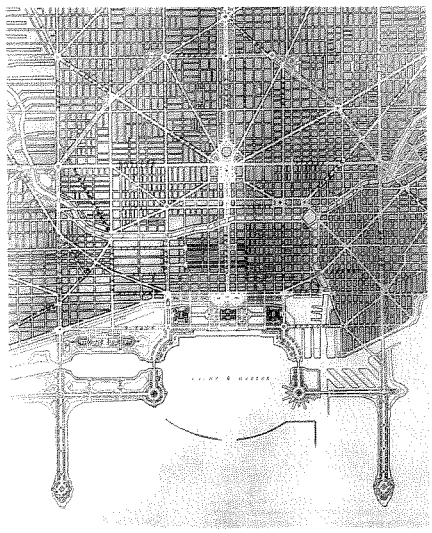
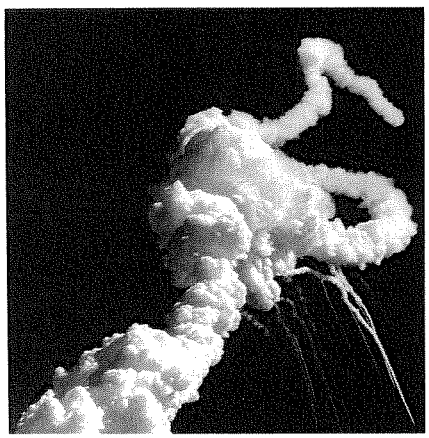
Beyond the Frontier I

Anne D. Nissen





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Traditional American Notions about Future Living Places

The first European colonizers of North America imposed well-ordered, permanent communities upon the land of the northeast, communities that were bound together by civic ideas directly related to religious beliefs. This physical organization was quickly overtaken by a quest—the galvanizing promise of the American frontier, a place always just beyond the sight of the men who began to propel their families westward. To them the West would be a garden of paradisal pleasures where harvesting would consist of pulling ripe fruits off wild trees, and plentiful game and water supplies would be nearby. The frontier was a vision, neither a real nor a built place. And in practice the search for it could not be sustained; families had to settle down in order to achieve a state of stability in which to raise children as well as crops. One could not wait for the promised land to eat.

By 1893, when the western frontier was declared officially "closed" by Frederick Jackson Turner at the World's Columbian Exposition, Americans had come up with a new repository for their aspirations: the city. It was a place of promise and striving, a place, it was believed, where all would succeed if they just worked hard enough.[1] And the urban fabric itself was now believed to be an organism that could be manipulated to achieve any desirable form. To the progressive mind it was all just a question of time.

But this optimistic image faded in the face of economic pressures, and the American family withdrew to suburban lands. These were places in which housewives were to run quasi-scientific, efficient homes full of well-nurtured children. They were never places of the future, really—rather, they largely existed to shore up an idea of the family as a private unit unaffected by new social and economic realities.

By the 1960s, seemingly prompted by an upsurge of faith in new technologies, Americans reincarnated progressive urban ideas, this time wearing technological dress. One set of proposals offered during the 1960s and 1970s suggested the creation of "wired cities." The wired city was to foster an electronic superdemocracy. It failed to deliver on its promise, as its theorists discovered that simply introducing networks of information conduits did not change the world. Concurrently "space, the final frontier"[2] became a compelling national vision. Once a small number of astronauts were successfully catapulted there, however, it became hard to sustain a vision of space that held promise for Americans at large. That the colonization of space might happen within anyone's lifetime came to appear extremely unlikely. And since then, what was once seen as pure space has been sullied by the introduction of surveillance and defense systems, and the Challenger disaster. Technology no longer can be seen as neutral.

It seems that many Americans have

lost some of their optimistic faith that the noble individual[3] will continue to be able to wrestle with the future, and win. So of what future places can Americans dream?

