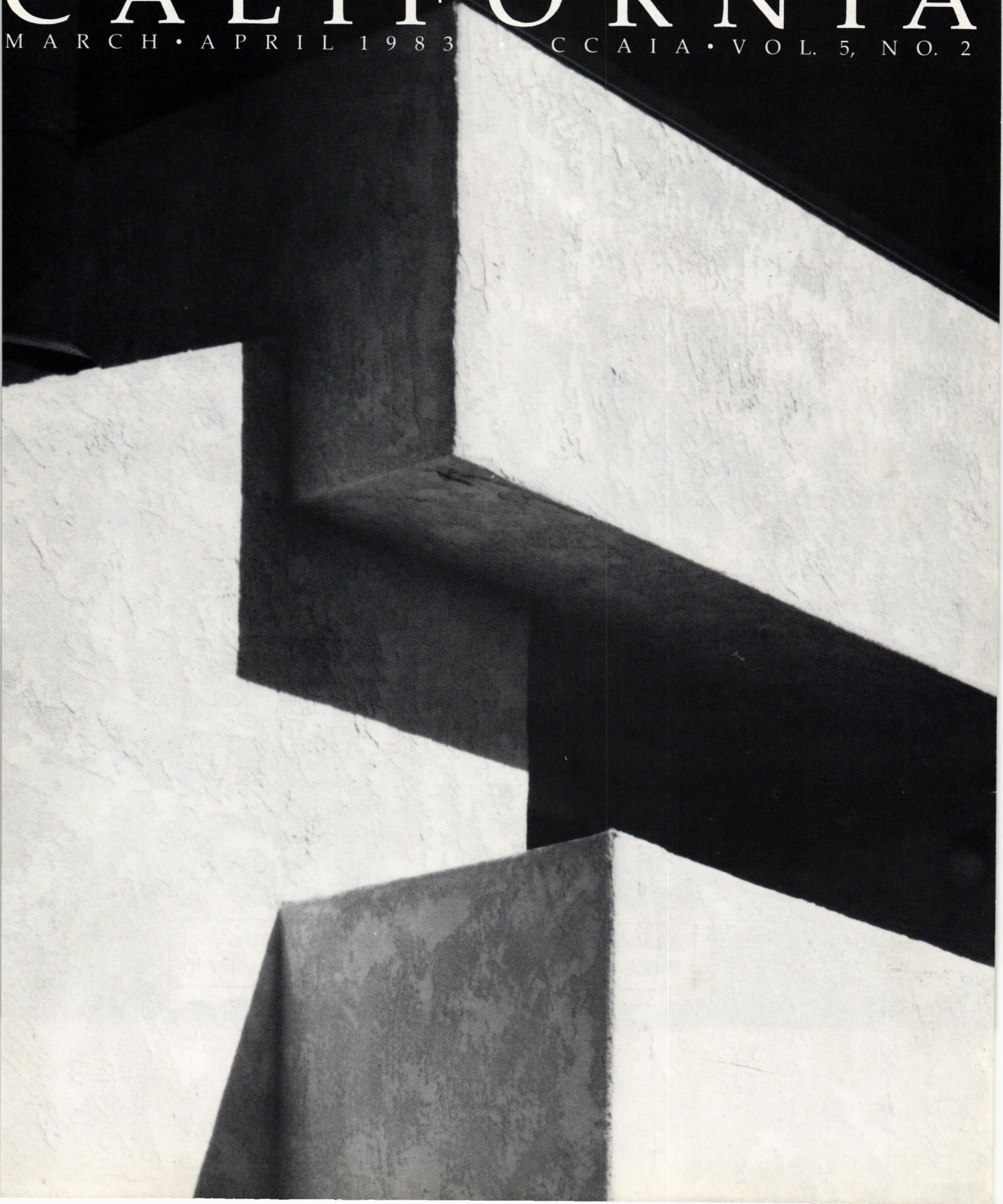


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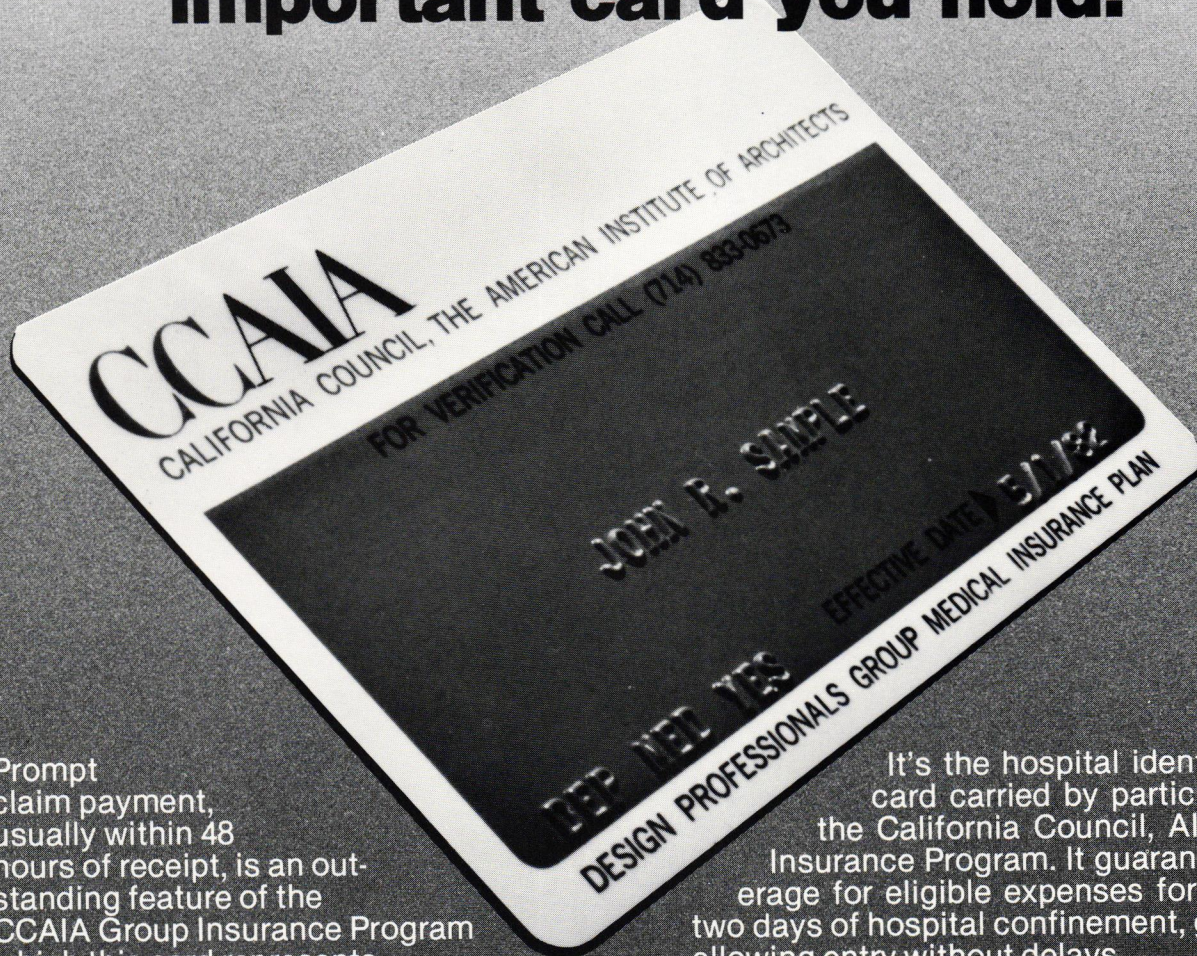
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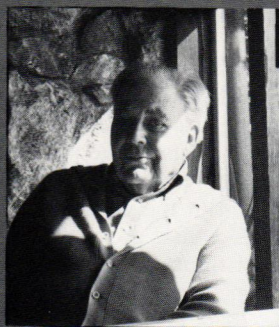
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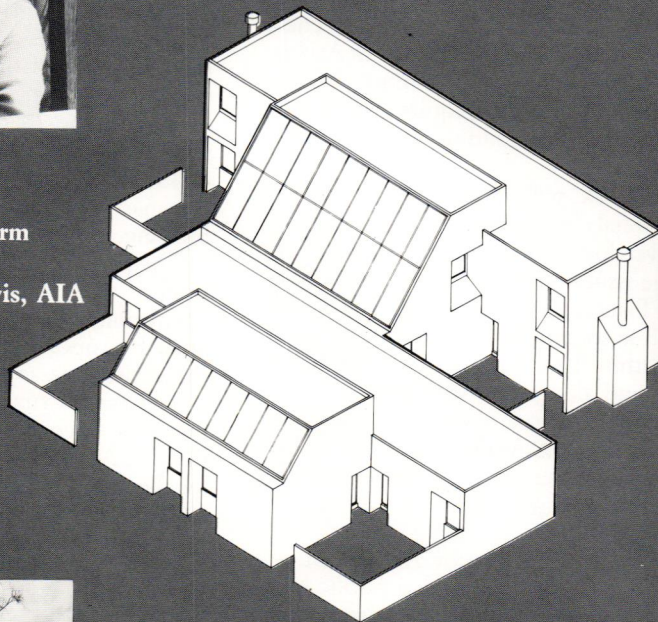
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No More "Junk" Design for Imperial Beach

The accidental approval of a sign for a local store—described as "junk" design by one City Council member—prompted the Imperial Beach City Council to enact a special ordinance establishing an Architectural Design Review Committee (ADRC), legally empowered to require developers to meet the city's building design specifications.

The ADRC will review and approve all commercial developments, residential projects over four units, and any variances or signage issues referred to it by James Sandoval, Planning Director for Imperial Beach. ADRC automatically will review all projects within the city's two commercial corridors and along the beachfront.

Sandoval, who authored the ordinance empowering the ADRC, said that ADRC approval will be required before building permits are issued. ADRC decisions can be appealed to the Planning Commission. The only projects outside ADRC's purview are projects requiring a public hearing, according to Sandoval. Approval for these projects is decided by the Planning Commission, with recommendations from ADRC.

Since Imperial Beach's only architect, Carl Buchanan Jr., AIA, currently serves on the Planning Commission, it is not yet decided whether membership on the five person ADRC will be limited to local residents, or will include architects and other design professionals from nearby communities.

Stage Set for Controversy

Performing artists may vie with environmentalists over a controversial \$85 million project planned for the Santa Cruz-Watsonville slice of the Pacific coast, just north of Monterey Bay.

The Wingspread Beach project dates back to 1979, when the developers, Hare, Brewer & Kelley Inc. of Palo Alto, purchased from the University of California, Santa Cruz, a 99-year lease on the 67 acre Porter-Sesnon property. HBK proposes to sell the state a parcel of beachfront land for use as a campground, and develop the rest of the parcel with 295 residential units, averaging 1,275 square feet each; a conference center with meeting rooms; and a performing arts complex comprised of a 1,000 seat proscenium theater, a 500 seat thrust-stage theater, a multi-purpose, flat-

floored rehearsal hall or experimental theater, and possibly a restaurant.

The performing arts have been thriving in the Santa Cruz-Watsonville area since the founding of the Cabrillo Music Festival 20 years ago. But the growth of local dance ensembles, music groups including the Santa Cruz County Symphony—even the Javanese puppet theater—is severely limited by the area's lack of a performing hall with a proscenium and a capacity above 600 seats. Wingspread promises to remove the space limits to growth with its performing arts complex.

The project is being opposed by the Friends of Porter-Sesnon, a coalition of environmentalists, anti-growth and slow-growth proponents who favor preserving the entire area as a state park.

The Santa Cruz County Planning Commission will consider the Wingspread proposal in April. Meanwhile, HBK is urging local performing arts groups to speak out in favor of the theater projects, but has found the groups reluctant to become involved in political issues which might jeopardize their nonprofit status.

Post Modern

The United States Postal Service is aiming to reduce costs and stabilize postage rates by centralizing its mail delivery systems. To encourage architects to design a centralized mail delivery point in commercial structures, the Post Office is willing to pay for mail receptacles, including rear-loading receptacles for mail rooms, front-loading wall-mounted/recessed units and freestanding units. Architects are asked to contact the Delivery Point or Growth Management Coordinator at the main branch of the local post office in the early planning stages for commercial projects to discuss centralized mail delivery points.

Women in Design Competition

Women in Design International is sponsoring its Second Annual Design Competition. Work may be entered in the following categories: architecture, ceramics/enameling/mosaics, fashion design, fiber art, fine art/painting, glass art, graphic design/computer graphics, illustration, industrial design, interior design/space planning, jewelry design, landscape design, paper art/printmaking, photography, sculpture, metalsmithing, textile design,

theatrical design and miscellaneous.

Deadline for submitting registration forms and slides is March 31, 1983. For further information, contact WIDI, P.O. Box #984, Ross, CA 94957. Phone: (415) 457-8596.

Students for Hire

A new Cooperative Education program, through which students alternate study and work with a participating employer, has been launched by the School of Architecture and Environmental Design at California Polytechnic State University, San Luis Obispo.

Students in their third through fifth year of study participate in the program for three or six month periods. During that time, they function as does any employee in the firm where they work. Student salaries vary, and are set by the employer.

Cal Poly's emphasis on design and technical training enables students to become active members of their employer's design team, according to Sandra Lakeman, associate professor of architecture and cooperative representative at Cal Poly. "The Coop program is an educational experience," she said. "The students are not to be stuck getting coffee or sweeping the floors. Students are capable of doing more than that, of being involved in the design process."

Since its inception in 1906 at the University of Cincinnati, the Cooperative Education program has grown in popularity throughout the country. Currently, over 1,000 colleges and universities have coop internship programs. National figures show that 50 percent of the participating students are permanently retained by their coop employer upon graduation. As a measure of the program's success, the top 10 companies on the Fortune 500 list all employ coop students.

Cal Poly recently received a \$1.15 million federal grant to expand its school-wide coop program from the 650 students now participating to a targeted 2,000 students, according to Lakeman.

In February, 13 architectural firms gathered at Cal Poly to learn more about the program and to present their firm's work to the coop students. Firms wanting more information about the Cooperative Education program should contact Sandra Davis Lakeman, School of Architecture and Environmental Design, California Polytechnic University, San Luis Obispo, CA 93407. Phone: (805) 546-1321.



