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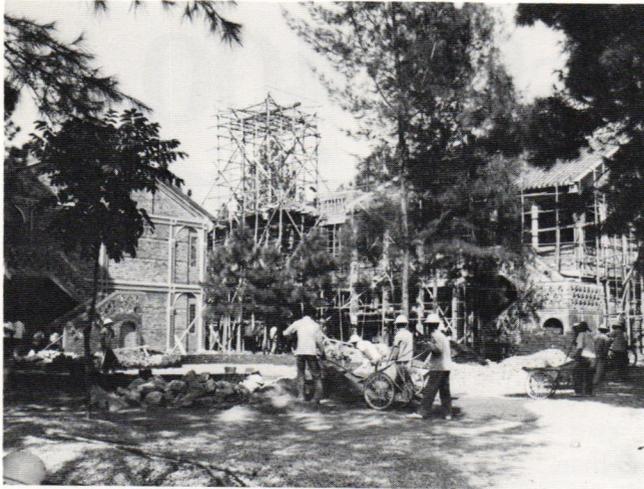
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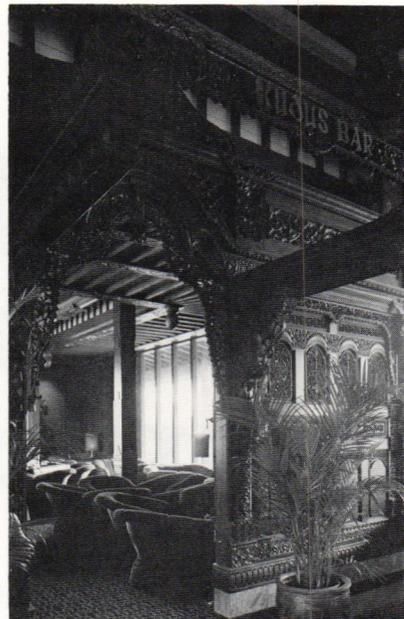
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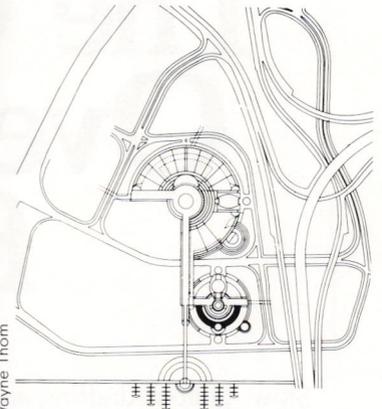
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People's Republic of China: Stone Flower Inn. Architect: Jonathan Hammond.



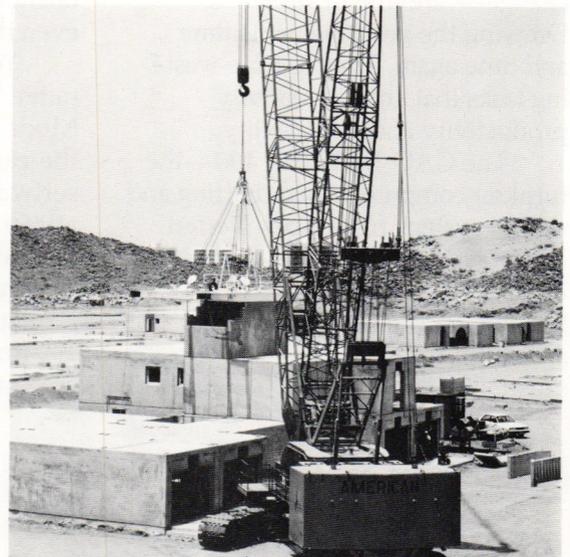
Indonesia: Jakarta Hilton. Architect: Killingsworth, Stricker, Lindgen, Wilson & Associates.



Singapore: Marina Center. Architect: Anthony Lumsden, FAIA, DMJM.



Western Caroline Islands: The Yap Hospital. Architect: Jonathan Winer.



Saudi Arabia: Prince Fawaz Cooperative Housing Project. Architect: Friel & Thomas Associates.

Hard Hat Photography

THIS ISSUE/TRANSCULTURAL ARCHITECTURE

- 16** Far East Markets, by Michael Stanton, AIA
- 20** Interview: Edward A. Killingsworth, FAIA
- 24** People's Republic of China: The Stone Flower Inn, by Jonathan Hammond
- 27** Tahiti: Moorea Plantation Hotel and Village, by Ronald F. Kuch, AIA
- 28** Western Caroline Islands: The Yap Hospital, by Jonathan Winer
- 30** Nigeria: Ahmadu Bello University Theater Workshop, by Jack Pritchett
- 32** Saudi Arabia: Prince Fawaz Cooperative Housing Project, by Dieter Thomas

DEPARTMENTS

- 7** EDITORIAL
- 8** NEWS
- 13** LETTERS
- 14** COMPETITIONS: Montalvo Center for the Arts Student Design Competition
- 34** THE COUNCIL
- 36** ON THE MOVE: Newport Beach R/UDAT, by Janice Phillip

COVER

Ahmadu Bello University Theater Workshop
Architect: Steven Ehrlich, AIA

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Cultural Invasions

We rolled into Shanghai dusty and worn, familiar enough with China by now to be surprised by the hotel lobby's dripping chandelier and wall-to-wall carpet. The relief was immense among my fellow travelers who hurried off to make appointments at the beauty parlor and enjoy the hospitality of the bar. Being a media mercenary, I headed for the newsstand. *China Daily's* headline read: "U.S. Invades Grenada." From my vantage point in a building whose context is Marina del Ray, it occurred to me that the most irrevocable invasions are cultural, not military.

China had a civilization when most of our ancestors were still sucking bone marrow. At the height of its refinement, Chinese architecture achieved an unparalleled harmony of building form and nature. The built environment was a formal expression of universal laws that governed the organization of the state and the people it ruled. Like all fine art forms, architecture thrived on the patronage of the wealthy, the rulers and those who served them profitably. Ironically, the all-out construction of Imperial pleasure palaces contributed to the downfall of the Ching Dynasty, and the hiatus from which Chinese architecture has yet to emerge.

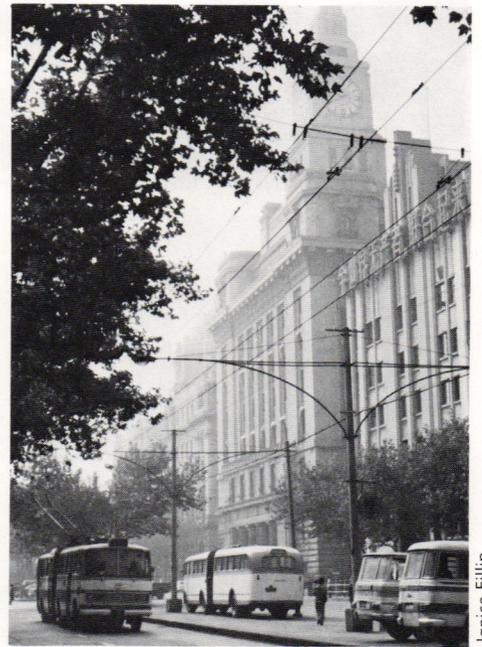
Since the state is the only client for architecture in the People's Republic of China, the practice of architecture is defined by the contribution it makes to society. The grace of classic Chinese architecture has been relegated to history in favor of dreary buildings that might cause an acolyte of the International school to pine for a pediment. Projects in the PRC are vast, both in scale and intent. The PRC is working to provide its billion-plus citizens with adequate housing and to expand its industry and technology. Considering the distance the PRC must quickly travel to achieve its modernizations, the aesthetics of architectural design may well merit dismissal as an irrelevant,

bourgeois concern. But the entrepreneurial Mr. Deng's decision to open China to foreign business ideas has introduced two groups—tourists and businesspeople—who are not used to subserviating their personalities to the welfare of the state.