Current Designs for the Parts of an American Future City

Two major movements that forthrightly deal with notions of the future are presented here, as well as a third implicitly concerned with the future. None are overwhelmingly guided by large-scale urban thinking. American planners by and large seem disenchanted with large-scale interventions into the urban environment (think of Pruitt-Igoe); with contemporary critics, they share a common agreement that there are no overriding answers. Without a controlling scheme it is not easy to address a concept like that of a civic-minded "information city." Such a vision cannot seem to hold the American imagination.

Americans have instead largely taken to rediscovering, recycling, and "revitalizing" their cities. Even the World Future Society has stated that "the 'city of the future' will bear little resemblance to the science-fiction images from the past. Rather, cities will increasingly build on their own unique characteristics, as represented by their historic downtown areas."[4]

At first glance the architectural world seems overrun with those looking "back to the future," to days of pitched roofs, gingerbread detailing, and happy, perfect families. But behind this glossy

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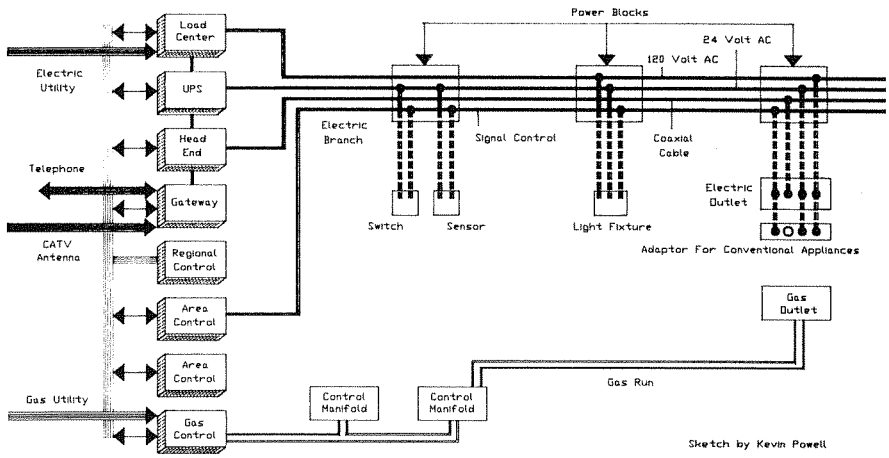

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1 Plan of Chicago, 1909

Plan of the complete system of street circulation; railway stations; parks, boulevard circuits and radial arteries; public recreation piers, yacht harbor, and pleasure-boat piers; treatment of Grant Park; the main axis and the civic center, presenting the city as a complete organism in which all its functions are related one to another in such a manner that it will become a unit.

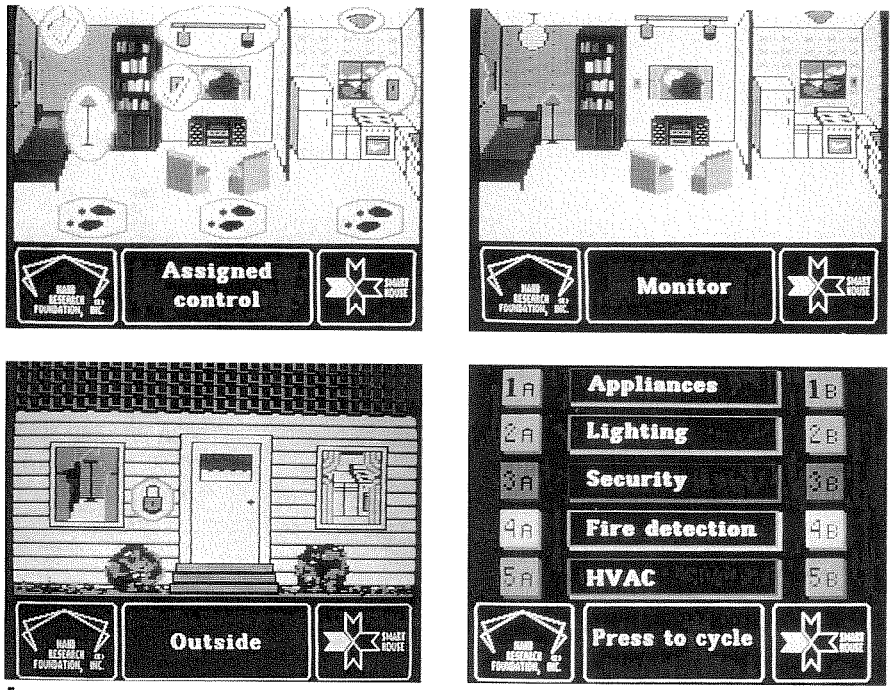
Reprinted from the *Plan of Chicago,* by Daniel H. Burnham and Edward H. Bennett, 1909 (Da Capo Press, 1970).