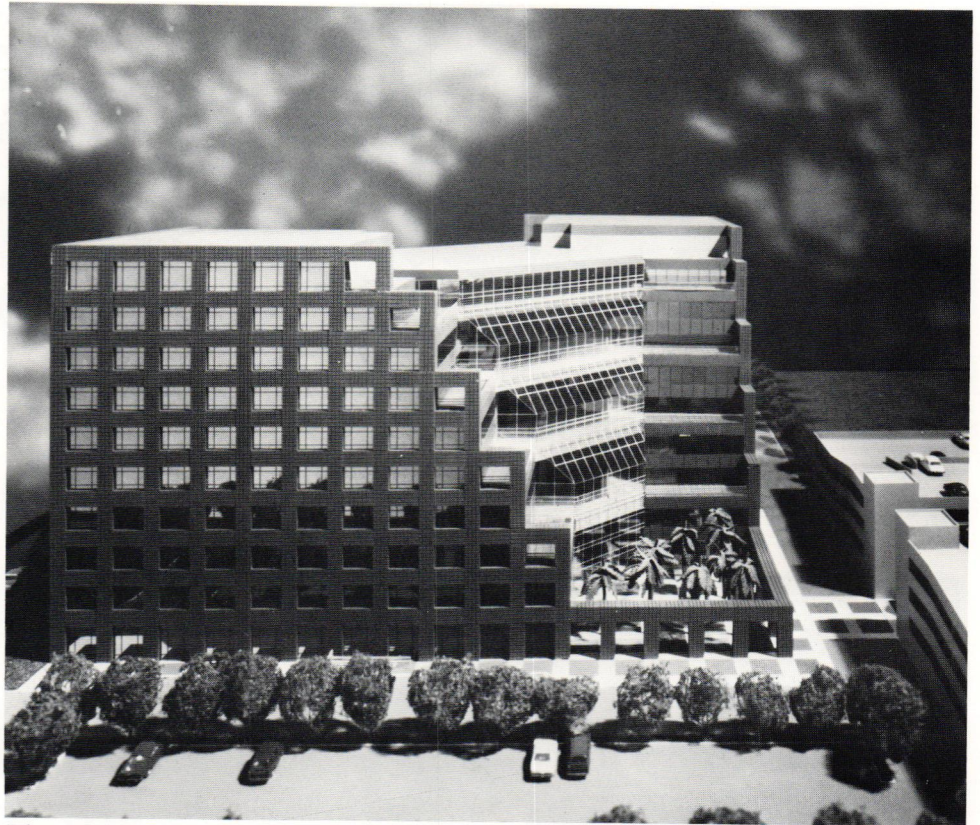
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Hillside Office Community, Award of Merit, Orange County Chapter, AIA.
Architect: LPA Architecture and Planning.

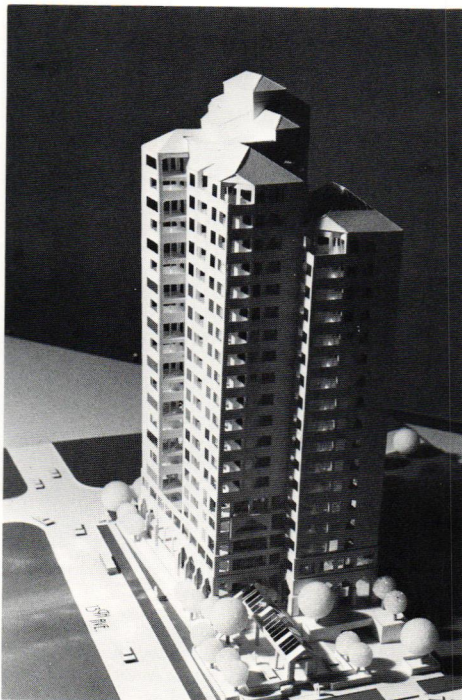
To mark its 30th anniversary, The Orange County Chapter, The American Institute of Architects combined history with the future through two events which presented awards for design excellence to 19 Orange County firms.

Special Honor Awards were presented to six firms "in recognition of historically significant design achievements during the past three decades." The Blurock Partnership of Newport Beach received an Honor Award for Continued Excellence in Design for the Past 30 Years. An Honor Award for Large-Scale Planning was presented to William L. Pereira Associates for the Comprehensive Irvine Ranch Master Plan (completed in 1963), which was instrumental in shaping the development of Orange County. The Bluffs, completed in 1963 by Leitch, Kiyotoki and Associates, received an Honor Award for Planned Residential Development. The Bluffs was the first planned unit development in California. An Honor Award for a Building 5-15 Years Old went to Riley/Bissell Associates for the Michelson Plaza Office Building in Irvine, California's first example of a water-filled steel frame building. Kermit Dorius & Herbert Brownell, Associated Architects, received an Honor Award for a Building 15-25 Years Old, for the Myford Irvine Residence built in 1958. Herbert Brownell, AIA's own office building, built in 1954, received an Honor Award for a Building at Least 25 Years Old.

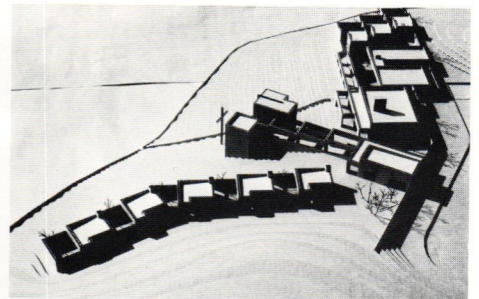
OCCAIA's first "On the Boards" design competition presented local firms with five Awards of Merit and 14 Honorable Mention Awards. Awards of Merit went to Collins & Wraight of Santa Ana for a 20 story, 60 unit luxury residential tower in Denver; LPA Architecture and Planning of Orange, for a Hillside Office Community in Thousand Oaks; Bissell Architects of Newport Beach, for a House of Prayer and Priests' Retreat in Orange; Raymond Salmi Associates of Tustin, for a Modern Church and Church School in Anaheim Hills; WZMH Group California, Inc. of Irvine, for "The Atrium" building design. Judges for the design competition were Panos Koulermos, AIA, James G. Pulliam, FAIA, and Rob Wellington Quigley, AIA. Jon Lundstrom, AIA chaired the OCCAIA Design Awards Committee.



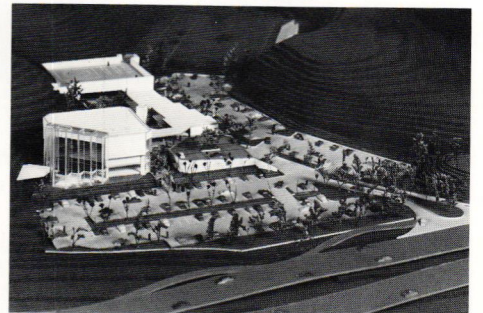
The Atrium, Award of Merit, Orange County Chapter, AIA.
Architect: WZMH Group California, Inc.



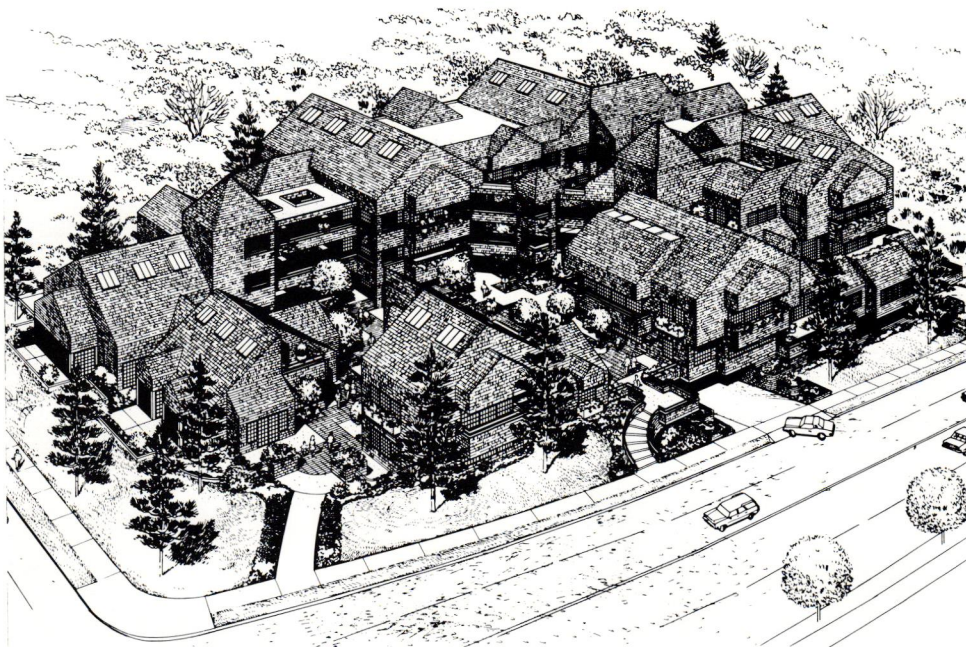
Denver Residential Tower, Award of Merit, Orange County Chapter, AIA.
Architect: Collins & Wraight.



House of Prayer and Priests' Retreat, Award of Merit, Orange County Chapter, AIA.
Architect: Bissell Architects.



Modern Church and Church School, Award of Merit, Orange County Chapter, AIA.
Architect: Raymond Salmi Associates.



*Evergreen Office Center, Honor Award, Pasadena & Foothill Chapter, AIA.
Architect: Louis L. Rodwell, Architect.*



*Lake Center Business Park, Award of Merit, Pasadena & Foothill Chapter, AIA.
Architect: Langdon and Wilson, Architects.*

Design excellence and sensitivity to both human and functional needs and to the built environment were the criteria used in the 1982 Honor Awards Program of the Pasadena & Foothill Chapter, The American Institute of Architects. The Honor Award was given to Louis L. Rodwell, Architect for the Evergreen Office Center in Pasadena. The Award of Merit went to Langdon and Wilson, Architects for Lake Center

Business Park in Santa Ana. Citations: Gateway Office Building, Group Arcon, architect; First Church of the Nazarene, Gaede/Alcorn & Associates, architect; CSC/Computer Complex, Langdon and Wilson, Architects. Jury for the awards program was David Martin, AIA (chair), Joseph Giovannini, George J. Hasslein, FAIA, Jon A. Jerde, AIA and John Lautner, FAIA.

Historic Preservation Conference

"Preservation is working for America," the theme of the Eighth Annual California Historic Preservation Conference scheduled for May 5-8, 1983 in Orange County, has more than one implication. "Preserving, restoring, and using fine old buildings is labor intensive and this means jobs," said Robert Selway, conference coordinator. "'Preservation is working' also means that preservation simply succeeds when so many other new things don't."

Topics to be covered in the conference include financing commercial rehabilitation, neighborhood conservation, the planning and politics of preservation, restoring old houses, archeology, design and construction techniques and architectural history.

The central quad area of Chapman College in Orange will be headquarters for the conference, which will include field trips to sites throughout Orange County. The conference is sponsored by the California Preservation Foundation, the Orange County Board of Supervisors and the Orange County Historical Commission. Registration fee is \$50, with special fees of \$25 for students and \$75 for corporate sponsors.

For further information, contact Diann Marsh, Orange County Historical Commission, (714) 834-5560 or the State Office of Historic Preservation, (714) 445-8006.

Construction Claims Seminars

Two intensive Construction Claims Seminars are planned for professionals engaged in commercial, institutional and large residential construction. The seminars are aimed at helping professionals avoid construction disputes and at improving their chances of winning if such claims do go to court.

Sponsored by Battelle, a nonprofit multinational research organization, the seminars will be held in San Francisco on April 21-22, 1983, and in San Diego on June 16-17, 1983. Registration fee is \$585. Contact Battelle/BSSP, 4000 N.E. 41st Street, Seattle, WA 98105. Toll free phone: 1-800-426-6762.

Low Flush

An amendment to *Health and Safety Code* Section 17921.3 requires, with certain exceptions, that, after January 1, 1983, all new buildings use water closets and associated flushometer valves which are water-conservation closets, and urinals and flushometer valves which use less than an average of 1½ gallons per flush.

Water closets, urinals and associated flushometer valves which do not meet the

new standards still will be sold to meet the need for water closets and urinal installations or replacements in structures built prior to January 1, 1983.

A list of approved water-conservation closets, urinals and flushometer valves is available from the Department of Housing and Community Development, Division of Codes and Standards, Administrative Office, P.O. Box 1407, Sacramento, CA 95807.

Solar Tax Credit on the Block

The California SolarCal Council, a citizen advisory panel to the Governor, recently released "Solar, Jobs and California's Economic Recovery: Public Hearings on Extending California's 55 Percent Solar and Wind Tax Credit." The hearings examined the impact of the tax credit on the State's Treasury, on job creation, and on California's economic recovery. The hearings found:

- the net cost to the state Treasury in the short term is minor, if not positive;
- over the long term, the credit clearly generates more in taxes than it costs;
- the renewable energy industry has helped hold down California's unemployment levels;
- the presence of California's tax credit has stimulated the development of a billion dollar industry which otherwise would be substantially smaller;
- the tax credit has resulted in a majority of America's solar and wind business activity occurring in California, activity which would relocate without the credit;
- not extending the credit will stop the expansion of this industry.

Under current law, California homeowners who install solar energy systems are eligible for a 55 percent credit on their state tax obligation up to a maximum of \$3,000. Larger systems, typically commercial systems, are eligible for a 25 percent credit. The tax credit affects solar systems installed after January 1, 1977. In the period 1977-1982, about 300,000 solar systems were installed in California homes—nearly four percent of all homes in California.

Despite the findings of the public hearings, the California State Budget proposed for 1983, if enacted, would eliminate the solar and conservation tax credits, retroactive to December 31, 1982. California Senator Gary Hart (D-Los Angeles, Santa Barbara), who introduced the original solar tax credit in 1977, has introduced S.B. 298, to extend the solar tax credit for six more years.

Copies of "Solar, Jobs and California's Economic Recovery" are available from the SolarCal Council, 1516 Ninth Street, Sacramento, CA 95814. Phone: (916) 324-4171.



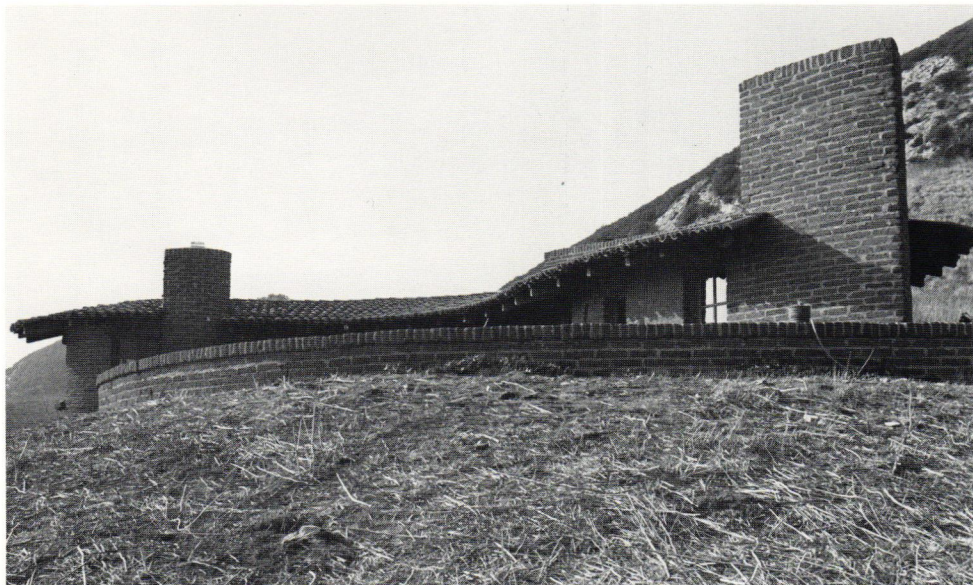
*Sherman Lee Residence, Award of Excellence, Golden Empire Chapter, AIA.
Architect: William R. Tuculet & Partners.*



*Mesa Creek Apartments, Design of Merit, Golden Empire Chapter, AIA.
Architect: KSA Group Architects.*

Housing was the theme of the second annual architectural awards program of the Golden Empire Chapter, The American Institute of Architects. William R. Tuculet & Partners received an Award of Excellence for the Sherman Lee Residence. KSA Group Architects received an Award of Excellence for the Bar-

rington Town Homes and a Design of Merit award for Mesa Creek Apartments. Jury for the awards program was Claude Stoller, FAIA, Homer Delawie, FAIA and George Thomas Rockrise, FAIA. Tom Preston, AIA chaired the Chapter's design competition committee.