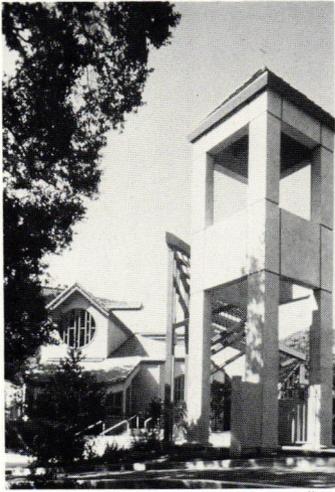
Strike up a conversation with an Australian executive in the Beijing airport or a Belgian doctor atop the Big Wild Goose Pagoda, and immediately you'll be asked how you're adjusting to transcultural life. "What's your hotel like?" the question is usually phrased. The happiest travelers are those whose hotels have bathrooms that enshrine civilization as we know it. To keep tourists at ease while their dollars are spent and to entertain technocrats while their brains are picked, the PRC is loosening its views on cultural pollution to allow construction of Western-style accommodations. On construction sites from Xian to Guangzhou, a forest of bamboo scaffolding covers highrise hotels designed by Western architects for foreign guests. But somewhere in this formula, China gets lost.

At least one "Western" architect has moved beyond a simple graft of concrete-and-glass towers onto an exotic site. I. M. Pei's Fragrant Hill Hotel outside Beijing succeeds in combining the classic traditions of Chinese and Western architecture in a contemporary structure that leaves no doubt where in the world it's located. Within China, a debate rages over the regional influences in the design of the Fragrant Hill. The possibilities of architecture as a form of cultural expression are again being discussed. The expatriot Mr. Pei may have sown the seeds for a revival of architecture as a Chinese art. With luck, the PRC will entrust Chinese architects with the design of transcultural architecture for Western users. If not, the PRC may have invited an architectural invasion that could result in a hegemony of Western-derived forms. The rich past of Chinese architecture deserves a future.

—JF



Janice Phillip



St. Matthew Church, Moore Ruble Yudell.

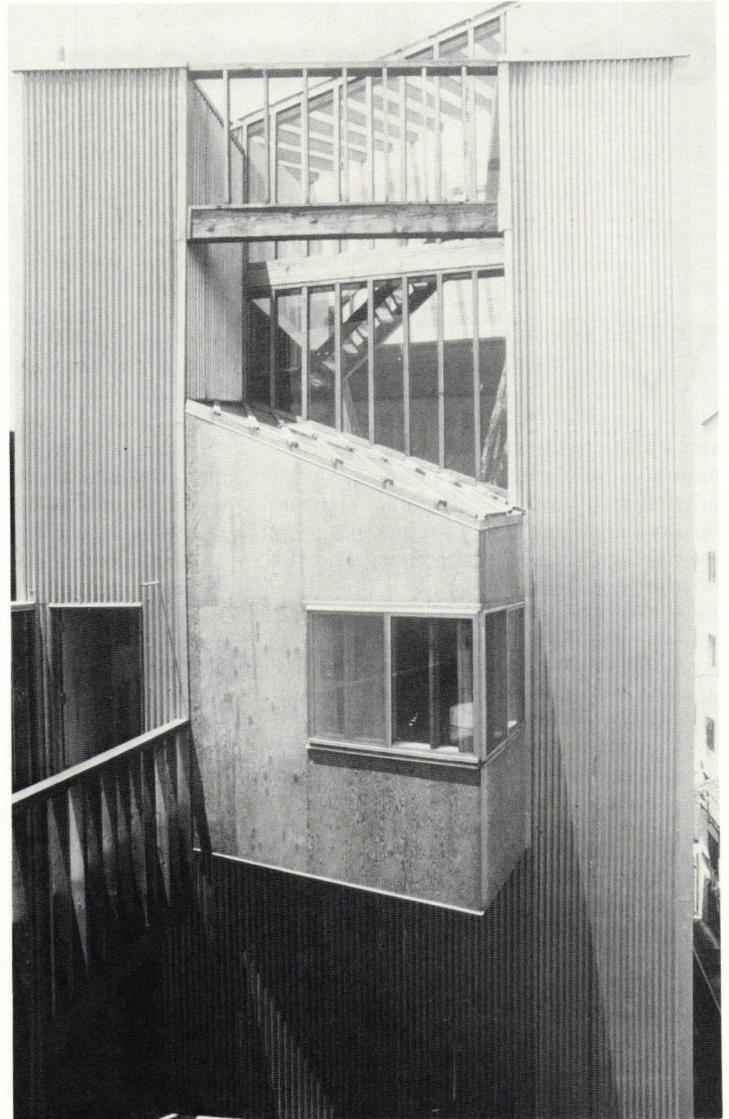


Goldman Residence, Ron Goldman, AIA.



Petal House, Eric Owen Moss, AIA.

Five private residences, two elderly housing projects, a parking structure, a church, and an office building received Honor Awards in the 1983 Design Awards Competition sponsored by the Los Angeles Chapter/AIA. Daniel L. Dworsky & Associates received three Honor Awards for Angelus Plaza, Housing for the Elderly in Los Angeles; and the B Level Expansion and West Parking Structure, UCLA in Westwood; and Northrop Electronics Division Headquarters Complex in Hawthorne. Honor Awards were presented to Steven David Ehrlich, AIA for the Swan House, Scotts Valley; Frank O. Gehry & Associates for the Spiller Residence, Venice; Ron Goldman, AIA for the Goldman Residence, Malibu; Raymond Kappe, FAIA and Lotery Boccato for the Freedman Residence, Santa Monica; Eric Owen Moss, AIA and Nick Seirup for the Petal House, West Los Angeles; John V. Mutlow, AIA for Plymouth Place, Low Income Housing, Stockton; and Moore Ruble Yudell for St. Matthew Church, Pacific Palisades. Judges for the Design Awards were Rafe Affleck, Todd Bennitt, Francis Dean, Robert Frasca, FAIA, Doree Freidenrich, Robert Marquis, FAIA, Rob Quigley, AIA, and Walter Richardson, FAIA. Robert J. Clark,



Spiller Residence, Frank O. Gehry & Associates.

AIA chaired the Design Awards Committee.

In addition to the Design Awards, 1983 LA/AIA President Robert Tyler, FAIA presented four President's Awards. Kajima Associates and George Shinno, AIA received two awards for projects in Los Angeles' Little Tokyo area: Weller Court, a specialty shopping, restaurant and office center, and Japan American Theater, a multi-purpose live performance theater. Appleton & Associates, Inc. received a President's Award for Boyd Street Place, a reuse of two industrial buildings in the Little Tokyo/Skid Row area for retail and office space. Douglas Lowe, AIA of Vito Cetta, AIA & Associates received a President's Award for the remodel of a Venice residence. President's Awards were judged by Mr. Tyler and Dr. Julian Nava.