2 Space Shuttle Challenger Accident, January 28, 1986

Photo courtesy of NASA.

3 First constructed "smart house," built in Bowie, Maryland, by the Smart House Development Venture, Inc., with the Gas Research Institute, 1987.

4 Wiring systems make these constructions possible.



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5 Centralized microprocessor control
The first smart house products are targeted for single-family, detached home construction in 1990. Reprinted from the *EPRI Journal*.

6 S.M.I.L.E. Preschool and Elderly Congregate Housing
Rehabilitation of 1960s nursing home, Dorchester, Massachusetts, 1987. The Women's Institute states that "the proposed design is planned to allow each of the two programs to function independently, while benefitting from the presence of the other. The two age groups in the building will enhance the 'homeyness' of the housing as well as provide the potential for an extended family for the children of single parents," as well as replacing loneliness as the chronic companion of the elderly.

Developer: S.M.I.L.E. Preschool, Roxbury, Massachusetts.

Project Manager: Women's Institute for House and Economic Development, Boston.

Architect: CityDesign Collaborative, Boston (Associate and Project Architect: Leslie Moldow).

7 Entry facade, elevation

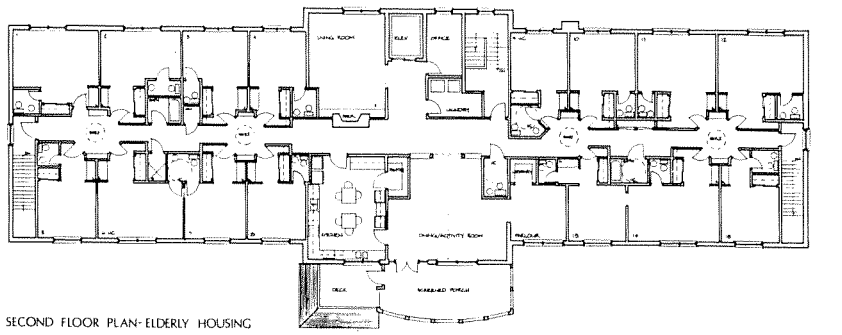
surface, other responses emerge. One is a response recognizable not so much by exterior image as in plan: the house or office as grand appliance. Another is a response driven by demographic shifts, which often does not wear an identifying look. This response happens on the smallest of scales. Last is a critical view concerned with providing formal representations of a more abstract future—often produced by younger "design intellectuals."

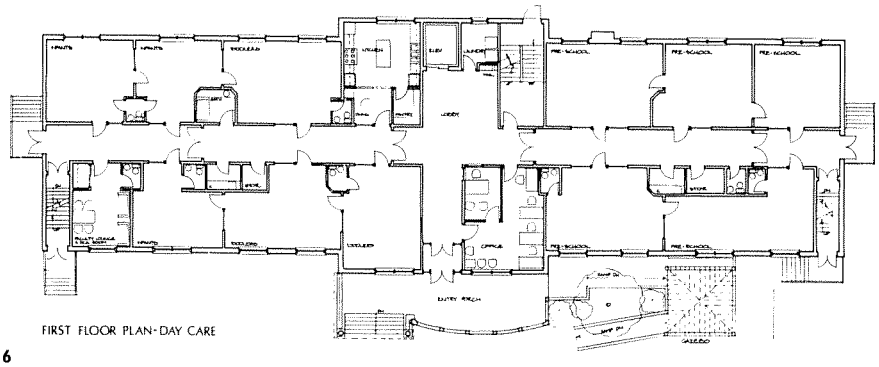
The "Smart" Environment

So-called smart buildings are being developed by manufacturers of home and office products, utilities, academics, and computer industries. Such work is evidence of a belief that foreseeable technological processes can better the American dream and the American office. Development of the smart house follows the initiatives toward the office of the future.