*The Hollister Ranch Adobe House, Award of Honor, Santa Barbara Chapter, AIA.
Architect: Serifo John Menegon.*



*Stearn's Wharf, Award of Merit, Santa Barbara Chapter, AIA.
Architect: joint-venture of Gilbert Barry, AIA, Architects and James Zimmerman, AIA Architect.*

Every four years, the Santa Barbara Chapter, The American Institute of Architects holds an awards competition to stimulate and recognize excellence in solving environmental design challenges. Garcia Architects, Inc. received an Award of Honor for Corte de las Damas, a 6 unit condominium project. The Hollister Ranch Adobe House brought an Award of Honor to architect Serifo John Menegon. Awards of Merit: Stearn's Wharf, a joint venture between Gilbert Barry, AIA, Architects and James Zimmerman, AIA Architect; and the Anapala Office Building Remodel, Barry Architectural Design Group, Gilbert F. Barry, AIA. Citation: the D. Crosby Ross Retail Store, Designworks and Bartlett, Kirkhart, Leggitt Architects, AIA. Jury for the Awards program consisted of George Bissell, FAIA, Herbert Powell, FAIA and Daniel Solomon, FAIA. The Awards Committee was chaired by James F. Carberry, AIA.

Design Review in Santa Rosa

The Santa Rosa City Council's recent overhaul of its design review procedure initially met strong opposition from the Redwood Empire Chapter of The American Institute of Architects. But now local architects are playing a greater role in establishing design review guidelines for the city.

In a move calculated to ease the workload of the Design Review Board and enable it to develop guidelines to make the review process less arbitrary, the City Council relieved the Board of some of its design review responsibility. The city

planning staff, which previously had reviewed residential projects of five units or less and commercial projects of less than 10,000 square feet, was charged with reviewing residential projects of less than 20,000 square feet.

The Redwood Empire Chapter objected to the city planning staff being given more control over design review. "Design professionals must deal with qualified persons with similar training and expertise when discussing design issues," said Bob Anderson, AIA, then-president of the Chapter.

The Design Review Board has turned to the Chapter to help develop the city's design review policies. The Chapter has been asked to input on city entryways, the highrise policy, sign ordinances, and city streets.

The Chapter also is working closely with the city staff, according to current president Kenneth Coker, AIA. "We're getting the city staff more plugged in to the local Chapter, and encouraging them to join as affiliate members," Coker said. "We want more interchange before a crisis occurs. We're trying to become more effective with the city staff, and show them we're here to solve problems before they occur."

International Habitat Conference

Creative strategies to meet the world's housing challenges will be explored by architects, engineers, housing specialists and construction professionals from around the world at a conference sponsored by the International Union of Architects' Working Group Habitat, April 6-8, 1983, at The American Institute of Architects Building, Washington, DC.

Entitled "Typology and Density," the conference will examine various forms of housing and how they affect the urban scene and the human condition. The international seminar will address: housing demands in developing countries; the role of the architect, engineer, housing manufacturer and contractor in housing construction; techniques for development of housing, and the roles of government, public and private sectors, institutions, users and professionals in meeting housing needs; housing and the human establishment, including the expansion, evolution and rehabilitation of the dwelling, the neighborhood and the city; and housing and the individual, including functions, forms and images in everyday life.

Registration is \$85 for AIA members, non-USA architects and their guests; \$110 for all other participants. Contact James M. Leefe, FAIA, Working Group Habitat, The American Institute of Architects, 1735 New York Avenue, N.W., Washington, DC 20006.

Paul E. Sharp

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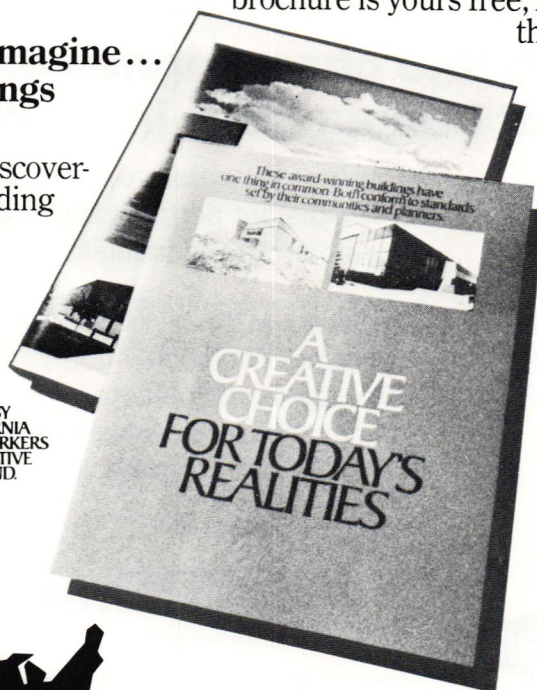
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Royalties for Architects

I have noticed that a number of my architectural projects (and those of my colleagues) have escalated in value far beyond the normal appreciation to be expected in the real estate market. I believe that this is due largely to the quality of design. I believe that, upon resale of a project, I should share in the escalated value beyond the normal architectural fees typical at the present time. One possible and very interesting method of accomplishing this would be through a resale royalty, to be paid to the architect each time a project is resold.

With this in view, I contacted Mr. Tom Goetzl, professor of law at Golden Gate University, San Francisco. Professor Goetzl participated in drafting the California Resale Royalty Act, whereby artists receive five percent of the sales price upon resale of paintings, sculptures and ceramics sold in California.

Mr. Goetzl and I share the view that a resale royalty agreement, on a per project basis, could be attached to typical architectural contracts, through mutual agreement of the architect and owner. This agreement could have an open fee schedule, say perhaps five percent for homes and one or two percent for multiple unit or commercial projects. Its enforcement would work much like an easement on a piece of property. In order for the title to clear for the sale of the project, the royalty would first have to be paid to the architect, each time the property sells.

I believe California architects would be very interested in the idea of royalty payments and the agreement forms that would make this possible. In addition, owners of the projects may be interested, as it might defray some initial architectural expenses and add a certain amount of prestige to any project that warrants a resale royalty.

With these thoughts in mind, I would propose that the CCAIA work with Mr. Goetzl to draft agreement forms that would be suitable for architects in California, and perhaps elsewhere in the United States. I urge architects and architectural organizations throughout California who agree with this idea to contact the CCAIA and request that the state organization take a leadership role in securing royalty agreements for architects.

—Alfred Morrisette, AIA

Credit Where It's Due

With reference to the November-December 1982 issue of *Architecture California*, I call your attention to an incorrect credit line for the Merit Award to the California State Railroad Museum appearing on page 12.

The architect of record for the California State Railroad Museum is the joint venture working under the name of Spencer, Lee, Busse & Stypula, Joint Venture Architects. The parties to the joint venture are Spencer Associates, Architects & Planners and Alton S. Lee, AIA, Architect. Each party contributed 50 percent of the effort.

Promontory Partnership consists of Spencer Associates and Barry Howard & Associates, Interpretive Designers. It was formed to execute designs for other projects, not parts of the California State Railroad Museum.

I believe that this error originated in the awards committee of the Santa Clara Valley Chapter, as it is not the first time it has appeared.

—Alton S. Lee, AIA

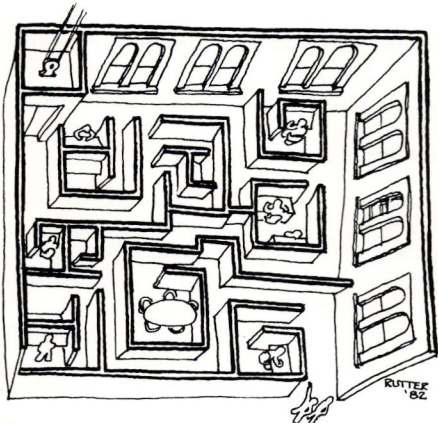
Kudos

Thank you very much for sending me the first issue of *Architecture California* for 1983.

I was particularly interested in reading the article on "Shopping for a Computer," as I will be in the market for one soon.

—Don Rogers

Assemblyman, Thirty-third District



Dick Rutter, AIA, Bolles Associates

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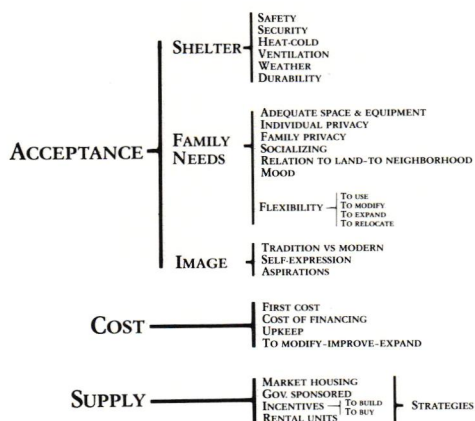
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First More Useful, Then More Affordable

by James M. Leefe, FAIA

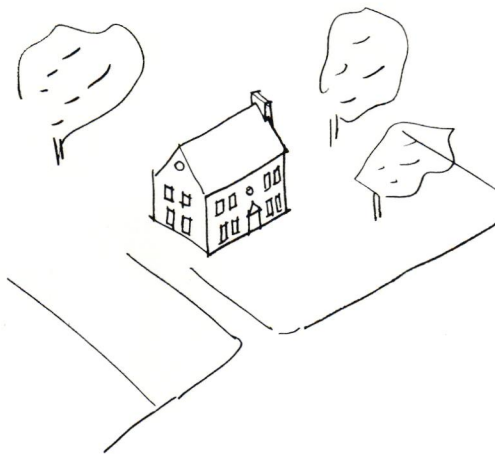
Affordable housing is certainly the topic of the day. But can we even begin to address this topic apart from all the other aspects of housing that we architects must consider? I think not. And I am concerned that our current concentration on affordability, important as it is, presents us with little in the way of new problems while it may tend to draw attention away from other, equally critical housing issues. So I propose that we look briefly at some of the things we architects might be doing and how they in turn might lead to housing that is first more useful and then more affordable.



The major concerns of housing are summarized under three headings: acceptance, cost and supply.

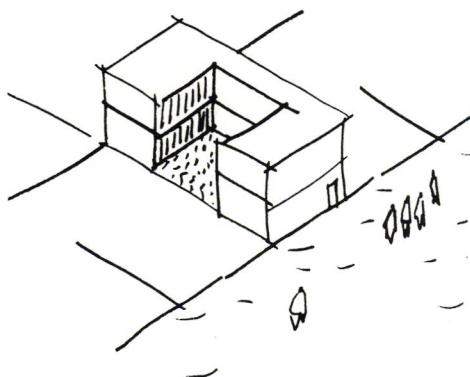
The bulk of our housing in recent times has been spread over the landscape on individual lots outside of the city core. There is no need to dwell on the inefficiencies and costliness of building in this way. We simply cannot afford to do it any longer. As we look to land-saving devices and increasing densities, we must rethink our approach to housing design and examine what we are doing in basic terms.

Sitting in the middle of its own piece of land, our traditional house looks outward. Without its surrounding land, our house can no longer do that. It needs to look inward. And the inward-looking house has its own demands. It is, indeed, very different from that of our suburban tradition. Property lines become the walls of the house. Enclosed and outdoor spaces exist as one.



The traditional North American house looks outward.

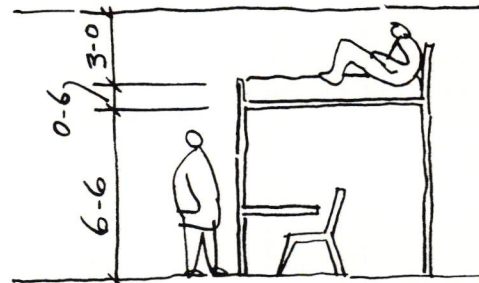
As a model of a useful house, I submit the traditional oriental house of the Middle East. Surrounded on three sides by other houses with the fourth side facing the street, living of necessity is focused inward. The ground floor of the front wing is for entertaining. Visitors need penetrate no further into the dwelling. The rear wing contains the family room. The upper floor front is for adult sleeping, the rear for children. The link between contains both stairs and circulation. The forms of this house evolved from a society very different from ours, one with strict separation of the sexes in social situations. Still, the organization of spaces works as well for the contemporary North American social unit as for the traditional Arab. One might call this the quintessential courtyard house. It can certainly be interpreted in many ways which I leave to the reader.



The traditional house of the Middle East looks inward.

The high cost of housing is forcing us to build smaller as well as more densely. No more can we afford the multiplicity of spaces to which we are accustomed for the variety of our needs. The argument has been put forth that quality of space must replace quantity. Fair enough, if we define quality as least demanding. We must refrain from trying to live the lives of those unknown persons who occupy the houses we design. Give the dweller a simple space, undemanding, a chance to adapt his home to his own needs, to create his own image.

Our standard ceiling height is eight feet. Higher ceilings are considered extra-



Raising the ceiling increases useful space.

gant. But are they really? I submit that the room with an eight-foot ceiling is limited in its usefulness. Think for a moment of useful space and the cost of added floor area compared with extra height. Raise our ceilings to ten feet and we can begin to use loft furniture. The bed, for example, can be high enough for full headroom beneath. A sitting area or a desk and work area can be accommodated below the bed. Raised platforms with (or without) storage underneath can be built for those who like multi-level spaces.

There are many more possibilities, but I believe my point is made: think carefully of the usefulness of the spaces we build, give the dweller some freedom, and we will have taken large steps towards the creation of affordable housing.

James M. Leefe, FAIA currently is chief architect of the Bechtel San Francisco Power Division; he formerly was principal urban designer for Bechtel, doing conceptual work on communities in developing countries. Mr. Leefe is a member of the AIA Housing Committee, which he chaired in 1982, and the AIA Delegate to the Working Group Habitat of the International Union of Architects.