Three Citations were presented in the category of Architectural Drawing and Fantasy to Marvin J. Malecha, AIA for "Drawings on the Fabric of Architecture," Eric Owen Moss, AIA and Nick Seirup for "Fun House;" and The Jerde Partnership for "Proposed Urban Entertainment Center, Baltimore Power Plant."

Crisis At San Luis Obispo

The School of Architecture and Environmental Design (SAED) at Cal Poly, San Luis Obispo, is undergoing some trying times. Dr. Warren Baker, the relatively new president of the University, is determined to bring a new management team of his choosing to the University and School and, as a result, has asked Dean George Hasslein, FAIA to resign.

Baker's point is that the School needs fresh ideas. In his search for "new ideas" the President created a Task Force on the Reorganization of the University, which has recommended that the successful and innovative combination of environmental disciplines which comprise the School be redistributed. Architectural Engineering would go to the School of Engineering, City and Regional Planning and Construction to the School of Business, and the Art Department would be transferred into the School of Architecture and Environmental Design which would then consist of three programs: Architecture, Landscape Architecture, and Art.

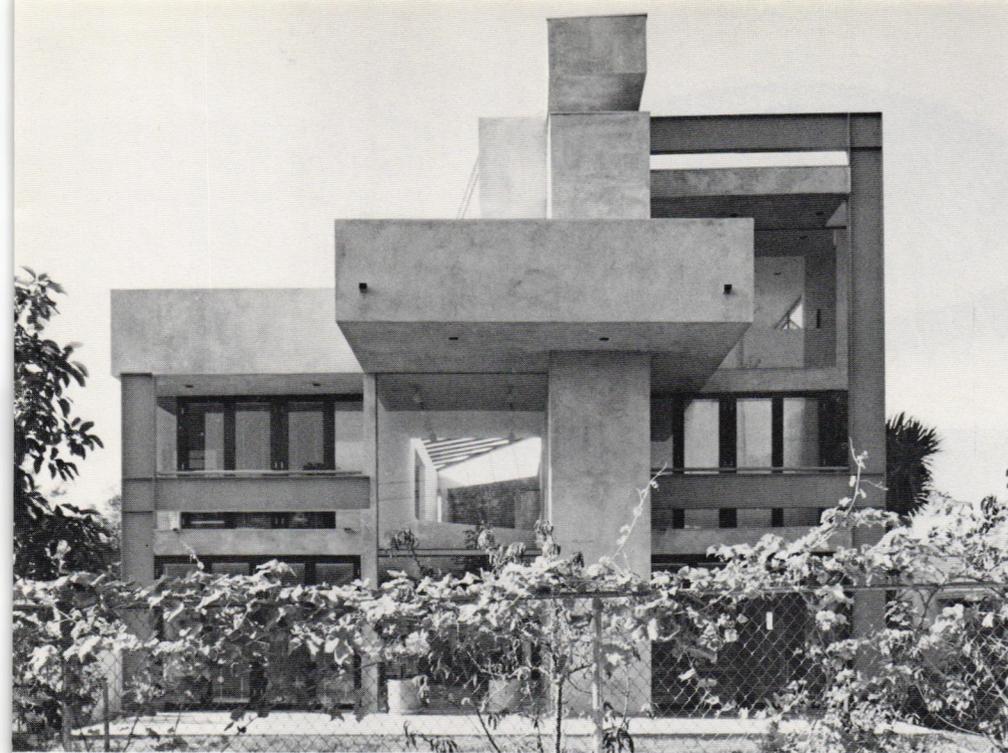
Dean Hasslein has been resisting these changes and took the matter to the alumni asking that they comment on the proposal to the President. A sample mailing brought forth around 400 letters supporting the present School organization and asking President Baker not to endorse the Task Force's recommendations. The response resulted in the proposal being withdrawn. The most frequently found phrase in the letters was, "If it isn't broken, don't fix it!"

The program at San Luis Obispo is one of the most popular and, in many ways, unique in the nation. Almost half of the state-educated candidates passing the California architectural licensing exam come from this School. The alumni are totally committed to the School whose graduates are some of the most sought-after in the nation. The School has the following philosophy:

- it serves and is centered in students;
- it is directed toward the profession;
- it is interdisciplinary in nature, interacting the five disciplines which create the built environment.

The School's alumni have formed a committee to protest tampering with the SAED, as well as the forced resignation of Dean George Hasslein. Alumni and other concerned professionals are being asked to write or telegraph Chancellor Ann Reynolds, The California State University, 400 Golden Shore, Long Beach, CA 90802 protesting President Baker's actions jeopardizing the future of the School.

—William R. Richardson, AIA
President, SAED Alumni Association



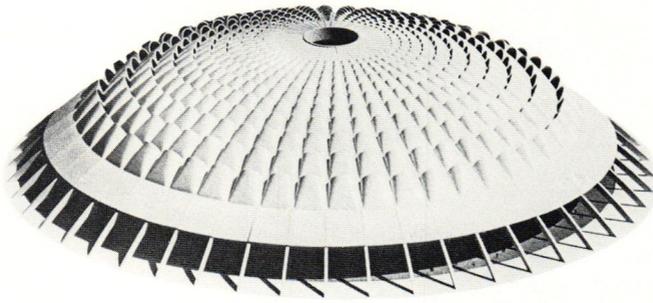
Freeman Residence, Raymond Kappe, FAIA.



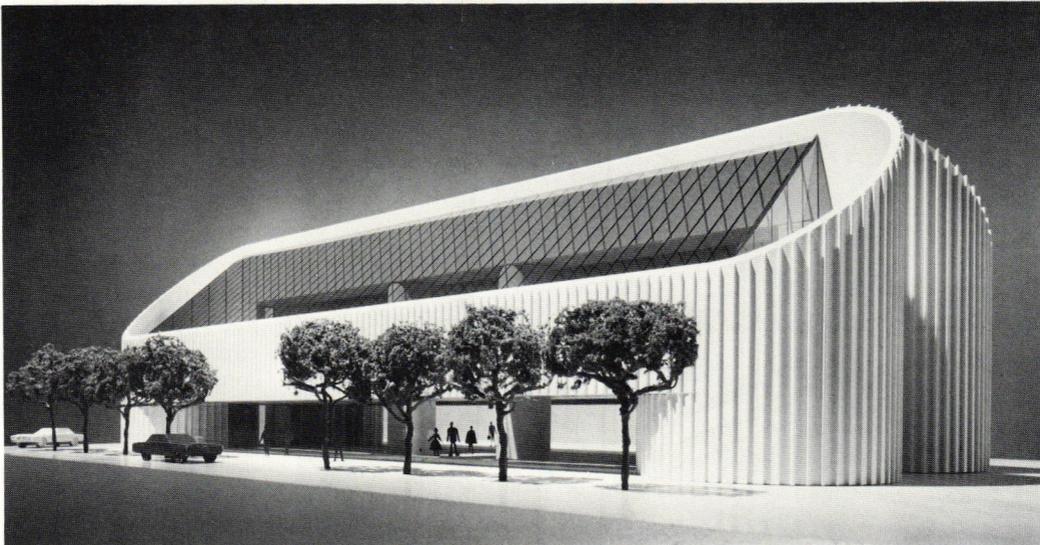
Northrop Corporation—Electronics Division Headquarters, Daniel L. Dworsky & Associates.