So as not to appear too new, and to appeal to the broadest possible consumer group, the recent demonstration house built by Smart House Development Venture, Inc., was clothed in traditional garb.[5] By the 1980s a host of technological items had made their way into many homes (stereos, personal computers, microwave ovens, burglar alarms, cable television, etc.). As the wiring needed to accommodate this electric activity proliferated, it became desirable to organize it all into a system. From there, it was a simple step to considering what opportunities that consolidation had opened up.

Smart house developers decided that the control of safety, energy, security, and comfort would be the key targets of their R&D. Lights and ovens would be automatically turned on and off; sensors would monitor for security; in a way, the "smart" house replaces the physical contributions of the housewife. Since any function in a smart house can be controlled or operated at any place, it is possible, technologically speaking, to rethink traditional ideas of spatial and social configuration. How flexible Americans' notions are about what the house *should* be remains to be seen, as does the size of the market for such equipment. And, of course, the American house is already under the siege of pressures that may transform the need for single-family homes in general.





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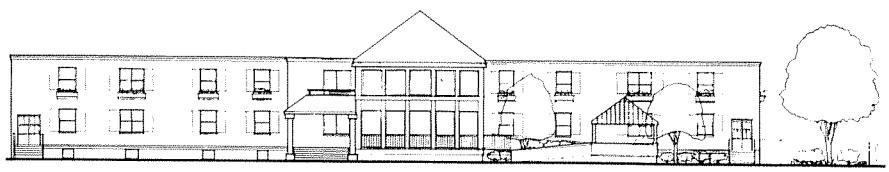

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Dreams and Emerging Realities

Already the traditional nuclear family is a thing of the past. Today less than 10 percent of the population lives in a family unit composed of a breadwinning father, a full-time homemaker, and children. Demographic shifts have already spurred the development of planned retirement communities, so-called mingle housing, and cooperatives. But fewer people can afford to buy such housing, or indeed any permanent, decent place in which to live.

For instance, the poverty endemic to single-parent families—the vast majority of which are headed by women—precludes their being a market that provides developers with return on their investments.

Since federal support for low-income housing has been largely curtailed, the housing situation for these and other nontraditional families is bleak. Responses to this reality are hard to find.

Although these new family types already exist, popular imagination is just beginning to catch up to this fact. But architects involved in the production of environments for people with limited income are already working on architectural issues that demographics show will only grow in importance. Often the resultant design work can be characterized as humanitarian, participatory, and incremental. Physical symbolization would seem to be the last concern; the luxury would be to have the needs met at all. Where such projects have been built, the localities into which they have been inserted have often insisted that they "blend in." But one could also say that these designs offer implicit critiques of architecture as recently conducted.

One group that has won recognition for its efforts to assist in the development of innovative housing is the Women's Institute for Housing and Economic Development, Inc. (WIHED), of Boston. The Women's Institute was started by an architect, a lawyer, and a banker committed to providing housing and economic development to low-income groups. The Women's Institute seeks to provide low-income families with houses that provide support and relief. Its other important goal is to provide a feeling of stability, of security, so that residents will no longer feel threatened with dislocation due to lack of finances. This feeling of security is a prerequisite for autonomy. All WIHED projects incorporate opportunities such as job training or access to child care within the housing environment.

The Women's Institute is presently working on a rehabilitation project that combines daycare for children with congregate housing for the elderly in one building. The floor that will house elderly residents provides spaces for communal activities and for privacy, as well as access to the daycare center below. Architect Leslie Moldow commented that because this project had a minimal budget, which should come as no surprise, she had to make the most of the existing building figuration. But to her mind a building's success is determined by the quality of its spaces. These, she believes, should be determined by timeless, fundamental human needs for such things as light, views, and small, comfortable living areas. If all such needs have been met, an underlying reason will show through to provide innate, not *a priori,* figuration. In this view, the look of future congregate buildings would be determined by future needs, as well as by future building materials and technologies. Moldow's focus on determining an architectural form from inside outward is indicative of the holistic response cited above.