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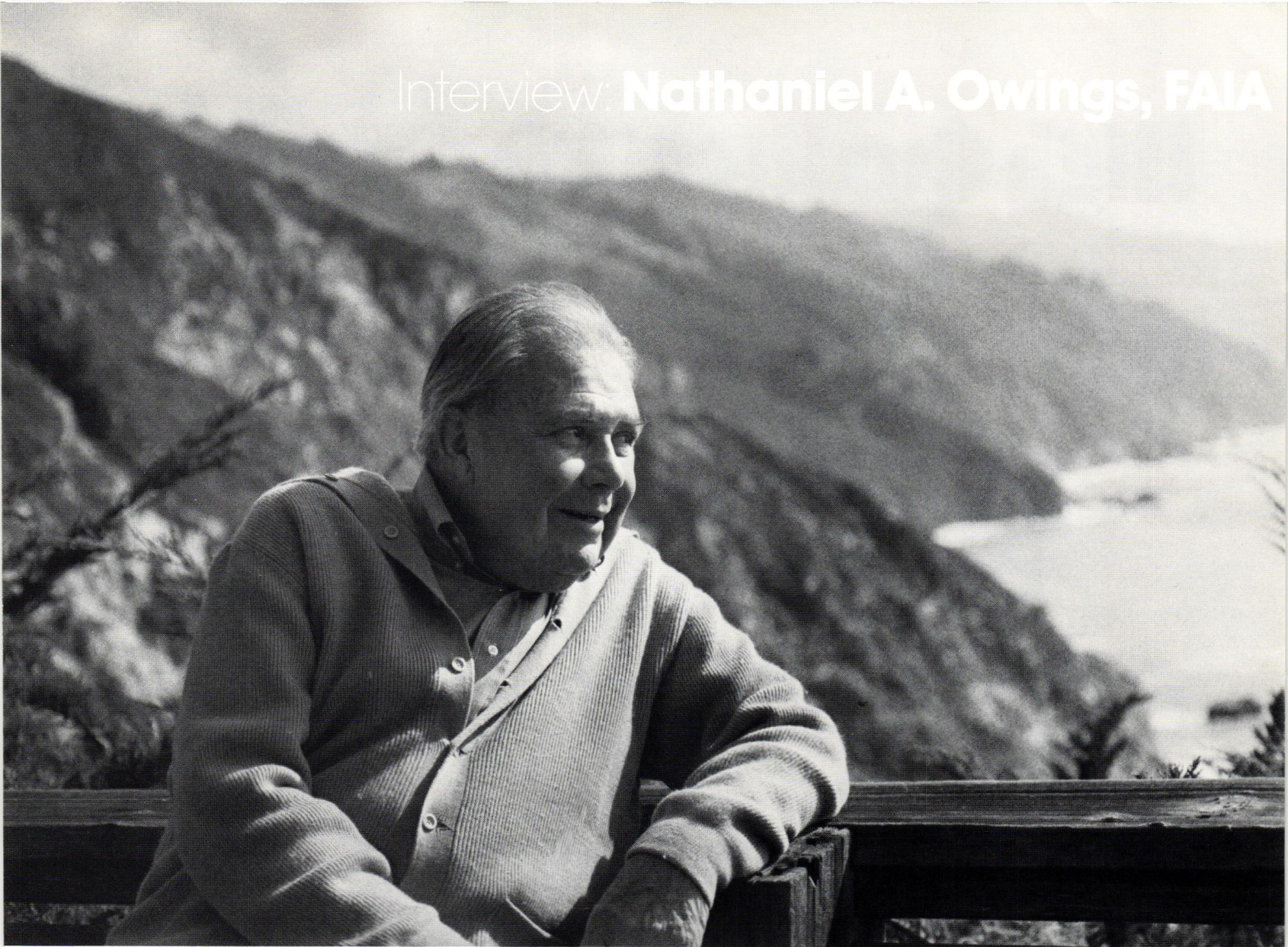
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From his aerie overlooking Big Sur, octogenarian Nathaniel A. Owings, FAIA reflects upon architecture, the firm he co-founded, and the 1983 Gold Medal just awarded him by The American Institute of Architects.

What are your feelings at receiving the Gold Medal, and why do you think the honor was bestowed?

The honor is what I would call a democratic expression. I like the fact that it occurred at the National level, which means I was nominated and elected by people who aren't really in the design profession. They're politically-oriented architects interested in the profession as it relates to humanity and to the body politic, rather than to the fine arts division of the museum.

What I have been actively doing for the last 60 years has been so foreign to the normal definition of architecture that most people were unable to categorize it. Buildings are very, very transient. In our country particularly, buildings are coming down after 50, 75 years, and something else is built in their place. The ethic of America is build, build, produce, produce.

My wife Margaret and I are both deeply involved in the opposite ethic. We believe that nature and the animal and the bird are equally important, if not more important, than man, and that man has no right to manage those animals and those birds. We have been waiting for somebody to say something about it in the last two years of the Reagan Administration. [Secretary of the Interior James] Watt is leading the charge against every single known defensive mechanism that's been set up to protect wild nature against the acts of man. Nothing is ever said about that. The media just doesn't know how to approach it. They can talk about a touch-down of some football game, but they cannot talk about how somebody saved the life of a baby otter.

As a profession, architects are the guardian angels of the land, or should be. We are trained for it, and we have the network to do it. There is hardly a town or county or village that doesn't

have an architect tucked away somewhere. Every one of them has got his feet on the land, and that land—whether it is a back lot or an alleyway or a huge ranch—needs a guardian. In lieu of being a great designer, in lieu of worshipping at the feet of Philip Johnson, I'd rather have architects worship at the feet of Thoreau or Audubon or somebody who believes in the dignity of the land and the dignity of man in relation to the land. That fight's been my life.

How have you carried that fight into the realm of urban planning?

One of the best examples was Baltimore. I was the chairman of a task force to study the design of the Baltimore freeway system. When I got there, I discovered that it was a setup. They'd already finished the study, and I was supposed to rubberstamp it. I didn't. Four years and \$7 million later, we not only had eliminated the entire freeway system, we'd even stopped a 14 lane bridge from being built across the inner harbor and replaced it with nothing. Now that's a miracle. Nothing was ever really said about it: there's no way to get a dramatic story about something that didn't happen.

However, two or three years later, [James] Rouse showed up. He is probably the most extraordinary creator of real things in the way of merchandising that our country has ever produced. He comes in and produces something which is very beautiful around the inner harbor in Baltimore, and it becomes a feature article in the *AIA Journal*.

I wrote the estimable editor, for whom I have a high regard, and said that it is too damn bad that Rouse gets all this praise and credit for a cosmetic job when nobody understands the fact that the oldest city we have come very close to being wiped out. I tried to point out that when the kudos came down it was superficial, for how you decorate rather than for how the area was saved.

Architecture is supposed to reflect the character and the quality of a society. All right. Our society is falling apart, because we don't have the moral stamina to recognize the fact that the land is the most valuable thing, that the land should be preserved. As architects we have the opportunity to find ways to do that. For example, when fuel was scarce and the prices were high, architects began to do high density housing to eliminate transportation needs. Every architect has, within his soul, a spark of genius which can be expressed through the ability to set up locally a new partnership with nature—nature in the real, not in the abstract—which will make the world a better place to live in.

That requires architects to become involved in local, grassroots politics.

What else is there in life but politics? Even in your church, what's the politics of who gets to

be the next minister? Politics means dealing with people. Politics is one of the tools that everybody has to have if they're going into battle. Unless you're going to be just somebody who sits there and takes what comes, you've got to be in the fight. Every single bad decision that has ever been made in planning in the United States has been made with the approval, or at least the quiet agreement, of some architect.

Why did you become an architect?

Because I went to Europe as a Boy Scout. I was sent over there on a scholarship in the First Jamboree in 1920, right after World War I. We went to Paris and I went into Notre Dame and then to Chartres. I was so totally overpowered that I knew right then I wanted to be an architect. Never had any doubt . . . never questioned it.

The greatest architecture ever done, in my opinion, the only *living* architecture is the gothic. The rest of it is just a pile of stones. I went not long ago to see Stonehenge by moonlight and it had the power of Karnak—it was extraordinary. And then I came back to look at a modern cathedral that had been built in the Fourteenth Century near Salisbury. It has a 450 foot tower. No aluminum scaffolding, no steel wires, no electric connections. We are a bunch of pikers in comparison. As Henry Adams said, "The Virgin is far better than the dynamo when it comes to building."

But getting back to today—we have the stars who mislead the average architect into thinking that they're accomplishing something. Those people aren't accomplishing anything except good media.

How did SOM get started?

The Spaces in Between, an Architect's Journey, a book I wrote published by Harper & Row, tells the whole story.

If I'd been a girl, I would have been in textile design. My sister was a girl, so I sent her to Europe to study textile design. I worked in New York, and used my salary to send her and her mother to Paris for a couple of years. She met Louis Skidmore there, fell in love with him, came back and married him. Our partnership started there.

When you started your partnership, did you intend to become the largest architectural firm in the world?

No, and we're very embarrassed we are. I consider it a serious handicap. I thought we designed the firm so that we would have avoided most of that.

It came about this way: Skid had met Raymond Hood in Paris and helped Hood do the design that he was going to present as a part of the 1933 World's Fair Commission for Chicago. Skid prevailed upon me to come to Chicago to work on the World's Fair. About six weeks after



Janice Philip

"In lieu of being a great designer, in lieu of worshipping at the feet of Philip Johnson, I'd rather have architects worship at the feet of Thoreau or Audubon or somebody who believes in the dignity of the land and the dignity of man in relation to the land."

I left New York, there wasn't a drop of drafting work in town. Crash.

So by luck Skid and I were among the very few architects in the United States with a job. He was the chief of design for the Fair, I was chief of development. I have an interest in development. He was an introvert, that very wonderful person, and he could get things done with quiet persuasion, while I was supposed to be kind of a bully, they said. Together we worked pretty well.

By the end of that Fair, we had met most of the great corporation people in the United States, because we went out and sold them ideas. We found that the old-fashioned architect with his high button spats and his pince-nez was obsolete. And we found there were an awful lot of corporations out there that needed help in their own fields.

We went through two World's Fairs. We dealt with everything except the actual houses that people lived in. We put in roads, sewers, water; we'd run bus systems. We knew a lot for our age and experience. We've handled massive projects smoothly, and we'd done it with a small staff, without any real money.

We made up our minds to start a firm. The plan was that we would develop a brotherhood ... and we were dead serious about it ... of individuals who were dedicated to the betterment of mankind ... anonymous ... as nearly anonymous as possible. Like the brotherhood of the Benedictine Order. I'm a Unitarian and Skid was an agnostic; it wasn't a matter of being connected with the church. But we wanted an anonymous body of dedicated people working together toward the betterment of mankind through a better relationship between man and nature.

We could have any number of offices, we could have any number of people in the firm, and each in the form of a satellite. If we got a job, we would put somebody who knew how to handle the political side or the business side together with a designer and a project manager, and we'd have a mini-firm of three people. That mini-firm would carry a job from beginning to end. Outside of that, we'd have our lawyers and our financial arrangements.

We wanted to take in young people who were just out of school, most of whom couldn't get a job except to do a house for their mother-in-law, literally. We found that nobody could do a hospital until they'd done a hospital. Nobody could do a school until they'd done a school. Now how do you get new ideas in that? We put a young man in charge that didn't know nothin' about nothin'. We got a chance to cover up for this young man, while he did his school, while he did his hospital, while he did his office building, while he did the Lever House, while he did the Bank of Manufacturer's Trust. These were all done by young men.

We developed a series of satellites. First thing that happened was we got a job in New York

that demanded a partner. Skid went to New York to do that job. He never came back. So within six months of starting a firm, we had two offices. Skid said we need two offices ... needed that much room because he and I were so different.

We stayed a partnership. We're the only large firm and almost the only firm who isn't a corporation. There is nothing to take the place of the original human elements that make a man trust another or distrust him. We don't want to get all fancy and plastic, so we're a small, compact body of partners.

The one big trouble with our system—it's been too successful. It's almost like inventing the wheel. It moves along and it's almost fool-proof. Now we're almost 50 years old. We've never had a big split-up. The body of our firm has remained intact. Our bylaws are like the English law. They're never written down, because if they were, the very writing of them would change their meaning. They're unwritten; they're absolutely flexible, they change every year. On the other hand, their continuity is enormous. The end result is today we have ... I don't know how many offices, a lot more than I think we should have. But I can't find a single basic change that's been made in the structure of our firm or the philosophy since the day we started.

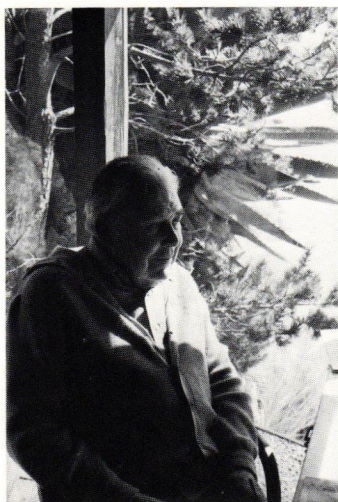
How do you find your partners?

Well, one, they cannot be brought in like you buy players from another team. We won't do that. We did it once and it didn't work very well. Our firm has created an environment in which these partners have grown. We didn't know any of these people, they were just youngsters when they came with us. None of the partners in our firm were famous when they came to us, not one. And many, many of them have turned out to be. But the anonymity is far greater than you might think.

You said SOM's success is an embarrassment. Why is that?

I'm sorry that it's gone the way it has because I think that the size of our firm has absolutely nothing to do with anything except size, and it certainly contributes to the difficulty of keeping up the quality. I'd rather be far more creative and far more selective and far less mass-productive.

I've been opposed to the proliferation of the skyscraper for many, many years. I don't understand how a society can produce human beings who are viable people with human qualities if they're going to live in 8 x 10 x 12 grey-and-white cubicles, pushing little buttons, never seeing the product at either end, and spending all their money on lunches and lipstick and transportation and high-heeled shoes. I don't think it makes sense. And they're going to make terrible ruins, the big skyscrapers.



"Every time a skyscraper is built, it's built because it is the easiest, cheapest, quickest way to create a lot of space fast and create an ego statement. But it's the worst thing you can do for a town."

When I was at my peak as an active partner, I dealt with the chairmen of the board and presidents of corporations . . . they were the only ones who could make a decision. They cared because they owned the buildings, it was their gothic cathedral. Now, since I've been out of it the last ten years, people have been dealing with high pressure, entrepreneur-type developers who don't own anything, except maybe the building for a short time. The personal quality of dealing with the real owner of a building is gone. You're dealing with a developer who wants the snozle; he wants the glittering lights; he wants to sell it and get out.

You say you are opposed to skyscrapers, yet in most urban areas SOM is synonymous with skyscrapers.

We've built quite a few more than any other firm, because we're so good at it.

This firm is now made up of, we'll say, my grandchildren. They don't want me around. They don't want me to tell them what to do. These young men, they are doing their thing as they see it. And who can fault the Sears Building as a great piece of design?

I do not pretend to try to influence or affect the firm in any way, except personally. And I don't try to do that very much, because if I went in there and tried to get them to change, that probably would drive them into an attitude of doing it more than they do now. They don't want the old man around. To hell with him.

But I'm free to get up and lecture and talk and say what I can. And I do, throughout the country. I don't believe in what they're doing. They're doing buildings well—they haven't lost the touch of great design, great architecture—but they're following in the route of the decline and fall of our society. I hope that this depression will change that to some extent. I hope they'll get wise to themselves.

If you were to take control of SOM now, how would you change things?

I'd go back to a tree. You've heard of a tree? Some people haven't. The Sears Building should have a mile square around it . . . a park . . . that should be contributed back to the community.

Urbanism, if you study it carefully, has got something to do with the quality of life. Well, when they get too many skyscrapers—and too many is usually two in a row—you've got to do something about it. I would plan my city on the terms of what a building can do for the city.

Indianapolis is as good an example as any. Washington Street, a mile long, is dead, dying, gone. They built two skyscrapers, full of shops. Those buildings should have been spread out on each side of Washington Street. Take a 40 story building, lay it on its side, have it four-stories high. Use high-density design—which is in the Pueblo Indians, it's in the Incas, every

society—to give great quality to the area instead of making the area a wind-swept hell.

One of the worst examples that I know of is on Madison Avenue. The skyscrapers are an example of utter greed at all levels. The companies hired the architects to do surgery on the building faces, to make them look pretty. But down below they've added probably 3 million square feet of space, and maybe 50,000 people a day to a street that's still the same. It's all nuts.

Every time a skyscraper is built, it's built because it is the easiest, cheapest, quickest way to create a lot of space fast and create an ego statement. But it's the worst thing you can do for a town.

As our global village continues to shrink, is architecture evolving styles and applications that are universally appropriate?

No. There isn't any movement toward anything but disintegration, degradation, and lack of dignity. There is a universal blight spreading over all values that have to do with permanency.

We are coming to the end of the road. We are running out of resources. The architect's losing his grip . . . he is becoming nearly obsolete as a factor in society. And I want him to get back in there.

What trends do you see affecting architecture in the next few years?