Ronald Moore Photography

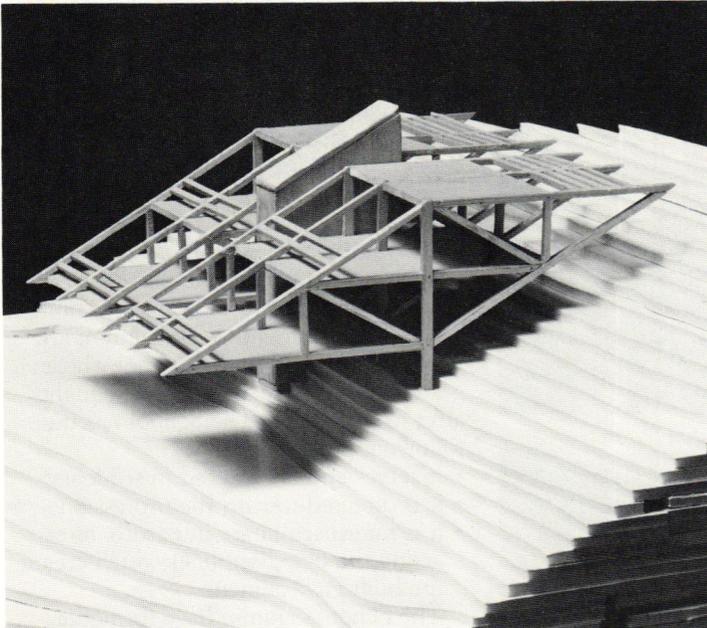




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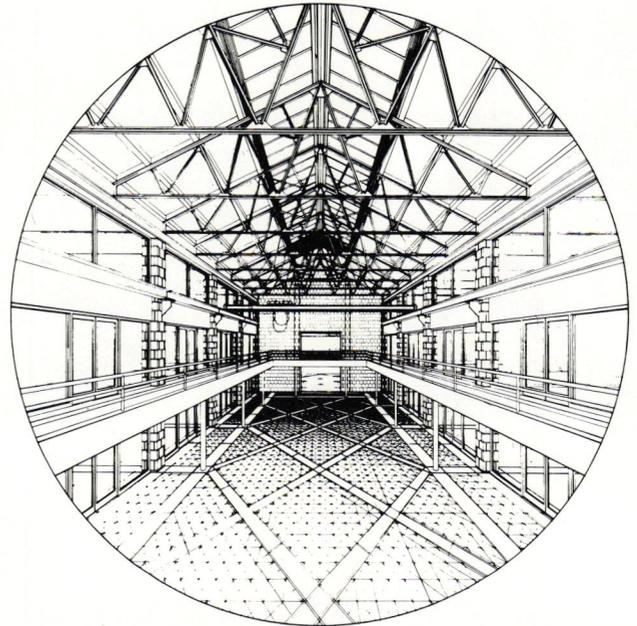


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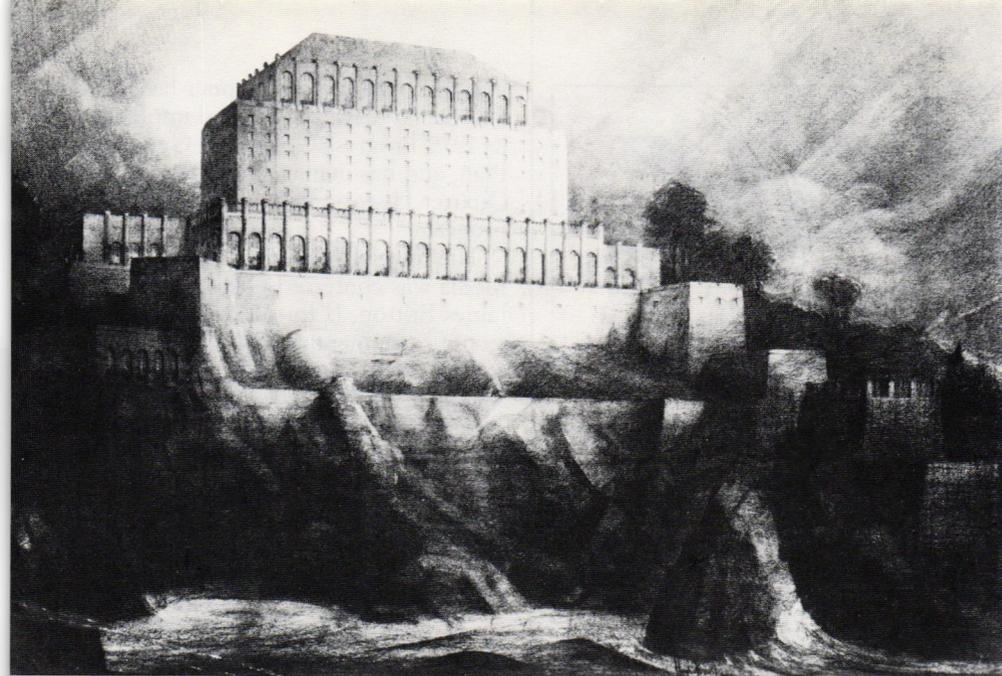
Hall House, Donald MacDonald, AIA.

"Unbuilt Architecture" was the focus for AIA/San Francisco Chapter's Awards Program. Based on the criterion that the unbuilt projects "would have contributed positively to our environment if they were built," the jury selected 15 projects out of 96 submissions. Those projects receiving Honor Awards were: San Francisco Skyway Design Center by Jacques DeBrer Associates; 600 Harrison Street, San Francisco by Tai Associates/Architects; Fillmore Mews in San Francisco by Daniel Solomon, FAIA and Associates; 90 New Montgomery Street, San Francisco, Gensler and Associates/Architects; Pacific Edgewater Club, San Francisco, Pflueger Architects; Hall House, Blue Lake Springs, California, Donald MacDonald Architect; Peters House, Berkeley, by Peters, Clayberg

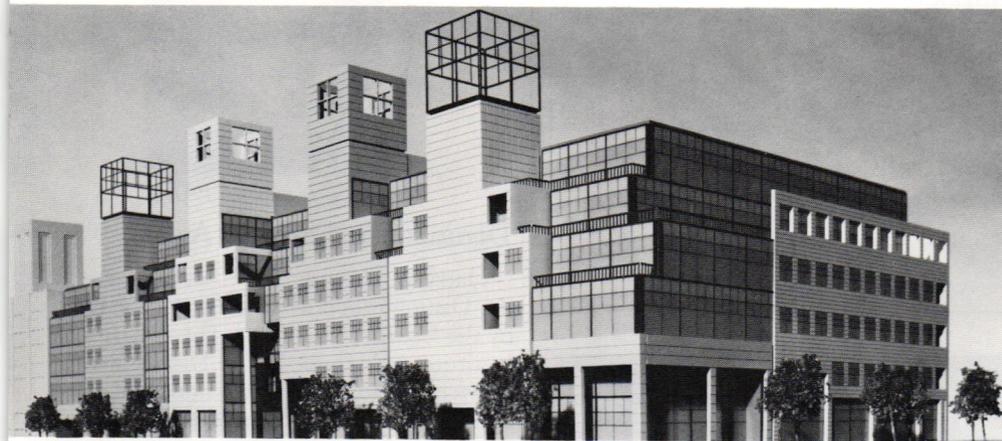


Jessie Street Substation, Werner & Sullivan.