The Boston city government is in the process of testing a program whereby vacant city lots are used for affordable family house projects, usually three to six families per lot. These homes are bid on by private builders and developers. What is unique about this civic program is its emphasis on the small-scale setting and local community decision-making process. The designers in the city's facilities department feel that the community has to be integral to the process; the dictates of a central agency would neither be welcomed nor successful. The designer's hand is to fade into the background.

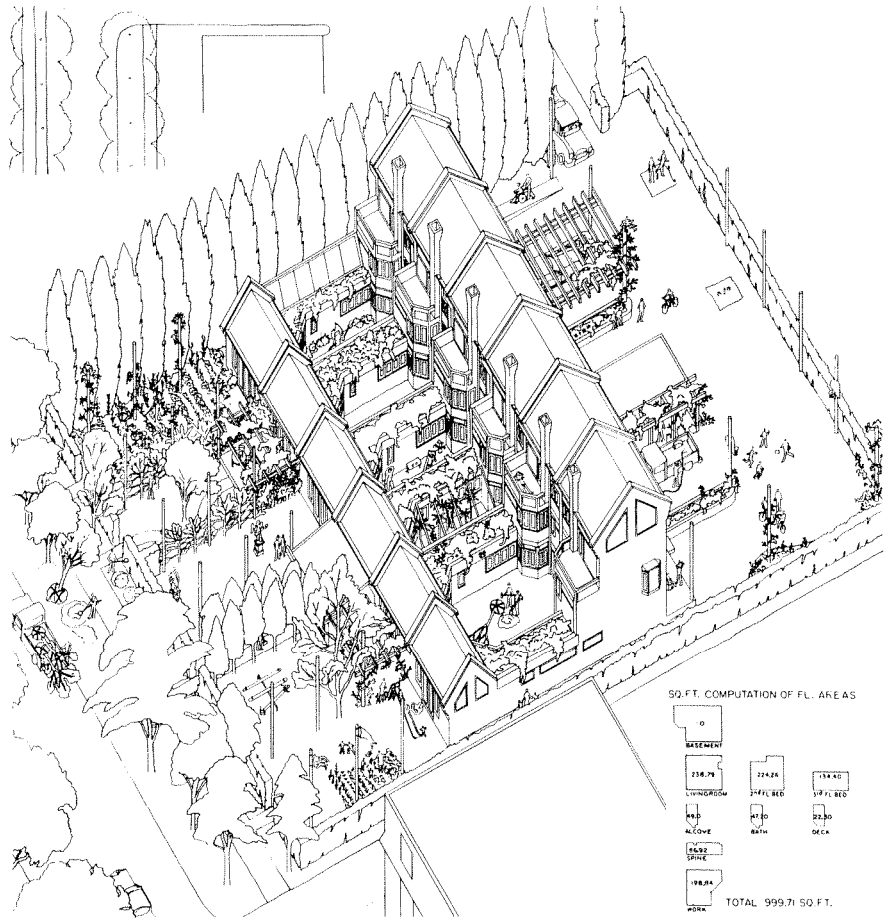
The city is most involved in creating housing that will be sold. Boston's public facilities department views its current foray into housing production as a limited mandate to reduce the risks of the often small developer or builder in such a market. Through this localized process it can encourage a response to the needs of the shifting and evolving demographics of home owners.