I think the trends are toward disaster. We are in worse than the Dark Ages, because the Dark Ages produced my gothic cathedral. There's no trends except downward to negativeness, to mis-asma. The highest evolution would be toward respect for open space and minimizing of construction until the quality of a building equals the amount of money you have to pay for it.

What is your opinion of recent budgetary reductions which virtually gut the California Coastal Commission and the California Energy Commission?

These are disasters. Now this gets back to politics. Pressure politics. The AIA has adopted this strategy of political impact groups.

We don't intend to let the Coastal Commission die. We have got a Big Sur Land Trust down here, private, non-profit, to take its place. We're going to fight it every step of the way—the beaches, the farms, as Churchill said.

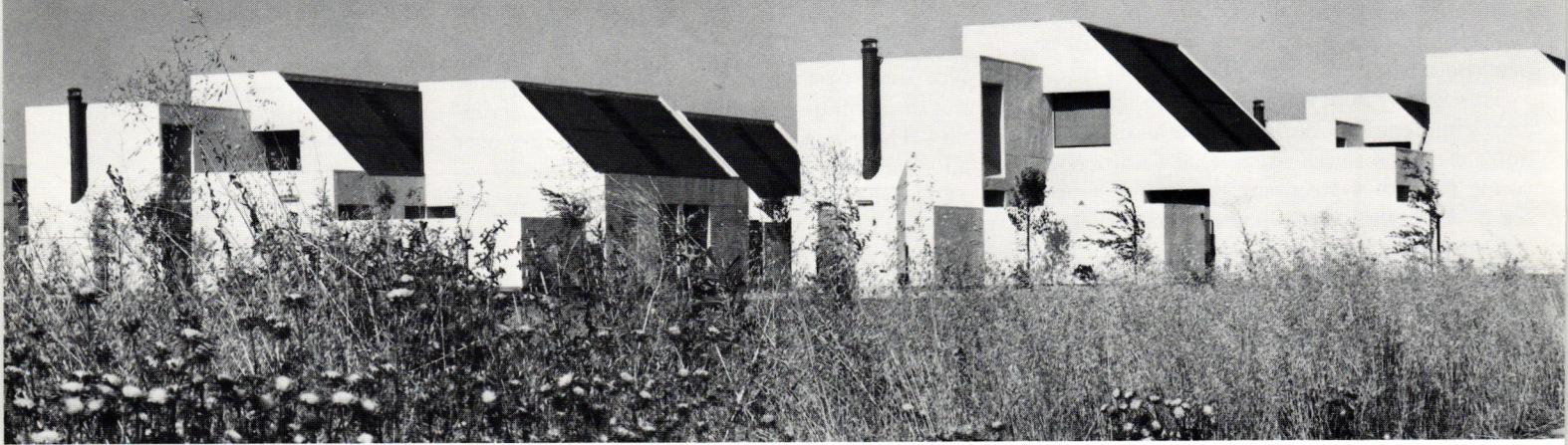
The greatest living architect with the greatest architectural design cannot do much without the land. The environment is the basis for everything. Therefore, you've got to fight for that first. There isn't an architect alive who hasn't got the ability to influence a certain group of people.

We don't live very long. We can raise hell with the land awfully fast. But to protect it is a day-to-day operation. The answer is to fight back.



"The greatest living architect with the greatest architectural design cannot do much without the land. The environment is the basis for everything."

The most dominant influence on housing form and size is economics, not technological innovation. No quantum leap has occurred in the technology of building since the steel frame and the elevator, at least not in a way that changes the image of the dwelling. Technology's influence on what we live in is proving to be less significant than its impact on how we live our lives and how we work.



Rob Super

Housing Form and Size

by Sam Davis, AIA

As computer and communications technologies advance, many of the activities which now take us away from home will be easily accomplished within the home. Banking, working, and shopping for nearly everything will be managed with the home computer in conjunction with cable TV. As we spend more time at home, and as the size of the dwelling diminishes to conserve financial and energy resources, the *quality* of the space must be sufficient to sustain and support our lives, lest we get a form of cabin fever.

Increasing housing density by placing more units on a site and by decreasing unit size is now a reality. In the process, a number of concerns, issues and some prototypical responses occur. Smaller units cost more per square foot to build than larger ones, since the necessary plumbing, kitchen equipment and foundation requirements are amortized over fewer square feet. But the sales price of a small unit is still lower, although not proportionately, than a large one. So the housing industry is moving toward smaller units—studios, mini-condos, condoettes—many of which are 500 square feet or less.

Livable Spaces

To make these places livable, a number of techniques are appropriate. The first is to increase the perception of space by increasing the height of rooms, by improving and balancing natural light, and by connecting interior spaces to exterior areas and views. In other words, the perceived boundaries of the space must be extended.

No matter how small the floor area, or how sophisticated and elaborate the equipment within, at least two comparably-sized

areas should be provided. There needs to be a place of retreat, a choice for the diversity of activities that are accommodated in a dwelling. The Pajaro project in Davis has two studio types, each about 500 square feet. One type has a loft above the high livingroom ceiling, creating two spaces. The other does not. The loft studios sold immediately, but the others are slower to sell, even at a substantially lower price.

Along with our need to view out, is our need to get out—to occupy exterior space, particularly in a climate as mild as most of California's. No matter what the housing density, as unit size diminishes, private outdoor space of significant size (not just a balcony) is critical. Moshe Safdie, the architect of Habitat in Montreal, called this provision part of the Environmental Bill of Rights.

Another desirable feature is shared space. If individual units are exceedingly small, they can be designed to be combined at some later date. In this way, a buyer can purchase two units, rent one out to cover initial costs, then connect and occupy both as family size or income increases. Allowance for retroactively altering unit size and mix is not costly or complicated, and provides an excellent marketing tool as protection against unexpected changes in buyer demographics. By recessing two entries, the units can be combined simply by adding a new front door.

Similarly, larger units may be shared by unrelated adults, with two master bedroom suites connected by a common living/dining/kitchen area. This type of unit is becoming more popular, particularly in urban areas.

Attachment to Detached Housing

Most Americans still desire a detached house, for some good reasons: it is reasonably flexible, it accommodates the need for privacy, it is identifiable. The detached house includes transitional spaces between public and private areas, a clear entry and rear yard, and typically has a close connection to the car.

But detached houses are inherently inefficient, not only because of their energy consumption, but also because of land use patterns which stretch out services and encourage use of automobiles. One issue, then, is how to achieve the amenities of the single family house while increasing density. The second issue is how to convince the new homebuying public that there are more and better amenities available with higher density.

While having to accept that they may never own a detached house, first-time buyers need not give up the amenities of the single-family house. Private open space, usually at the top of the amenities list, can be readily provided in the form of a small patio or large balcony. Entry courts, plazas, and gardens are usually a welcome substitute for the front sidewalk, stoops and porches of the detached house, and still provide the important, recognizable transition from public to private territory. Assuming the automobile continues to play a major role in our lives, it is possible to have a close relationship between car and dwelling in moderate densities of up to 25 or 30 units per acre.

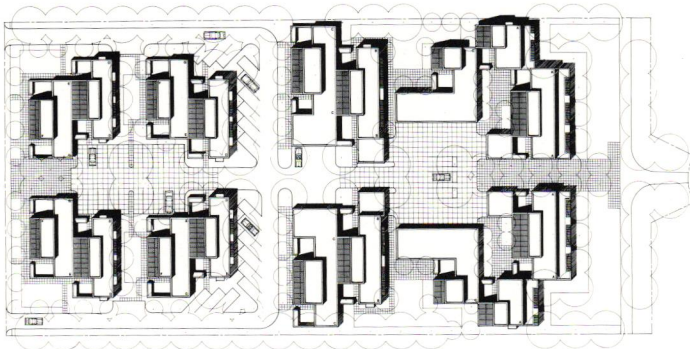
In the Pajaro project, each house has a square plan made up of four smaller squares. One quadrant is removed and serves as the private outdoor space for that dwelling. The courtyard units are then connected in a pattern that separates private spaces in one unit from those in the neighboring unit.

Clustering of several units creates a series of semi-public spaces which provide transitions from public to private. Groups of 16 to 20 units are then placed around a parking court, allowing every unit relatively close access to the car. The parking court is canopied with trees and is surfaced in paver blocks to make it

"There needs to be a place of retreat, a choice for the diversity of activities that are accommodated in a dwelling."



"Clustering of several units creates a series of semi-public spaces which provide transitions from public to private."



Site

more of a pedestrian space where automobiles are tolerated.

This planning technique of clustering identical plan forms yields a number of advantages in addition to the desired amenities. Although unit size ranges from 500 square feet up to 2,500 square feet, the structural module for all the buildings and construction details are consistent throughout. Variety and economy are both achieved. The largest units are two stories high, but all units have the same plan dimensions within each 20 unit cluster.

Integrated Energy Design

The conservation of financial resources through reduced unit size and increased density are but two trends in housing. Conservation of energy resources is another.

Common sense design and household management can significantly reduce energy use in dwellings. Neither method need affect the form of the dwelling. In fact, most energy-related approaches which drastically change the dwelling image are not, in themselves, cost effective, and must be combined with other conservation features or amenities to make them cost effective.

Good energy design integrates technological solutions with planning and form. A solar greenhouse works most efficiently, for example, when the space enclosed is an integral part of the dwelling plan and not an isolated appendage. In the Pajaro project, the active system uses radiant heat supplied through plastic pipe embedded in the slab-on-grade construction. Since the slab is also the foundation, using it as a source of heat storage and delivery is an added bonus.

Well-planned energy features are also cost efficient. The

additional cost of the Pajaro solar system, which is used not only for heating, but also for hot water and some cooling, is \$5,300 per unit. When the cost of conventional equipment not installed, such as ducts and furnaces, is deducted and tax credits are added, the net increased purchase price is only \$340 for a 1,500 square foot house. But savings on the monthly heating and hot water bill are as much as 70 percent, about \$340 a year. In other words, the occupant is already ahead about \$25 each month at current billing rates.

With some features, costs may be difficult to isolate and assign. While it is possible to ascertain how much more a high ceiling costs compared to the same floor area enclosed by an eight foot ceiling, it becomes a problem of apples and oranges. The spaces provided are not of the same quality, and the energy feature is not easily isolated from the whole of the design. Comparative analysis of the energy use in the two structures is further complicated by the particular climate, the inhabitant's use of the space, and other contributing building features.

A feature should not be provided for its energy function alone. Providing cross ventilation or natural ventilation with windows can improve energy consumption. It also improves the quality of the environment through greater comfort control and better natural lighting. Ventilation through symphonic air movement (heat rising) may provide the additional desirable design feature of high open volumes.

Housing Rethought

As dwelling costs continue to rise and people remain for longer periods in the same location, the dwelling must be made flexible enough to sustain major lifestyle changes. In single family dwellings this was relatively easy to accomplish, but high density flexibility requires thought.

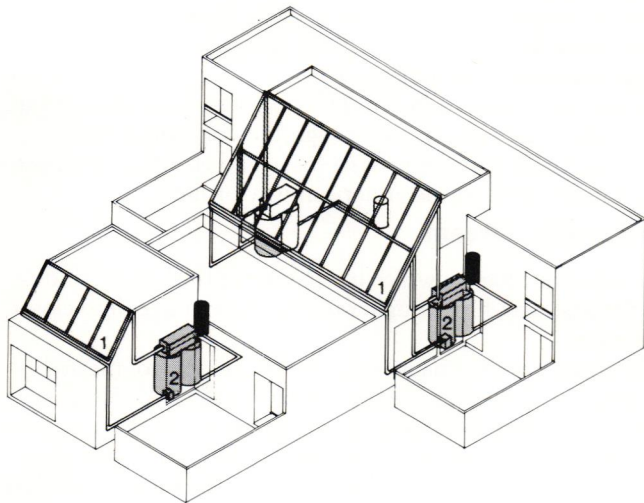
Short term flexibility is already a reality with furniture. Hideabeds, lightweight foam sections and various storage and shelving systems allow for spatial variety. But major lifestyle changes—a new baby, grown children leaving home, a new hobby—are not always easily accommodated, particularly as unit sizes are reduced.

One approach to this problem is to conceptualize the dwelling as two zones—one that is open space, one that is filled with supportive appliances and equipment. Louis Kahn made the distinction of servant versus served spaces. The core (or equipment space), which includes kitchens and bathrooms, can be located either within the other space or attached to it. Imagine, for example, having a recreational vehicle with all the necessary support functions and either parking it within a large living space or attaching it to the outside of a building.

As technology advances, the core may become an independent element capable of plugging into the dwelling much as a refrigerator plugs into a kitchen and is connected to a power source. The implications of such an advance are quite broad. Extra bathrooms, kitchens, entertainment centers could be inserted at will (although probably at substantial cost), thereby increasing the longevity of a dwelling for its existing owner. Of course such flexibility would necessitate freer, more open interior volumes much like spaces in conventional office buildings where interiors accommodate frequent change.

While this notion may seem farfetched, most of the technology exists, and many of these spatial conceptions can be seen in loft renovations in our urban centers. The computer access floor and vacuum waste disposal systems used in dentists' offices can be combined to make a totally mobile kitchen allowing any space to become a family room, even for brief periods.

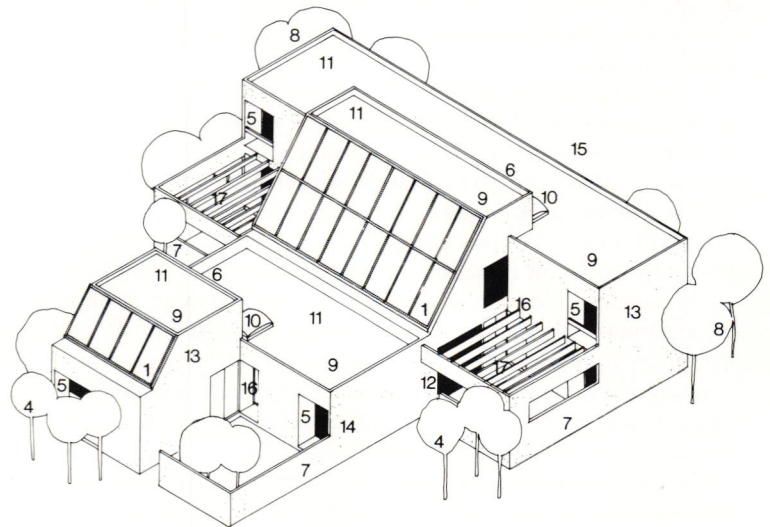
"Good energy design integrates technological solutions with planning and form."



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Pessimist or Optimist?

Architects have a difficult enough time with the exigencies of the present to be overly preoccupied with the future. Still, it is often fruitful to hypothesize on what could be, if only to give some perspective to what is, and how present trends may be resolved in the not-too-distant future.

An optimist will suggest a future where technology has solved all our energy problems, where there is no pollution, near full employment and 7 percent loans. (This person may also be called a dreamer.) The dwelling in this future might be focused on entertainment and information.

A pessimist might suggest a future with high unemployment, pollution, low food supply. A dwelling in this future would focus on security, communal living for protection and collective food production, and the reuse of existing products and materials, including whole buildings. In a more pessimistic future, Paolo Solari's concept of communality and collective archologies becomes dominant. Experiments like the self-sufficient Integral Urban House in Berkeley would be commonplace, and factories which were no longer in production would become inner city enclaves, a sort of urban kibbutz. Without the resources to develop new buildings, old ones would take on new life and use.

In an optimistic future, housing would be more industrialized with high quality components capable of being interchanged and updated. A wide variety of available interior components would allow individuality and mobility, permitting us to take substantial elements of the house with us when we move.

