Reuse").

DIRECTIONS IN HOUSING CONSTRUCTION

While writing about the best housing practices of today, we also want to look to the future. What new ideas are on the horizon? Our firm, Goody Clancy, was established in 1955 to build a House of the Future for Disneyland in Anaheim, California; it was ultimately visited by over seven million people. Based on building materials research by the late Marvin Goody and others at the Massachusetts Institute of Technology (under sponsorship of the Monsanto Corporation), the project explored the uses of plastic in housing. The dramatic forms of that housing took advantage of the particular qualities of plastic. It was one of a number of attempts by Goody Clancy and others to develop dwellings that could be prefabricated in factories and erected quickly and in large quantities under many different site conditions.

However, prefabrication (whether plastic, concrete, steel, or other materials) requires a large market within an economical shipping distance of the factory, something that is difficult to provide unless by a government client (as in the former Soviet Union). In the United States, prefabrication of flat

At Kronsberg, a sustainable, mixed-use community in Hanover, Germany, storm water is collected in ponds. In the background, a residential building has movable sunscreens to control heat gain. Willen Associates Architekten. Photo by Karl Johaentges.

components (building walls, trusses, etc.) that can be shipped easily has traditionally been more successful than prefabrication of whole units. Manufactured homes, also known as mobile homes or trailers, have, however, become a staple of low-cost American housing. Mobile homes are built to separate codes and valued as personal property. Another type of prefabricated housing, modular housing, has seen significant market growth in the last decade. Modular homes are built in factories to the same codes as site-built housing, and they are often indistinguishable from site-built homes once completed. They consist of one or more modules narrow enough to travel along a highway and that can be expanded or combined on the site.

The exploration of new materials and methods of construction has continued since the mid-1950s with only modest changes in building methods and greater progress in new materials and the prefabrication of building components. Much of the current interest in new building materials has focused on those that are most sustainable—for example, recycled denim that can be used as insulation or compressed earth that can form a load-bearing wall. The Massachusetts Institute of Technology (MIT) is exploring ideas for new digital and building technologies that make domestic life easier (enabling people to keep house, shop, and manage resources, often from remote locations) and that help conserve energy through better controlling and monitoring methods. Their goal is to create responsive environments through sensing and communication media, ultimately making smart houses for everyone and in particular allowing the frail elderly to live more independently.

Conventional means and methods of building housing are still the most common and vary with the type (low-rise vs. high-rise)

and with local conditions. Structural, mechanical, and other building systems share similarities across different housing types. We discuss these in Chapter 8, "Building Systems," noting specific variations for the different housing types.

Sustainable design in housing, as in all architecture, extends beyond simple energy conservation to a concern for all resources. It can be addressed in a variety of ways that include building near transit to reduce automobile dependence (as at Prairie Crossing, Grayslake, Illinois, a case study in Chapter 3); reuse of existing structures (renovation and adaptive reuse); use of recycled materials; and conservation of land and water.

We highlight these features where they appear in the projects selected as case studies.

FINANCING HOUSING

A house is the most expensive item that most people will ever own, typically absorbing one-third to one-half of household income when mortgage and other payments are counted. This heavy financial investment may be one reason that most buyers in this country choose a more traditional or historicist style over a contemporary one. Traditional designs are assumed to have a better resale value, and most developers are reluctant to build for the estimated 5–10 percent of the house-buying public who prefer a contemporary modern style.

Financing plays a critical role in determining what is built and how it is constructed. The government subsidizes housing construction in numerous ways: tax deductions for mortgage payments (to encourage home ownership), tax credits for the reuse of historic structures (to encourage preservation), and direct subsidies to produce low-income housing for those who might otherwise be unable to afford to rent or buy a home. In Chapter 9, "Financing and Feasibility Issues," we address some of the typical means of financing housing—whether subsidized, market-rate, or luxury—and discuss the process of moving from design ideas to completed projects.

This book broadly covers many types and combinations of housing. Case studies of successful communities, drawn mostly from around the United States, illustrate key points about each housing type. The case studies do not represent a comprehensive survey; instead, they provide a small sampling of valuable examples. The bibliography will guide those who choose to explore any aspect of community housing and development more deeply. As we know, the study of housing is a lifetime project.