The New American House competition sponsored by the Minneapolis College of Art and Design and the National Endowment for the Arts in 1984 was a widely heralded response to emerging housing needs. The program required the 1,200 registrants to think of house forms that would work for members of non-nuclear households who might want or need to do professional work at home. The winning entry, submitted by architect Troy West and professor of planning Jacqueline Leavitt, was composed of six units, one of which was flipped to provide enlarged space for a daycare

facility. Each unit contained a work area attached to the living portion of the house via a kitchen spine. Continuing their previous interests, West and Leavitt provided "private as well as shared space, areas for personal use and places where people could earn a living working at home, provisions for child care and adult socializing, and . . . connection to outdoor spaces."[6]

The difficulties encountered in trying to get this project built have shown that the existing marketplace does not adapt well to new ideas. The long time it has taken to get variances and to explain the project to a myriad of interested parties has driven up costs. Unfortunately, the development was refused public assistance for the child care component and for units for lower income single parents. The project was to prove itself entirely on a market basis. As Leavitt points out, the majority of the population that the program identified (single parents) have never had a share in the housing market.

In order to make the housing available for a few lower income people, several work spaces were made into small apartments. But even so, as Leavitt has written, "It is highly unlikely that low-income single parents are going to live in the New American House."[7] That the project will be built at all is due to the active role played by architect Harvey Sherman. He organized the competition, was awarded National Endowment for the Arts funding, ran the competition, and, when it became clear that the final design would not wend its way through



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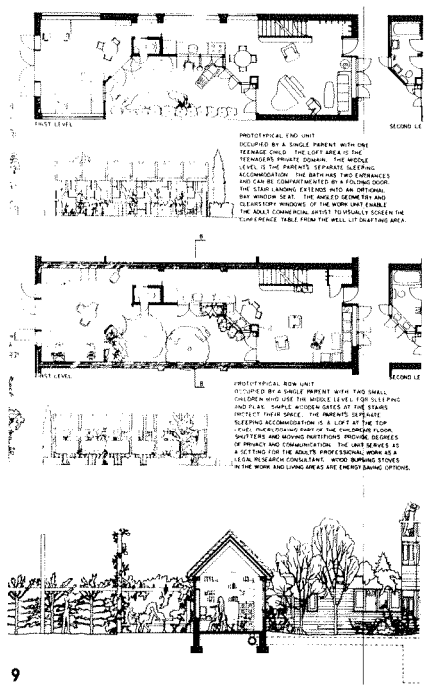

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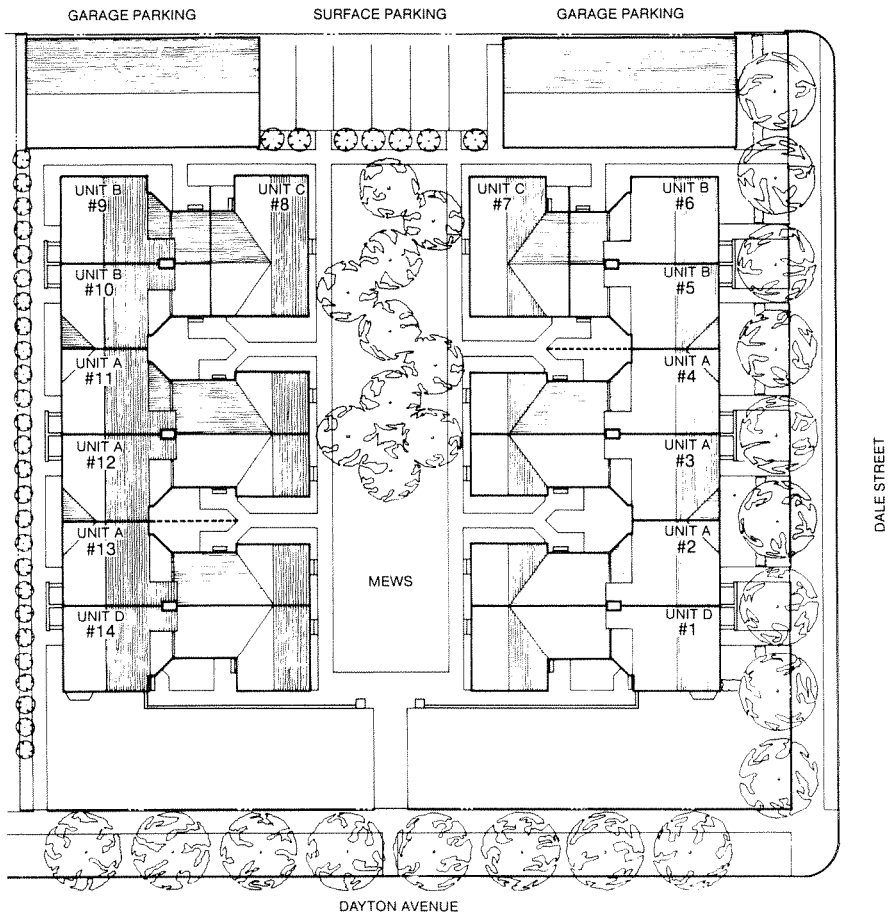
8 A New American House competition, winning entry by Troy West and Jacqueline Leavitt, 1984