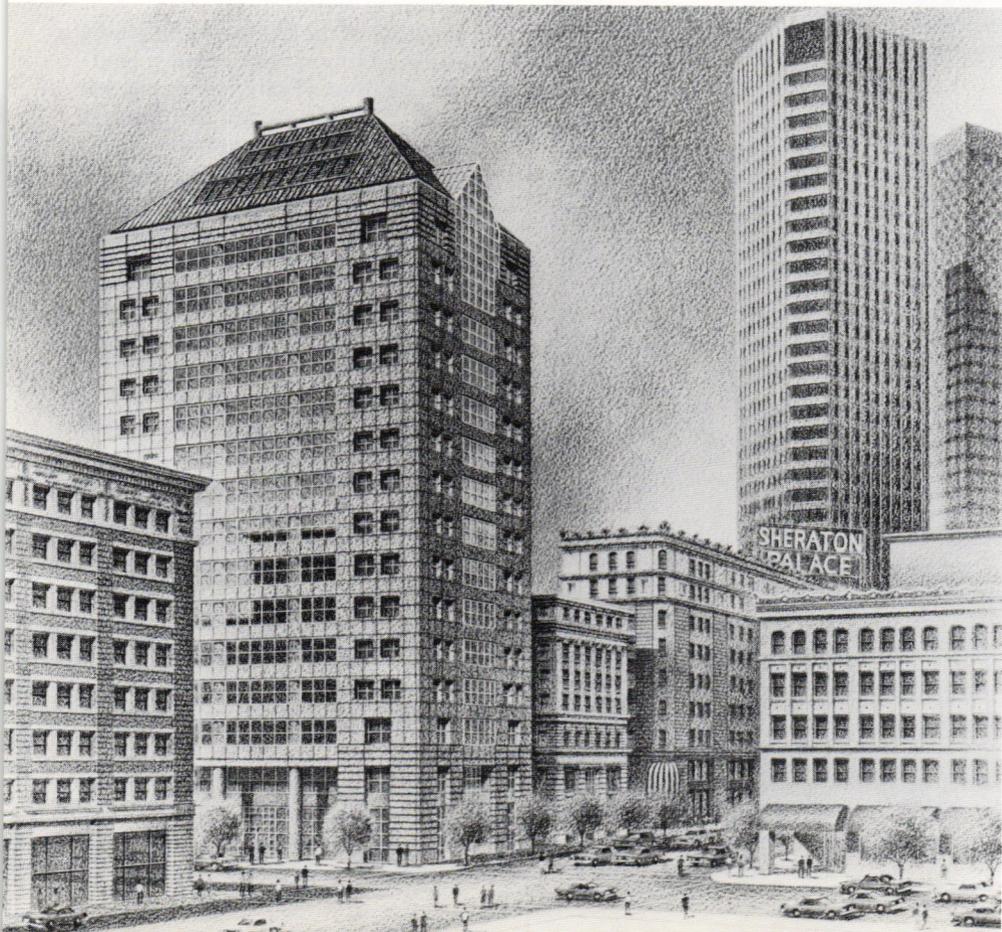
& Caulfield; House in the Santa Cruz Mountains, by Lyndon/Buchanan & Associates; 750 Bush Street Residential Condominiums, San Francisco, by Donald MacDonald Architect; San Francisco Performing Arts Center Alternative and Sundome in San Francisco by Reid & Tarics Associates; Jessie Street Substation Adaptive Reuse Proposal, San Francisco by Werner & Sullivan; Columbia Plaza Headquarters Branch, Denver, Colorado by Robbins & Ream, Inc.; Eagle Point, Larkspur, California by William S. Lyons, AIA; and The National Square, Washington, D.C. by John M. Woodbridge, FAIA. Judges for the Honor Awards were Sally B. Woodbridge, Donn Logan, FAIA, and Harold P. Stump.



Pacific Edgewater Club, Pflueger Architects.



600 Harrison Street, Tai Associates/Architects.



Accessibility Workshops

Workshops reviewing the state's requirements for access to buildings by handicapped persons are being cosponsored by the Department of Rehabilitation and the Office of the State Architect. Workshops will be held on February 1 in San Rafael; February 29 in San Diego; March 22 in San Luis Obispo; April 12 in Eureka; May 3 in San Diego; May 24 in Burbank; June 14 in San Francisco; and June 28 in Fresno. Pre-registration is required for admittance. The fee is \$30. Registration forms can be obtained from Accessibility Workshops, Department of Rehabilitation, 830 K Street Mall #126, Sacramento, CA 95814.

Design Competitions

"Innovations in Housing" is the theme of a design competition being sponsored by Wood Products Promotion Council, *Better Homes and Gardens* and *Progressive Architecture*. Architects, engineers, designers, builders and students are all eligible to enter. A \$5,000 first prize will be awarded to the best design of a single-family home that is economical to build and that excels in the aesthetic and structural uses of wood products. Deadline for entries is March 15, 1984. Rules and entry forms can be obtained from Innovations in Housing, P.O. Box 11700, Tacoma, WA 98411, (206) 565-6600.

Commendation for Excellence Awards

Three San Diegans received Commendation for Excellence Awards from the California Council, The American Institute of Architects. The CCAIA annual awards recognize extraordinary achievement by architects and nonarchitects in contributing to the excellence of the built environment.

San Diego landscape architect Joseph Y. Yamada received a Special Award for Excellence in Allied Arts for his years of service in the design, preservation and enhancement of San Diego's parks. Yamada is president of the landscape architect firm of Wimmer, Yamada & Associates. In bestowing the honor, CCAIA President Paul Neel, AIA remarked, "His influence in landscape design has been a positive factor in the overall beauty and planning of San Diego's open spaces, park facilities and private projects. He has successfully introduced innovative and sensitive landscape solutions which have established a high standard for land development."

Michael Stepner, AIA, Assistant Planning Director for the City of San Diego, was given the Special Award for Excellence in Government for his effective integration of architectural principles

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into public planning. Stegner has helped San Diego revise, adopt and implement its 1979 Progress Guide and General Plan, and has managed the Gaslamp Quarter Historic District Revitalization program.

The Special Award for Excellence in Media was conferred posthumously on James Britton, II for his sensitive architectural commentary and criticism. Britton was architecture critic for the *San Diego Union*, and frequently wrote on architecture for regional and national publications. In recognizing Britton's achievements, Paul Neel, AIA said, "Jim's comments on San Diego architecture went beyond mere analysis of structure to consider the broader issues of how architecture fits into the overall environment."



Harry W. Harmon, FAIA.

Distinguished Service Award

Harry W. Harmon, FAIA was presented the Distinguished Service Award for 1983 by the California Council, The American Institute of Architects. The Distinguished Service Award, the highest honor given by the CCAIA, is presented each year to recognize and honor a long and significant career in architecture.