If people begin to work at home, be entertained at home, and shop at home, the social networks which were established at

work and through recreation will no longer exist. This could result in a society of introverts unwilling, perhaps even fearful, of communicating and establishing personal relationships. Houses and housing projects could become independent cultures further alienated from other such enclaves. The Sony Walkman may be the precursor of this future, as people try to tune out the world.

But the same set of pressures could evolve into a society no longer burdened with long working hours and commuting, where people have time and are willing to interact in a more relaxed way. Housing projects which encourage socialization by providing public amenities and a range of outdoor spaces will support this gregarious group. Restaurants, stores, and Pac Man arcades will become even more popular.

The images offered are extreme, and while we can see the trends and possibilities which would make them plausible, I am generally a realist who sees us stumbling along evolving usable technologies slowly, with no one resource having a dominant impact on housing form. But as the demographics change—the baby boom turns middle aged, a new baby boom begins—the electronic revolution will continue to push us toward innovations in housing sizes and forms.

Sam Davis, AIA has his own practice in Berkeley, where he also is Associate Professor of Architecture at the University of California, Berkeley. This article is from a paper he presented at a conference on California Business: Reality/Prospects, sponsored by the School of Business Administration, UCB.

The Downsize Dream

by Janice Fillip

Although 10,000 homeless wander the streets in San Francisco alone, the "housing crisis" no longer just refers to sheltering the homeless. Today, people at all levels of the middle class find themselves less and less able to own—or even rent—a house.

A quick look at the numbers shows why. Only 55.5 percent of California's householders own their own—10 percent less than the national average. Median home values in the Golden State ballooned 300 percent in the last decade, and the median rental price has jumped 158 percent. Yet median income failed to keep pace, with only a 139 percent gain. Californians have fewer dollars to spend on increasingly costlier homes.

The median price for one of the nine million existing homes in California—whether it's a bungalow that once sold for \$9,000 or a postwar apartment-turned-condo—is \$110,000. An annual income of \$35,000 and a 20 percent downpayment is needed to purchase that median home, according to the Bank of America. The median income in California is \$22,000.

The California house not only costs more to buy, it costs more to build. More is less when it comes to the dollar's buying power, so for the typical new single family residence in the Los Angeles area, for example, construction costs have tripled in the past decade, outpacing the rate of inflation by nearly 40 percent. Land and site development costs account for an even greater chunk of a house's price. Spurred by speculation, inflation and regulations, these costs, which once made up 12 percent of a home's overall expense, now account for 40 percent of the total. Meanwhile, the price of financing money has accelerated at a rate the *Columbia* might admire.

These economics of housing in California are disappointing a fundamental value of the middle class, and may be destabilizing our society. "Housing is of more than simply economic importance. It's symbolic of what the American Dream is all about,"

says Assemblyman Jim Costa (D-Fresno), a leading author of housing legislation. "Part of the ethic behind the American Dream is the ability to own a piece of the rock. When, through hard work, people put themselves in the financial position to buy a house, they feel rewarded. They learn the basic values of complex financial arrangements which they wouldn't understand unless they purchased a home. The only way to create a broad, stable middle class society is through the concept of home ownership. I believe housing has a social and economic purpose that is fundamental to the American way of life."

The Possible Dream

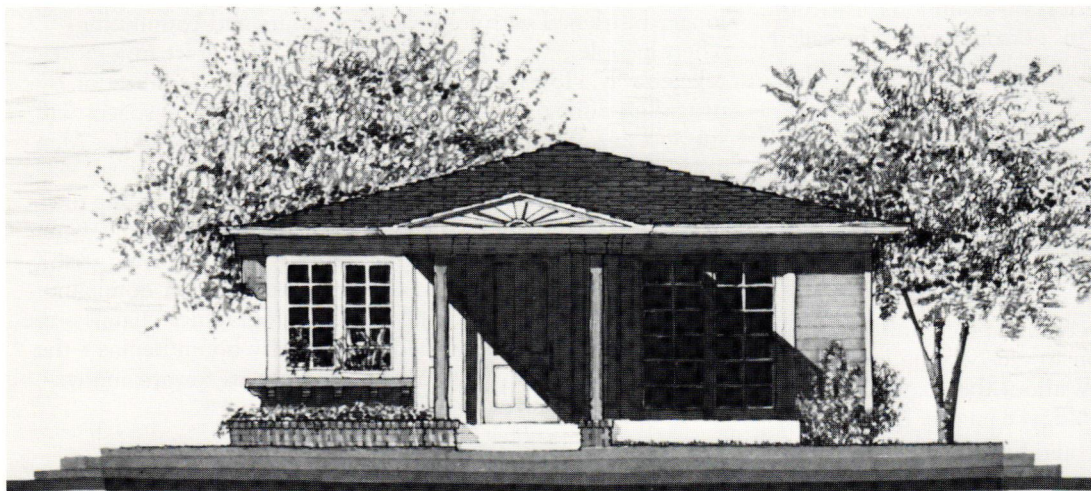
The economic logjam which has paralyzed the housing industry in the past year, has brought builder and architect into closer cooperation.

"The thrust for design comes from the builder, not the architect," says Art Danielian, FAIA, a member of AIA's Housing Committee. "Most architects have not developed skills in housing to satisfy the needs of the builder. It's not an imagination problem—it's a question of understanding the builder's market and his problems."

Smaller, denser dwellings are the end product of the builder's equation. But to sell a downsized dream, builders rely upon architects to design houses that prove that even a circumscribed space can be a castle.

"It's harder to do affordable housing," says David Lorimer, AIA, whose Del Mar firm specializes in low- and moderate-income housing. "You have to produce the design elements, but you don't have the money. The reality is that in affordable housing, you touch more people's lives with architecture than you do in expensive housing."

The range of affordable solutions are as diverse as California itself. Following are a few projects that touch people's lives.



Customized Modular Housing,
Santa Barbara
Garcia Architects

For the first time in its history, the City of Santa Barbara is sponsoring a revenue bond drive aimed at raising funds

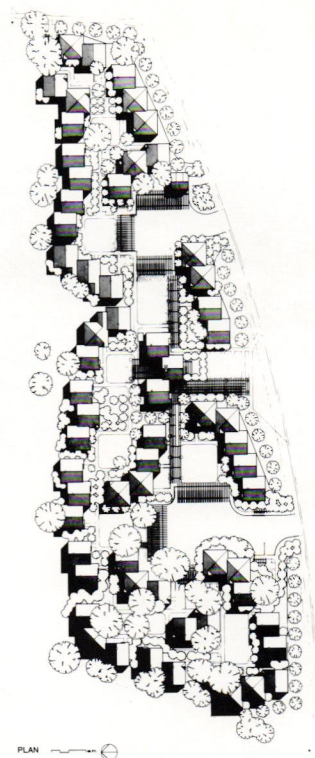
for customized modular housing. The units, designed by Gil Garcia, AIA, can be put in place for as little as \$20,000 each.

"The customized cottage look is intended to fit into surrounding areas," Garcia says. "A high density town-house development looks out of place in an older residential area. This looks like it's always been there." In addition to custom trim, Garcia's design incorporates a hipped roof to counter the "low-gable stigma" of affordable housing, and reflects California's bungalow tradition.

The trailer modules are factory-built to specification. "They're built exactly like a stick-built house," Garcia says. Being trailer modules, the units are inexpensive to transport to the site, where they are plugged in and ready for immediate occupancy.



Richard Christiani



Winston Gardens Housing for the Elderly, Oroville

Hirshen Gammill Trumbo

The meandering site plan for Winston Gardens reduces long views and creates a sense of coziness and privacy for the rental-subsidized units. Fifty-seven one bedroom units (652 square feet) and three two

bedroom units (782 square feet) are organized around a series of squares. The living-rooms of all units are oriented for maximum southern exposure. The front porch of each unit faces a landscaped commons area provided with benches for communal gatherings. "The whole idea was to deinstitutionalize the project, to pull people out of their

houses," says Richard Christiani, construction administrator and member of the design team.

The buildings around each commons area have a distinct color, undergoing a spectral change from blue through violet, earth tones and yellow to green. Groves of fruit trees distinguishing each area are chosen so their spring blossoms

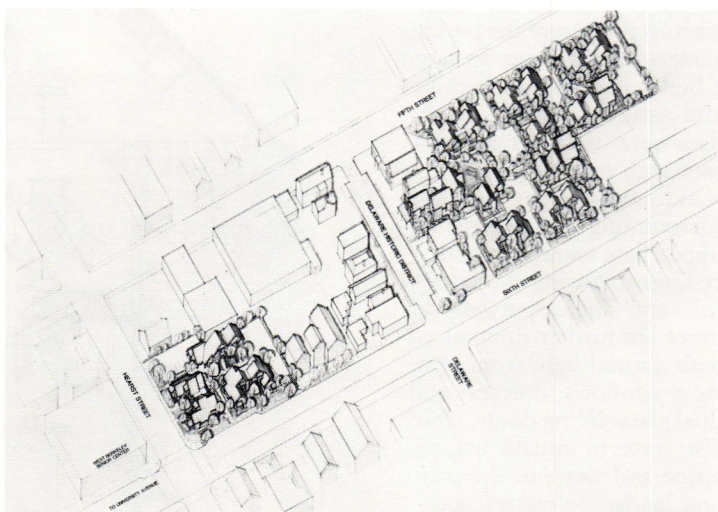
will complement the buildings' tones. Bougainvillea-covered trellises create shaded walkways leading to the centrally-located 1,900 square foot community building.

The \$2.2 million, 41,750 square foot project was developed by the Housing Authority of the County of Butte, with funding from HUD.

West Berkeley Redevelopment Project, Berkeley

Hardison Komatsu
Ivelich & Tucker

"We're always looking for ways to give people shelter without giving them slums," says George Ivelich, AIA. The West Berkeley Redevelopment Project, 62 units of infill housing for low-to-moderate income families, is designed to respect the scale and spirit of the adjacent single family neighborhoods. Prototype units containing six dwellings each sit at the perimeter of the site facing out toward the streets. The massing and scale of these units resembles that of the



traditional large Berkeley home.

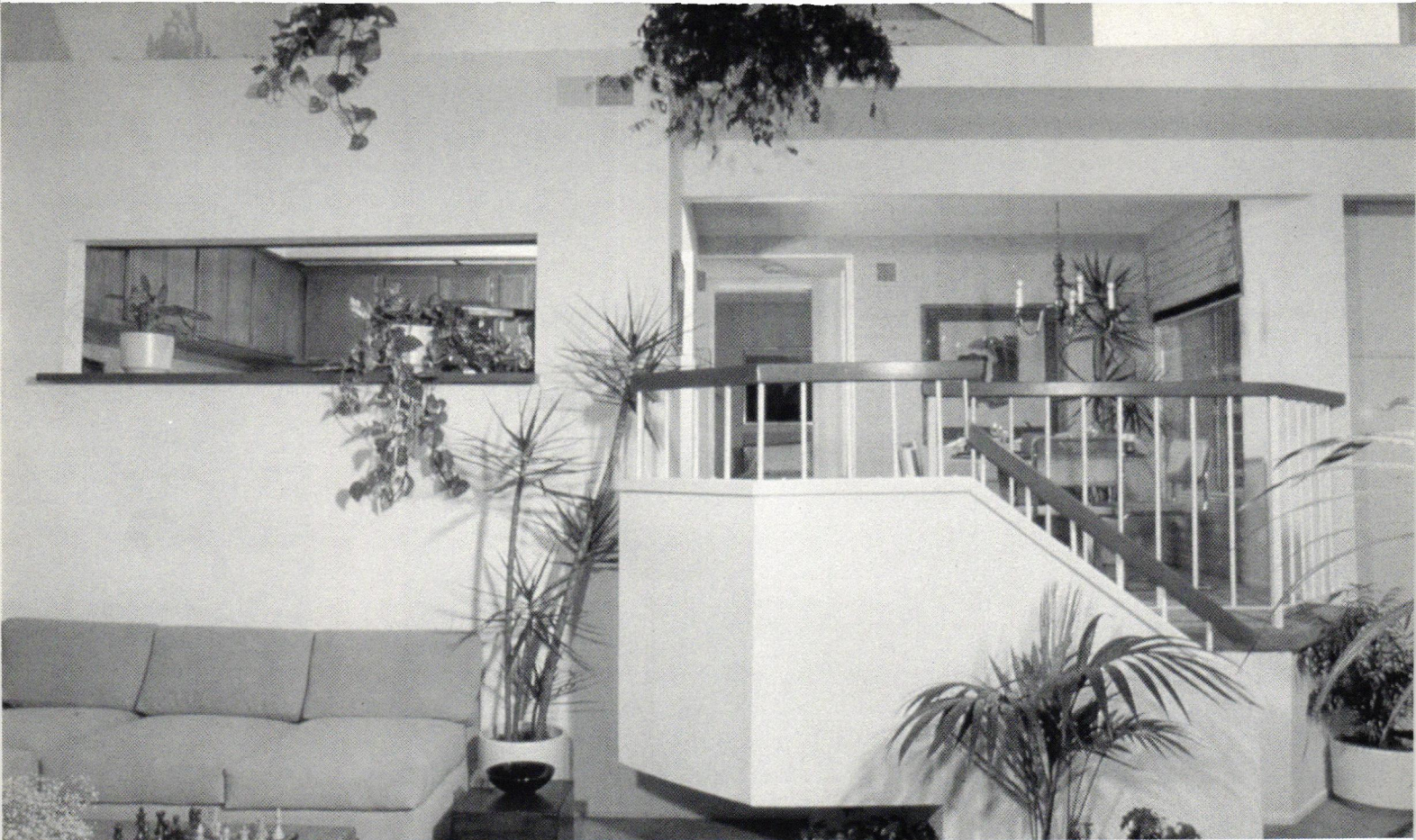
The larger family units are organized along a central pedestrian walkway that leads

to the community and recreation areas. Private yards and parking are distributed throughout the site in a manner that

avoids the objectionable "project" image.

"Communities have to participate in allowing for solutions," Ivelich says. "We're still meeting the same arguments against affordable housing: traffic, noise, pollution. While some of it is legitimate, a lot is a smokescreen to make projects less dense. Inclusionary zoning goes a long way toward overcoming community resistance, but it takes a planning commission and a city council that is enlightened to develop an affordable project."

This project is integrated into the Delaware Historic District (circa 1850). Cost of the project is \$45 per square foot, with CHFA Section 8 subsidy.