Prototypical clients were visualized as, for instance, "a single parent computer scientist, whose business has expanded, has doubled the work area and glazed the private outdoor space for a wintergarden. Her two children have grown to need separate bedrooms . . ." And "a legal research consultant has covered the front of his work space with a grape arbor so he could have meetings outside and allow his two small children to play undisturbed in the private outdoor space."

9 Prototypical end unit plans



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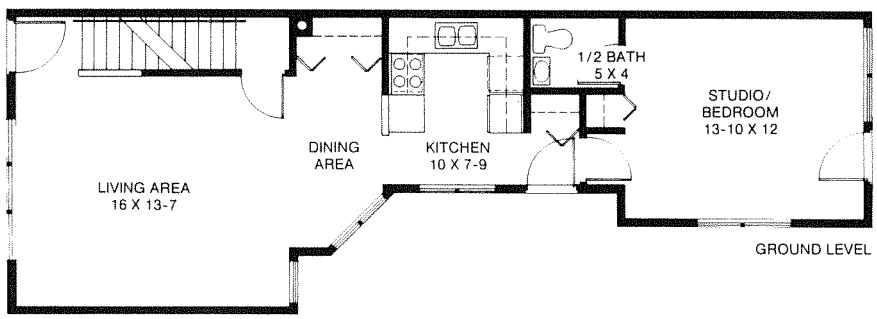

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10 Dayton Court Site plan

Transformed into Dayton Court, the New American House will be built on a larger site. As the New American house was developed for this site, the community voiced concern that the project might in the end be an incursion of gentrification. Therefore two types of small apartments have been included. The units with separate studio/work place areas (most similar to the original proposal) make it possible for two households to live under one roof, sharing kitchen and dining and living areas, if they so wish. It is hoped that successful construction of Dayton Court will encourage other innovative housing projects at decreasing costs.

11 Ground level plans, Unit A, Dayton Court

the market without special coaxing, became codeveloper himself. Such initiative seems necessary for such other solutions as pooling funds for limited-equity cooperatives. Perhaps the architect of the future will have to increase his or her involvement in such endeavors. Affordable congregate housing would give architects clients to create images for, as well as providing better-tailored housing for more of America's future families.

Notes

1 Philip Fisher, *Hard Facts: Setting and Form in the American Novel* (New York: Oxford University Press, 1985), p. 131.

2 As Star Trek put it.

3 Traditionally associated with the male.

4 John Fondersmith, "Downtown 2040: Making Cities Fun!," *The Futurist*, vol. 22, no. 2 (March-April, 1988), p. 9.

5 Built in cooperation with the Gas Research Institute. Further information on the Smart House L.P. can be obtained by writing 400 Prince George's Blvd., Upper Marlboro, MD 20772.

6 Harvey Sherman and Elizabeth Springs, eds., *A New American House, Architectural Design Competition, 1984: Catalogue of Winning and Select Designs* (Minneapolis: Minneapolis College of Art and Design, 1984), p. 4.

7 Jacqueline Leavitt, "Two Prototypical Designs for Single Parents: The Congregate House and the New American House," in *Alternative to the Single Family House*, edited by Karen Frack and Sherry Ahrentzen (New York: Van Nostrand Reinhold, in press), p. 28.