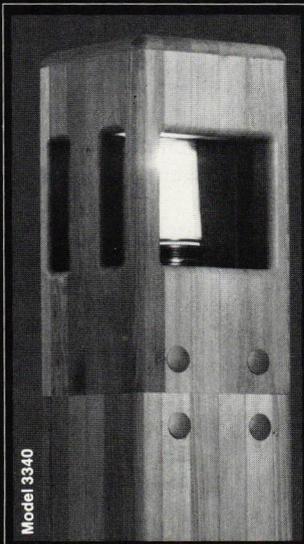
A graduate of the University of Southern California, Harmon has been involved with the California State University system since 1948. He guided the physical development of the multimillion-dollar state university facilities during a period of tremendous growth for the 19 campus system. Harmon retired last August, ending a remarkable career as vice chancellor, physical planning and executive vice chancellor.

Harmon has served the profession as National Secretary of The American Institute of Architects; Chairman of the AIA Foundation; Director of the Los Angeles Chapter/AIA; President of the Association of University Architects; and Chairman of National's Architects in Government Committee.

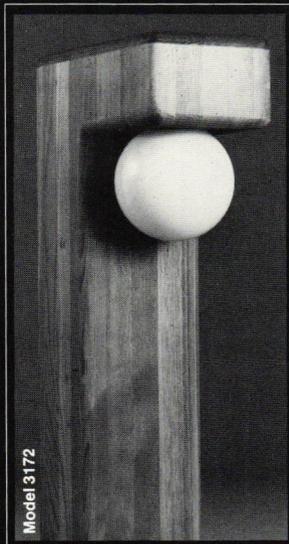
Correction

Carl McLarand Associates, Inc. of Costa Mesa inadvertently was omitted from the list of award winners in the Orange County Chapter, AIA design awards. Carl McLarand Associates received a Merit Award for Baywatch, an attached housing project in San Pedro, California.

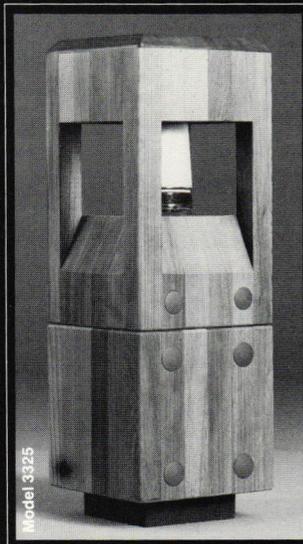
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LETTERS

Architects In Space

May I take this opportunity to congratulate you on the "Architects in Space" issue—I found it quite fascinating and informative. It is a great pity that the major architecture magazines in the U.S.A. seem to have their terms of reference so narrowly prescribed to preclude articles of this type.

David Nixon, RIBA, AIA

The November/December issue of *Architecture California*, like many others I've read through, is excellent. The article on the "UCSB Art Museum Competition" was interesting and the "Space Station Design" particularly informative. I was particularly pleased with the CCAIA Energy Policy statement.

The editor and the editorial board are to be congratulated for the quality of the material and attractive layout.

Douglas S. Stenhouse, AIA, AICP

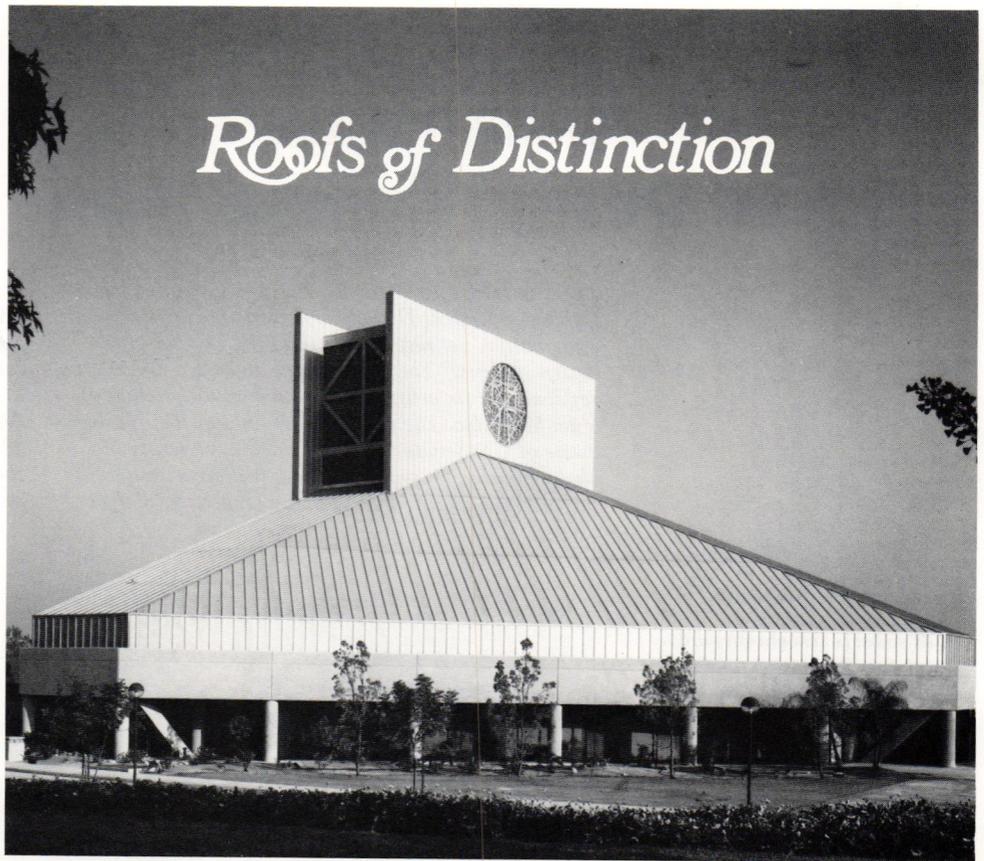
Architects Off In Space

Starry-eyed thinkers are not necessarily an anachronism—some are being well paid as architects. The built environment came out of some architect's head, plucked, as it were, from an instant of thought within the human brain. And rarely, if ever, is there an interesting story to go along with that moment in history. For usually, the architect is merely alone, hunched over the drafting table, pencil routing charts in the black sky.

One expectantly waits to hear: "I was by the ocean one day when I noticed a peculiar formation in the water . . ." Or: "I was knocked unconscious playing touch football—when I came to, there was this house." Alas, the design process is quite extraordinarily mundane. A business decision grafted onto a talent. How much does the client want to spend? Well, then, curves are out. Pre-stressed concrete is in. A few trees here and there ought to do the job.

The talent, of course, comes from making something nice out of something less. That's always been the talent—no matter what the profession. It was a talent for my mother when she cooked us meals during the Depression. It was a talent for the Washington Senators whenever they played another baseball team. And it's a talent now for architects, when everywhere growing up in the skyscape are glass curtain walls reflecting the bad thoughts of the past.