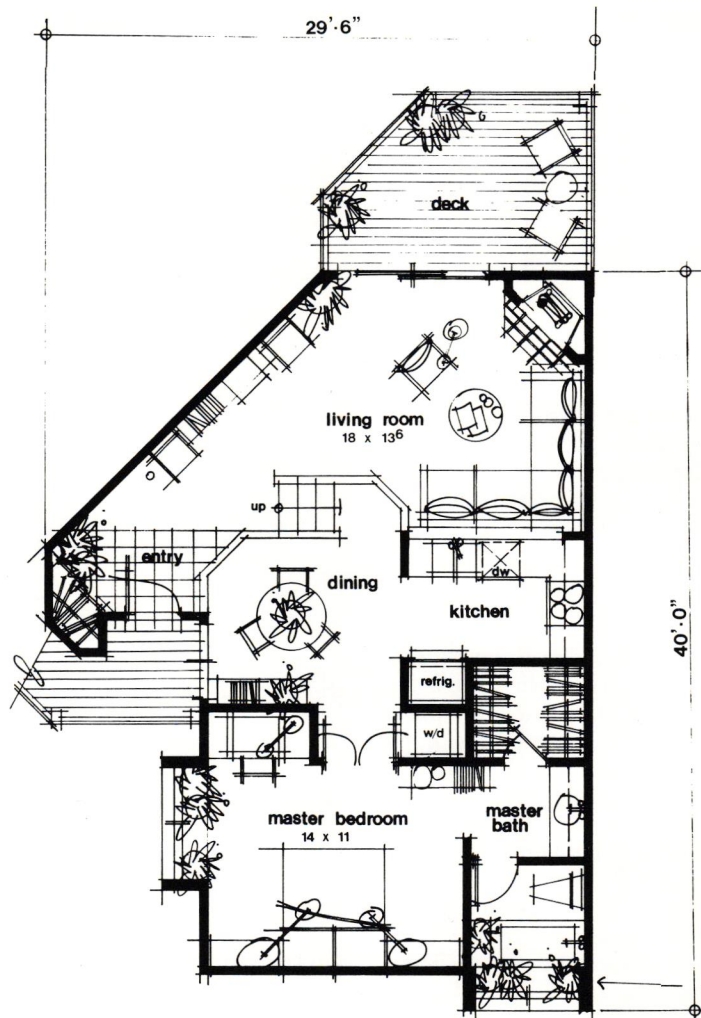
Pentridge Cove, Costa Mesa

Danielian Associates

"All houses should be affordable," says Art Danielian, FAIA. "There's always ways to reduce cost by being clever in design, in land use. Architects should strive to reduce cost, no matter what the price range."

A suburban infill development, Pentridge Cove embraces a waterscape program and mature landscaping to create a unique living environment. The 106-unit project (Phase I) situated on five acres yields a density of 20 dwelling units per acre. The stacked flat condominium units range in size from 870 square feet for a one-bedroom to 1,188 square feet for a two bedroom. All

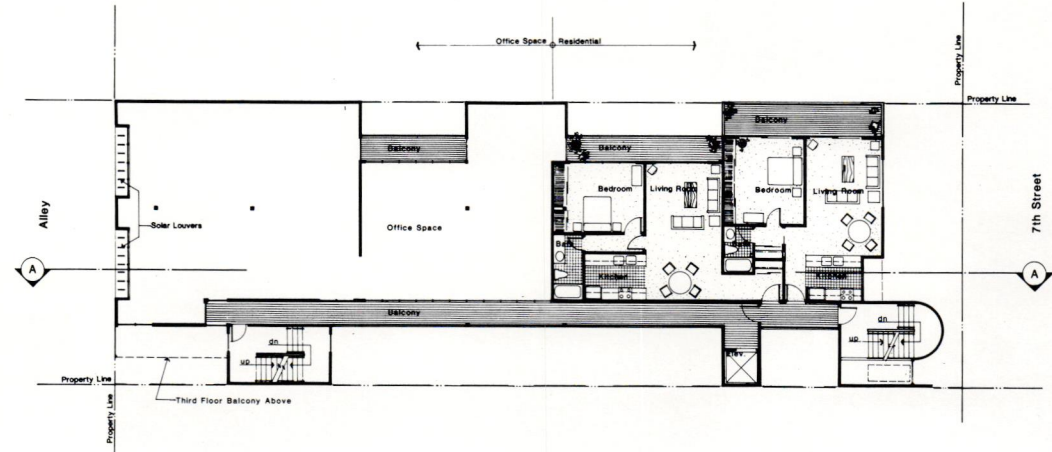
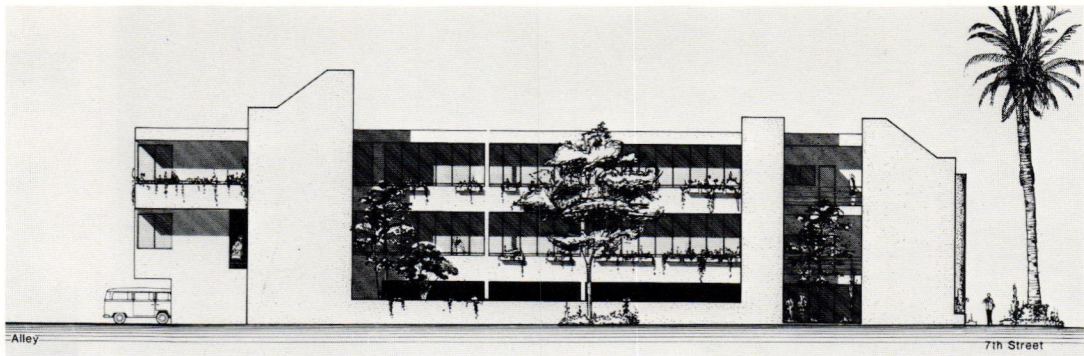
units are split-level in design with 50 percent of the parking garages tucked under. To permit a better flow of spaciousness and natural light, the lower flats were designed with ten foot high ceilings with free-standing eight foot high walls surrounding the kitchen. The upper flats feature sloped ceilings following the lines of the roof. These spacious volumes are further dramatized with natural light from clerestory windows, dormers and dual glass sliding doors, which also serve to visually extend space and views to the patios and landscape/waterscape amenities. Units are staggered to provide visual relief in building massing and to create a sense of individuality and privacy.



**Professional Office/
Residential Development,
Santa Monica**
Widom/Wein

The owner's original program called for an office building to house his dental practice and other professional tenants. The City of Santa Monica imposed restrictions requiring the concurrent development of moderate-priced apartments to total 50 percent of the total floorspace. The client agreed to the goal of providing affordable housing, but the project would not break even at the 50 percent mixed-use ratio. The client and architect spent one and one-half years negotiating with the city to reach an acceptable, financially solution. Negotiation time and expenses added roughly 25-30 percent to the cost of the \$1.5 million project. The mixed-use project resulting from the negotiations includes 5,546 square feet of commercial rental space, one two-bedroom and two one-bedroom apartments.

"The City Council is not making it easy to meet their own needs," says Chet Widom, AIA. "One of the things they don't understand is the fact that you've got to get these buildings financed. The City Council can say anything it



wants, but the majority of the lending institutions in Santa Monica will not lend here. "It was very interesting how the City Council kept referring to the owner of this project as the 'developer.' It was almost like 'nigger' or 'Jew' or some Nazi kind of thing. Finally, one City Council member

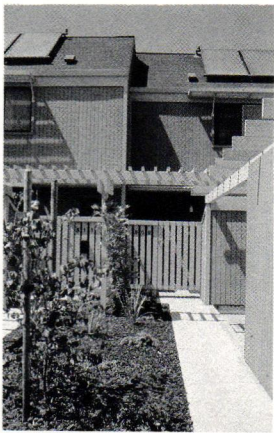
said: This is outrageous. This man is a dentist who has been in practice in this community for 18 years. "I think that there have to be incentives—maybe that's the difference between myself and the city, in that I still believe in free enterprise—incentives to the well-meaning,

concerned developer who still wants to make a profit, to allow him to do certain things in order to get this housing. What this whole thing could lead to, if it went in the right direction, is an incredible creativity by the architect, the developer and the city to solve the need."

La Solana, Hayward
Stoller & Ong

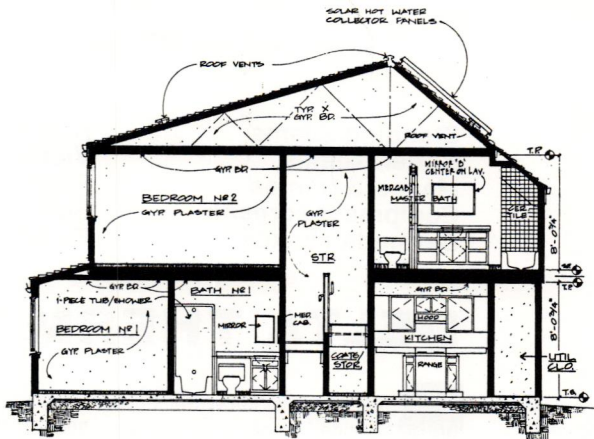
The 58-unit La Solana project is designed for families with children. All two, three and four bedroom units are two story townhouses with double stud sound absorbing common walls, and are oriented to take maximum advantage of passive solar space heating and active solar hot water heating. The design integrates many energy-conscious strategies and technologies to reduce nonrenewable fuel consumption.

La Solana, developed by Eden Housing, Inc., a local nonprofit corporation, is a demonstration project sponsored by the Department of Housing and Urban Development.



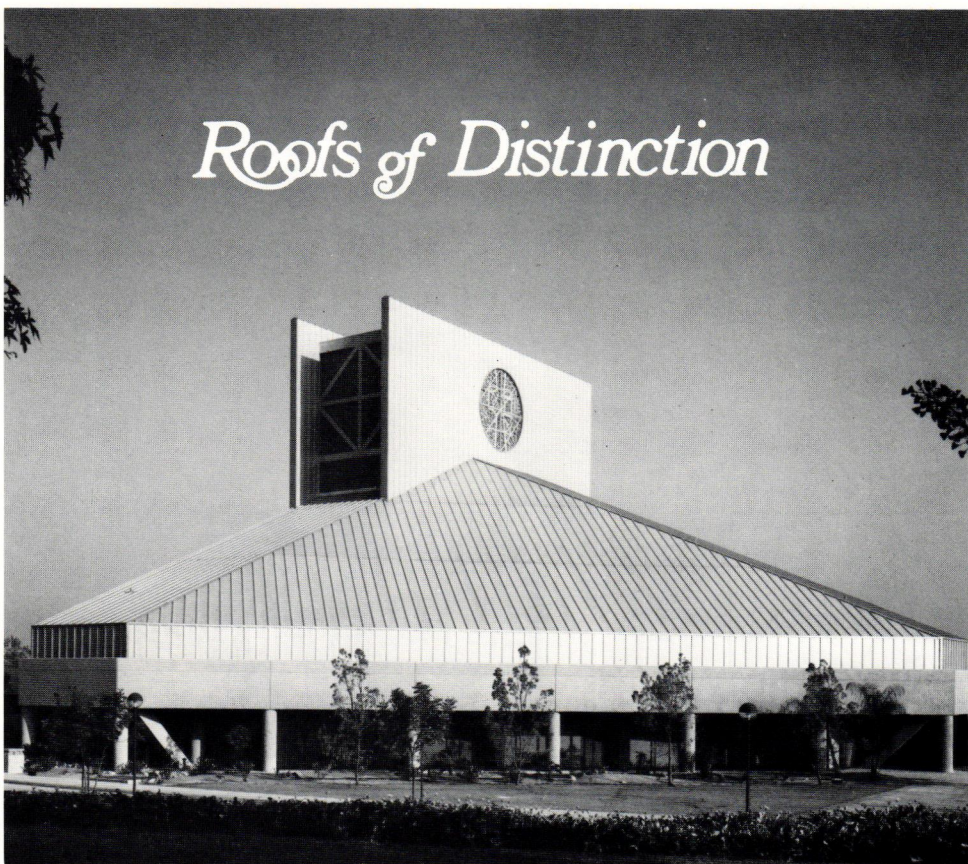
ment. The units were designed to sell for an average of \$59,000, substantially below market. Following the completion of La Solana, volunteers from Stoller & Ong helped six fami-

lies adapt the La Solana plans for a self-help project christened "La Solita." The architects helped plan the site, critiqued the families' plan adaptations, and were troubleshooters while the families



built their homes. "The brightest hope is self-help housing," says Claude Stoller, FAIA. "Then it's a question of the architect designing a community and directing a project which unskilled people can do."

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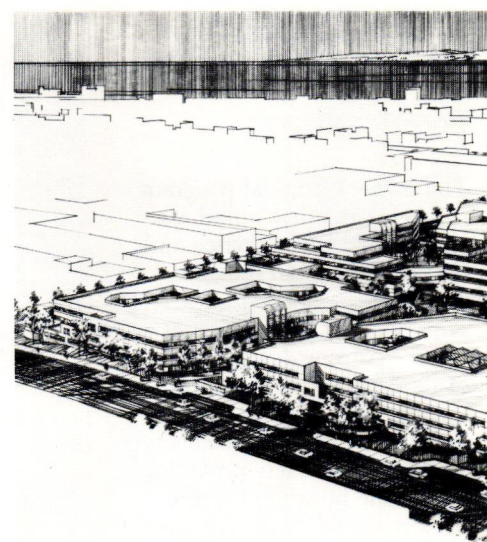
Welton Becket Associates

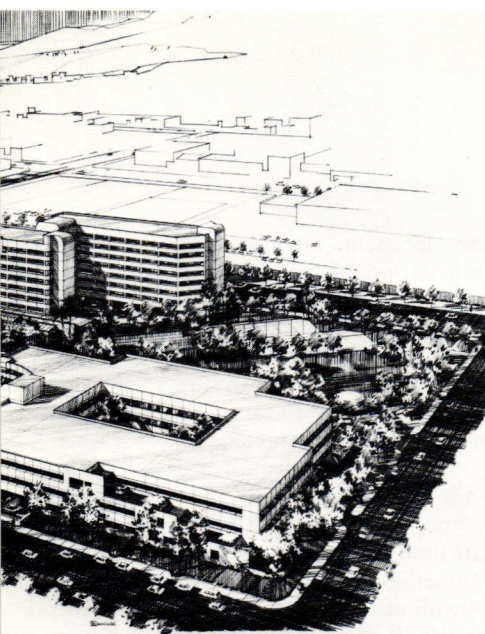
Construction was underway on Colorado Place—a 15-acre, urban development containing corporate headquarters space, a 350 room luxury hotel, restaurant and retail facilities, and a health club—when the City of Santa Monica enacted a building moratorium followed by an ordinance requiring that developments contribute affordable housing units to the community. The architect-developers were plunged into months of negotiations with the city.

An agreement granted Welton Becket permission to proceed, provided that six acres of the site were dedicated to a public park, that a childcare center was built on-site, and that the firm provide 100 units of low- and moderate-income housing somewhere in the city. Welton Becket purchased three sites for affordable housing, and hired the Leon Glucksman architectural firm to design the units. A \$4.2 million state subsidy was awarded to Welton Becket to construct 44 of the units. Welton Becket's contribution to the park, child-care center and affordable units cost an estimated 1.5 percent of the \$100 million project.

David O'Malley, AIA, president of Welton Becket Associates, discusses the evolution of Colorado Place and the impact of Santa Monica's affordable housing requirements:

"We viewed Colorado Place as a demonstration of something entirely within existing zoning and codes, that didn't require any variances or any exemptions. There were a lot of demonstrations in Colorado Place, about how you create public space and how you create work space, and how you conserve energy and





so on. The whole thing was meant to be an example of the state of the art of urban design.

"What the city did was choose to intervene in its own published codes and ordinances and require something different. Is the project better as a result? The answer is no. I think we were sacrificed to a political ideology. I don't think it has anything to do with social concerns.