—*Oshmaul*



First Church of the Nazarene.
Architect: Gaede/Alcorn & Associates

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Montalvo Center for the Arts

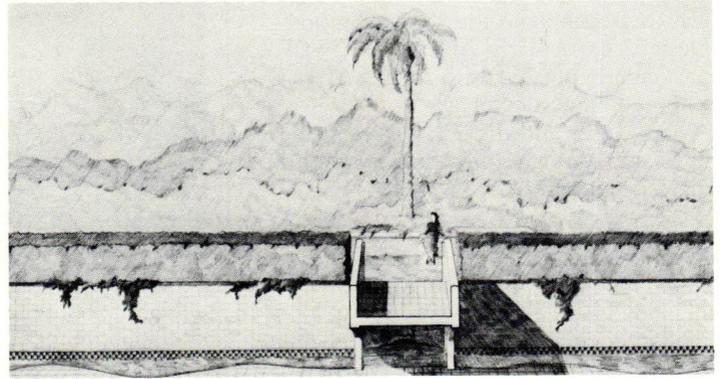
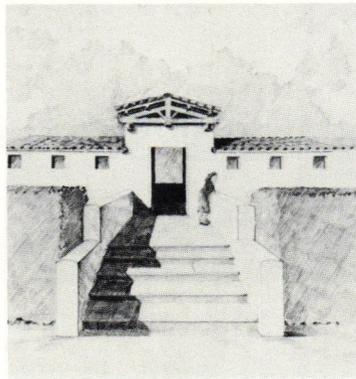
Student Design Competition

The Montalvo Center for the Arts sponsored its first California Student Design Competition to "stimulate imaginative, yet responsible thinking by California design students." The program was to design a new residence for six artists to be located on the grounds of Villa Montalvo. The villa, built in 1912 as the country estate of U.S. Senator James D. Phelan, presently includes housing for seven artists, as well as art galleries, performance spaces, offices and an arboretum. Judges

Mark Mack, Daniel Solomon, FAIA and Beverly Willis, FAIA evaluated 51 entries in a blind judging, and provided the students with written feedback on their concepts. First prize of \$1,000 was awarded to Brett M. Bennett; the \$500 second prize went to Michael Warner Radcliffe; Dorek Jamie Rusin received the \$250 third prize. All of the winners are students at the University of California's School of Architecture in Berkeley. Jury comments appear below.

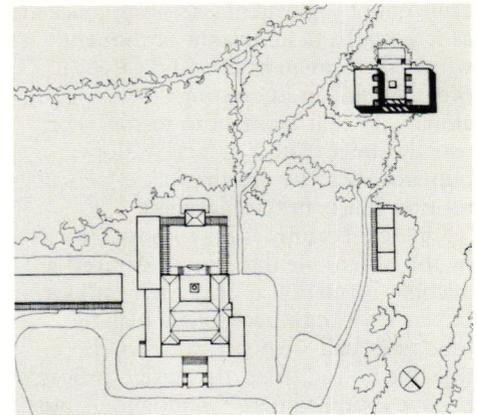
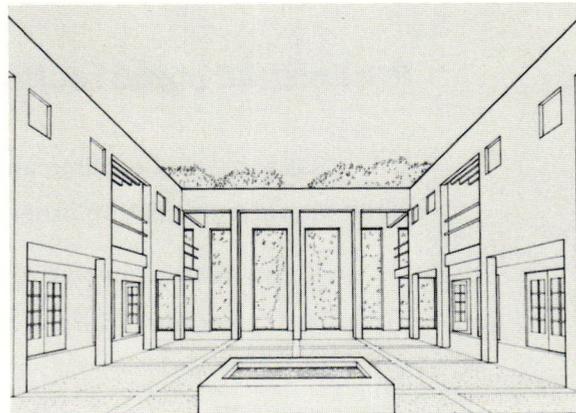
Brett Mansfield Bennett

"Loft space is straight-forward... graceful, well done, restrained, happy, festive, has humor... architectural language particularly appropriate... recognizes site extremely well... special interior spatial arrangement... flawed by lack of accessibility to court... trellis continues Montalvo motif of unifying elements... has quality of traditional regional architecture."



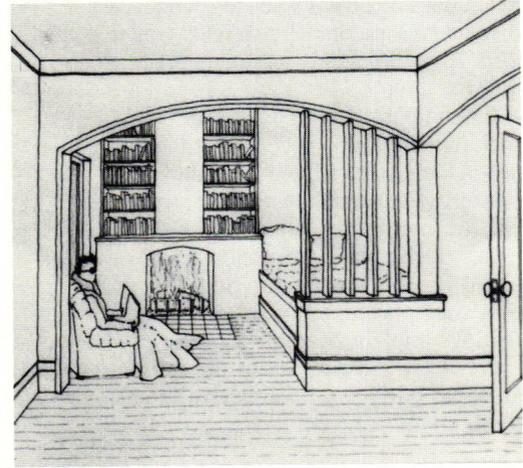
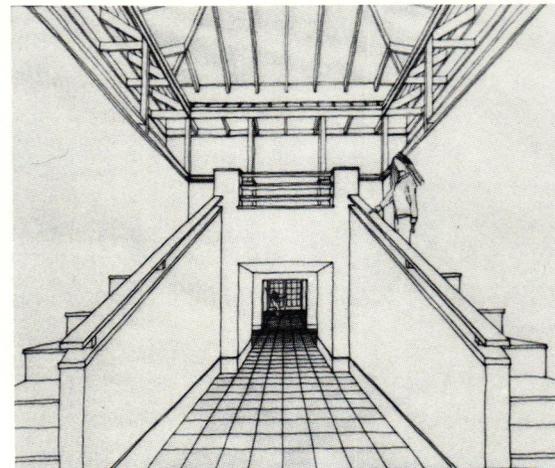
Michael Warner Radcliffe

"Fabulous courtyard... cohesive... tight spaces at second floor are major flaw... a good diagram which lacks 'flesh'... court is beautiful, underscaled... a rational space in an irrational setting."