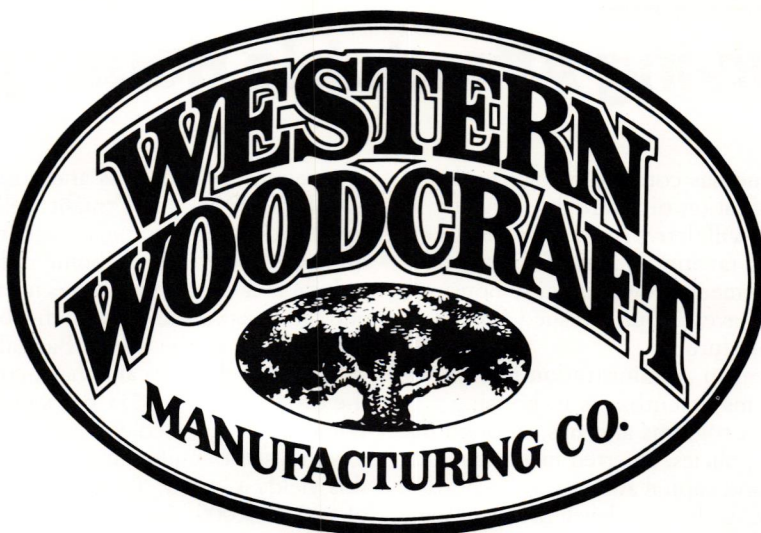
"Everybody has responsibility for providing affordable housing. That responsibility hasn't been very well carried out in this country. To barter a developer is not a solution to the problem. It's just pushing it onto somebody else.

"This country suffers most when people get discouraged with government. If you're going to bring creative influences to municipal government, then you have to stand there polite and gentlemanly and try to make your point.

"The real issues are what happens in cities: how do they manage the growth process which contributes to the overall solution, rather than takes away from it.

"The real answer to the problem of affordable housing is not rent control, because it has a long-range deteriorating effect on housing, which you can see in Santa Monica. And it's not 'stop redevelopment,' because the city is a living organism and it needs to replenish itself, it needs reinvestment. So some of the things that are politically popular, in fact have long range detrimental impact.

"Architects and all people with creative minds have a responsibility to participate in that political problem-solving. We cannot leave it to the politicians. Architects have got to get off their butts and get involved. Otherwise they become the victims, and then they can't complain."

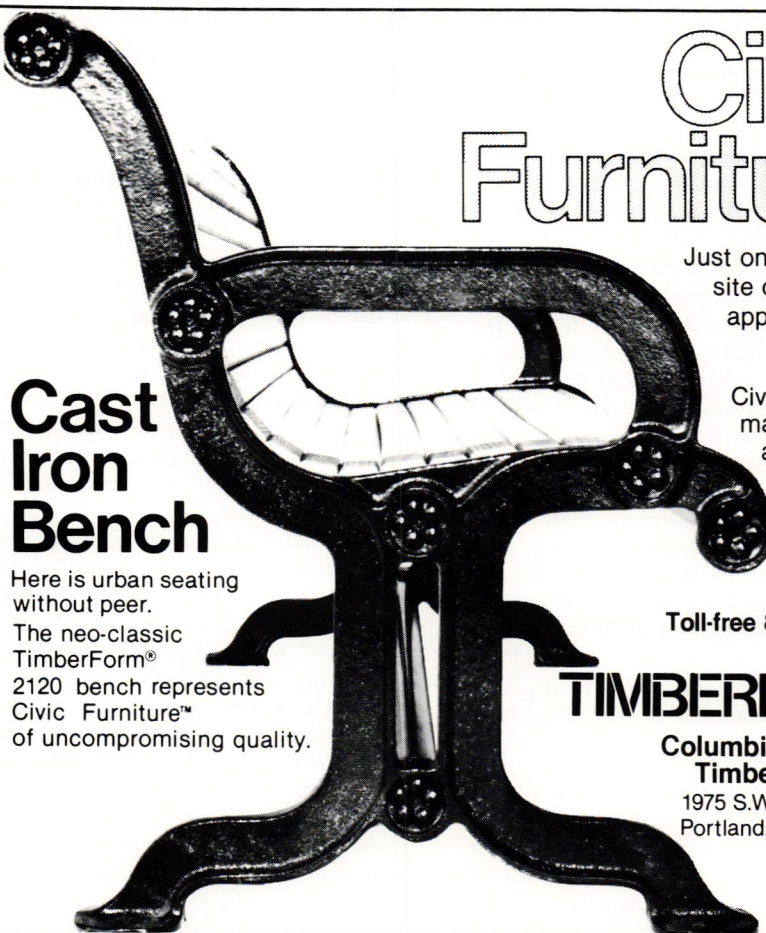


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Reviving Affordable Housing

The time has come to recognize that the resuscitation of affordable housing in California will derive from private market forces and taxation policy. The days of the government providing large housing subsidies have all but vanished for the foreseeable future.

The Reagan Administration has announced major cutbacks in housing assistance programs and has, through its monetary policies, diverted major amounts of credit and capital away from the housing sector. At the state level, the Deukmejian Administration, facing a major budget deficit, is unlikely to continue funding many of the state housing programs. Attention now must focus on the major steps toward achieving affordable housing without direct subsidy. These steps involve density, design and financing.

Density

Land costs in California are a critical component of overall housing cost. With residential land typically running around \$250,000 per acre, it's clear that the old quarter-acre lot is out of the question as the starting point for affordable housing production. Densities must climb to the level where land costs can be held to approximately \$10,000 per unit, and less if possible.

The challenge here to the architect and site planner is to show potential residents and neighbors that these higher densities need not be unattractive, or lack amenities or beautifully defined and articulated outdoor spaces. The added investment in high quality outdoor space is multiplied many-fold if it helps justify higher density and alters the underlying land costs.

California law recognizes the crucial importance of density, and provides for extra units through "density bonuses," when affordable housing is being developed. Density bonuses and other techniques to finance affordable housing are outlined in *101 Steps to Better Housing*, published by the California Department of Housing and Community Development. The booklet is available free from the Publications branch of the Department, 921 10th Street, Sacramento, CA 95814.

Design

High quality, intensively-utilized, multi-purpose space is essential in trimming the bloated three-bedroom home down from a California average of 1,600 square feet to a leaner 1,000-1,100 square feet. The skilled use of light, glass and built-ins can

compensate for needless and costly footage. Indeed, designers might well lift some tricks of interior space use from the much-maligned mobile home industry.

Judicious trade-offs between first costs and life costs can also add to the long-term affordability of the home. Basically what is needed in this area are "hard-costs" on the order of \$30 to \$33 per square foot. For a tightly-designed unit in a multi-family townhouse or condominium development, this yields a "hard" construction budget of \$30-\$35,000. Add land costs at \$10,000 and development costs at another \$15,000, and a total development package of \$55,000 is possible for a three-bedroom unit. Costs can be lower, of course, for efficiencies, one- and two-bedroom units.

Financing

While soaring interest rates crippled the home building industry in the last two

"... housing today is not just a problem for minority populations ... but a bedrock economic issue facing the bulk of the population who earn between \$12,000 and \$25,000 annually."

years, rates appear to be moving downward. The present objective must be to finance that \$55,000 package described above for the market of households who earn between \$12,000 and \$25,000 a year. The use of tax-free mortgage revenue bonds is often a crucial step, with such monies now being available at interest rates of around 10 percent.

For rental developments such financing is available on an entire project, if at least 20 percent of the units are rented at \$375 to \$400 per month. The remaining 80 percent of the units can rent at any level, although they too enjoy the benefit of the tax-free financing. The specifics of this type of financing, known as "80-20 Developments," are governed by federal and state law, and set forth in *101 Steps*.

This type of development can produce unsubsidized three-bedroom apartments for families earning around \$15,000 per year. Lower income families can be reached with smaller apartments. The key point is that, without any direct subsidy, a family of four or five with, for example, two wage-earners averaging \$7,500 each, could afford a three-bedroom apartment. (This type of

development "pencils out" only by taking full account of syndicating and tax sheltering, modest annual rent increases, the possibility of converting to condominiums in 10 to 20 years, and in some cases a short period of negative cash-flow to the developer—tolerable because of tax benefits and potential appreciation.)

It is considerably more difficult to provide ownership opportunities at these income ranges because the tax advantages are more powerful for rental developments. Nonetheless, taking that same \$55,000 townhouse or condominium unit financed at the 10 percent tax-free rate, a household earning \$22,000 annually could qualify for ownership with a 3-2-1 interest buy-down.

Such a buy-down provides a three percent reduction from the basic 10 percent rate to yield a seven percent interest rate for the first year, going up to eight percent for the second year, and nine percent in the third. The 10 percent level can hold from the fourth year on, or the rate can continue to rise slightly above 10 percent to compensate for the reductions in the first three years (which on a \$50,000 home has an up-front cash value of six points, or about \$3,000).

By enacting Proposition Five last November, Californians voted to establish such an interest rate buy-down program through the California Housing Finance Agency (CHFA), although there are many private buy-downs in operation. Architects and other members of the development team can use buy-down techniques to make projects initially more affordable.

In a "starter" situation, where there are no children, a well-designed 600 square foot one-bedroom or studio unit can be built at \$35 per square foot, thus holding hard costs to \$21,000. Add to that \$10,000 for land and another \$15,000 in development costs for a total of just over \$45,000, and it is possible that a working couple, each earning \$9,500, could afford to buy.

These calculations assume a confluence of favorable on- and off-site conditions, building codes, permit fees and dedications, approval times, and community acceptance of new housing at this price range. An extremely negative situation in any of these categories plays havoc with the ability to attain affordable costs.

Joint-Ventures

To minimize some of the risks associated with community acceptance and the possibility of delays or—even worse—liti-

by I. Donald Turner

gation, many development teams are looking to joint-venture relationships with local nonprofit organizations. Such nonprofits may include churches, civic groups, or even business groups. These groups are distinguished from their nonprofit predecessors of the 1950s and '60s by their interest in housing as an economic issue, rather than as a social concern.

The nonprofits of the '80s understand that housing today is not just a problem for minority populations or welfare mothers, but a bedrock economic issue facing the bulk of the population who earn between \$12-\$25,000 annually.

Nonprofits around the state have proven their value in speeding community approvals, attaining density bonuses, and countering sometimes hostile neighbors who actually support affordable housing—just so long as it's not in their neighborhood. The nonprofits might also bring Community Development Block Grant (CDBG) funds to a project, and might have a legal priority for the use of surplus school sites and other public properties before they go on the auction block.

The latest, and perhaps most significant variation on the nonprofit theme is the budding coalition between nonprofits and the state's major employers. The large companies—particularly those in the Silicon Valley and in Orange County—are realizing that the shortage of affordable housing within reasonable commuting distance is destroying worker satisfaction and productivity, and is accounting for jammed freeways, wasted gasoline, and the loss of air quality.

In many respects, the major employers, acting alone or in concert with local nonprofit organizations, are the "sleeping giants" in the housing arena. With their interest and involvement, with the grassroots advocacy of the local nonprofit, with excellence of design for both interior space and land utilization by the architectural profession, and with judicious and targeted use of tax-free financing, affordable housing in California may yet be rescued from extinction—even without continued governmental programs.

I. Donald Turner was Director of Housing and Community Development for the State of California for 4½ years under Governor Edmund G. Brown, Jr. He is now President of BRIDGE, a nonprofit housing development corporation operating in the San Francisco Bay Area.



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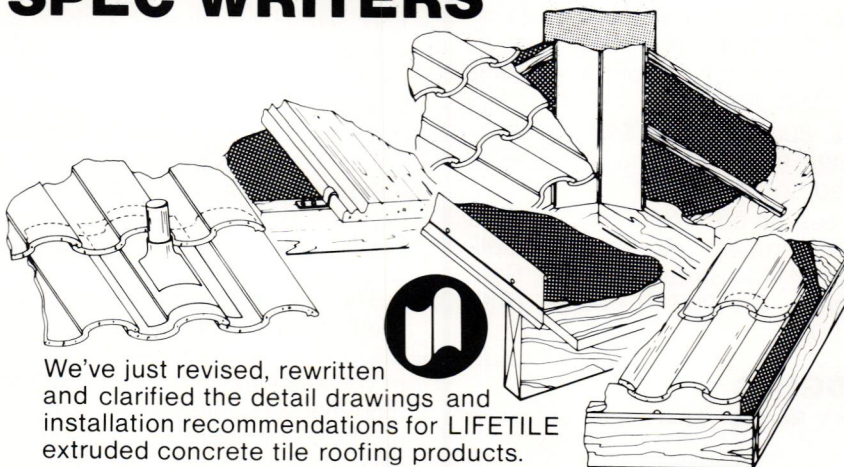
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mobility, instant place, instant culture, instant entertainment. The new courtyard apartments accommodated the automobile, provided a sense of community within walls when none existed beyond, supplied a superficial connection to past civilizations through architectural styling, and thereby entertained fantasies of living in a paradise world.

Beyond fulfilling the dreams and density requirements of the 1920s, the courtyard apartments offer several planning lessons for today. Using the model of typological analysis of city elements and memory devices presented in Aldo Rossi's *The Architecture of the City*, the authors evaluate the elements which render courtyard housing comprehensible and reproducible.

Although the text at times is verbose and pedantic, the photographs and diagrams clearly illustrate the typology of courtyard housing. Five plan configurations suggesting or defining enclosed outdoor spaces are outlined for the typical 50 x 150 foot lot. Within each plan, five functional zones make the building readable: court, threshold, living unit, service alley, vehicle accessway.

The court serves as access to the living units where the functional organization continues. All living spaces overlook the court and service spaces, and face onto the alleyway between buildings, ensuring the amenities of privacy and natural light. Architectural and landscape elements reinforce the experience of leaving the city and entering a private garden world.

The authors maintain that this stage-set architecture derives from an eclectic tradition opposed to the Bauhaus rejection of historicist associations in favor of a machine-age technological expression. While the modernists' buildings stand isolated, object-like on their sites, disrupting the urban fabric, the eclectic courtyard buildings define public and private realms, and collectively form neighborhoods and districts with hierarchical networks of courts, alleys, streets and plazas.

Courtyard Housing in Los Angeles is an urban manifesto. It calls upon architects and planners alike to reconsider the modernist theories and planning regulations which reduce housing to a series of two-dimensional density, parking and mechanical requirements based upon formulas of economic return. It calls for the adoption of a housing type that reintroduces order amid chaos, and addresses the needs of the individual, the street, the neighborhood and, ultimately, the city. *Courtyard Housing in Los Angeles* challenges the architectural profession to recapture and fulfill the dream of living in an oasis in the desert.

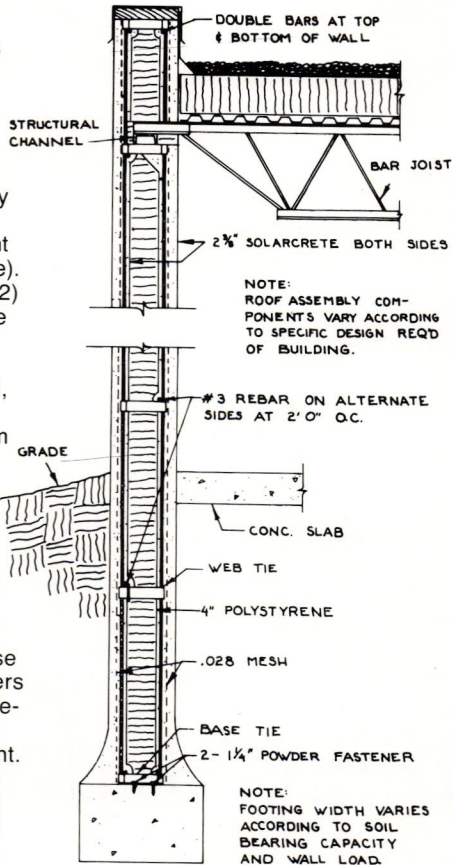
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