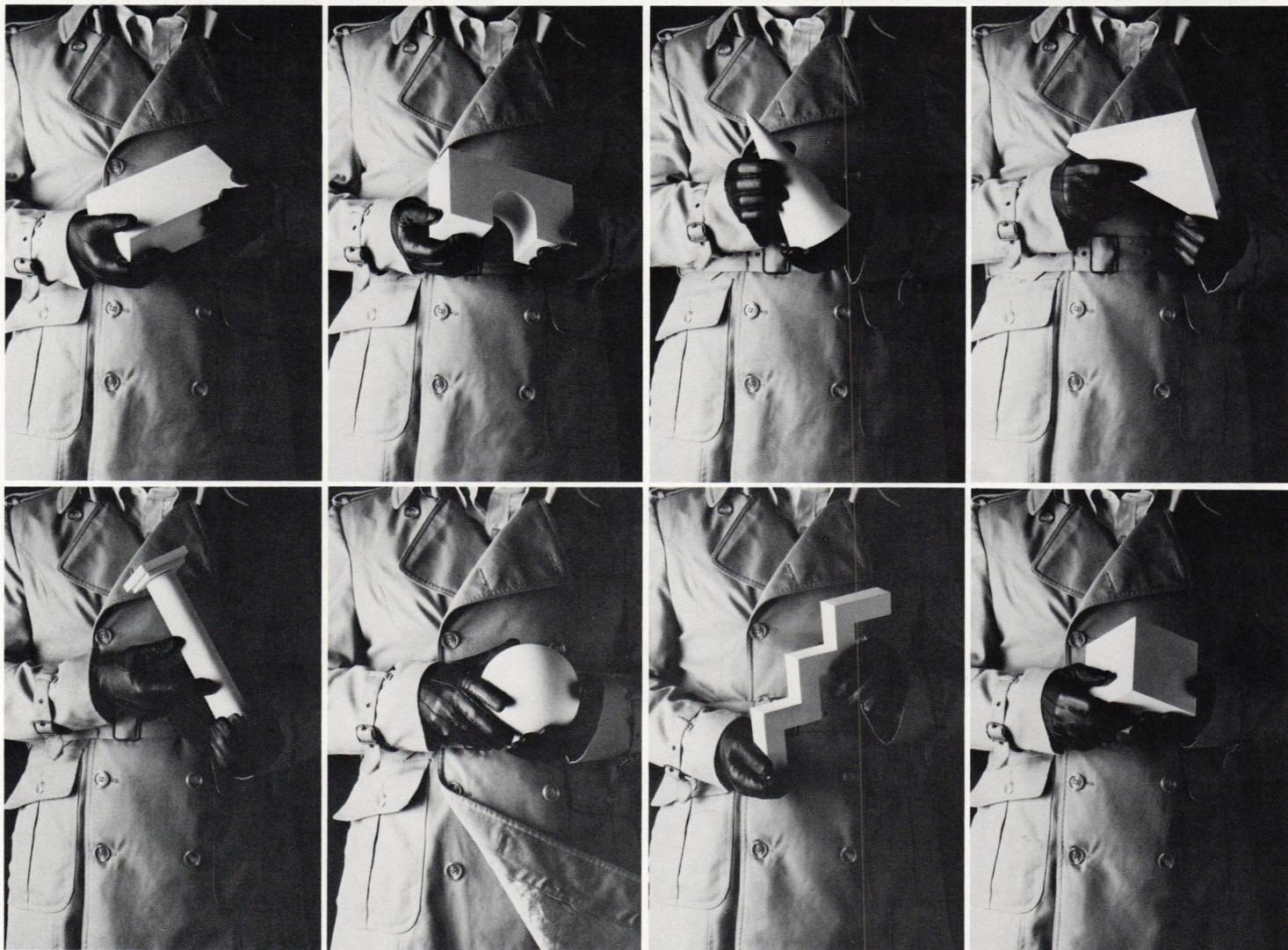


Dorek Jamie Rusin

Wonderful drawings demonstrate the quality of living spaces... the only one with a considered impression of the living spaces... living spaces are excellent, well thought out... exterior somewhat disappointing, entry underscaled; sophisticated design."



SECRET S



CCAIA Exclusive

Architectural Design Secrets Revealed

Monterey — Famous and infamous architects, designers and cross disciplinary professionals will be in Monterey March 30-April 1 to clear the fog shrouding architectural design. Says fifth annual Design Conference Program Chair Rob Quigley, AIA, "Presenters will emerge from the shadows to reveal what you've always wanted to know about **how they do it.**" Referring to design philosophies and techniques, Quigley added, "This conference is abundant with participatory opportunities for presenters and attendees alike."

Quigley alluded to the craft of set designing, the motion picture industry's view of scale and image, and a dinner roast to unmask the 1983 CCAIA Honor Award winners, in describing the programs planned for March 30. On March 31, current site specific sculptors will tell how they practice architecture with-

out constraints, and **unidentified sources** are expected to expose regionalism in architecture during a series of team presentations. A special luncheon, "Intimate Architecture," will **reveal the cover-ups** associated with today's fashion design.

According to Conference Chair Ed Sohl, AIA "Design

competitions will be featured on April Fool's Day." He added, "We'll be watching these presentations closely to see what they have **up their sleeves.**" The Conference, expected to draw a record attendance, is sponsored by the California Council, The American Institute of Architects.

Hidden design figures:
column, sphere, stairs, cube,
triangle; (bottom from l. to r.)
rectangle, archway, cone,
(top from l. to r.)

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Far East Markets

by Michael Stanton, AIA





Janice Philip

Hong Kong.

Hardly a week passes without news of another American business giant, like Atari, relocating its manufacturing facilities to Asia. Hong Kong, Bangkok, Singapore, Kuala Lumpur, Pinang, Jakarta, Taipei and other cities along the Pacific coast of Asia are booming. In the midst of this economic vitality, new markets are opening up for California architects. As projects in the Middle East become more of a mirage every year, architects are increasingly intrigued by the potential market for their services in Asia, particularly in the former colonial capitals of Hong Kong, Singapore and Jakarta.

The best-known success story in the Far East is Hong Kong. Hub of commerce, focus of international banking, noted manufacturing center, and possible gateway to the People's Republic of China, modern Hong Kong is home to over five million people (98 percent Chinese). The 32 square mile Hong Kong Island was ceded to the British at the end of the first Opium War in 1842. Subsequent treaties (including the one granting a 99 year lease on the New Territories, which comes due in 1997) expanded the land holding to 404 square miles, but business activity remains centered around Hong Kong Island and the adjacent mainland peninsula of Kowloon.

These sections are among the most heavily developed places on Earth. Land costs are so high that site acquisition is frequently 80 percent of the project costs. Much of the available land is controlled by the Crown and a few large companies like Swire Properties and Hong Kong Land. The value of land has led to an incredibly dense pattern of development. Old narrow trading streets now are lined with high rise buildings, and grey concrete residential towers march up the brown hills of the island. The value of land means every effort must be made to squeeze an additional square foot or an extra floor out of a project, often to the detriment of the design. Most of the area's 19th century structures have been torn down for new construction. Today's modern city has few physical reminders of its history.

Hong Kong traditionally has been the domain of local and British architects. Palmer and Turner (who have been in Hong Kong since 1868), the local Chinese firms, and branch offices of British firms like YRM International have monopolized most of the important local projects. U.S. firms seeking work in the Colony often have come up empty. John Portman and Associates has had an office in Hong Kong for 4½ years, and has yet to land an important commission.

But some inroads have been made by American firms. SOM Chicago designed the New World Center on Kowloon, and I.M.

Opposite: Overseas Chinese Banking Center; I. M. Pei & Partners, Architects.

Pei of New York recently completed the Sunning Plaza in Causeway Bay. The New World Center, a praiseworthy hotel/office/commercial complex with alternating bands of dark glass and tile, introduces some excellent landscaping and sculptural massing to the Kowloon waterfront. Sunning Plaza is Hong Kong's first all-curtain wall building. Its reflective glass walls and open plaza are a welcome relief from the typical tile-faced concrete towers rising from three story, full-lot podiums.

A significant contribution by American architects in Hong Kong is the work of Wong & Tung International. Founded by Bill Wong and Albert Tung, AIA, American citizens educated at Georgia Tech, Wong & Tung operates offices in Hong Kong, Dallas, and Oakland. The firm is best known for new towns and massive housing developments. These projects are International style towers rising from a continuous raised base of car parking and commercial spaces.

Some of Wong & Tung's projects are numbing in scale. The Mei Foo project in Kowloon, finished in 1978, contains 99 towers. The Chi Fu Fa Yuen, "Garden of Prosperity," complex completed in 1981 contains 4,350 condominiums in twenty 28-story towers and seven lower-rise buildings. Even more mammoth is Taikoo Shing—an ongoing project for Swire that is turning the 53 acre site of a former shipyard into homes for 45,000 people who will be accommodated in 11,000 flats in 51 towers, each of 22 to 30 stories. This dense pack housing is made possible in part by Wong & Tung's evolution of an "H" floor plan which locates kitchens and bathrooms in recesses close to the building core. Because local building codes require a minimum separation distance between kitchens in adjacent buildings, the "H" plan allows the designer to site towers close together.

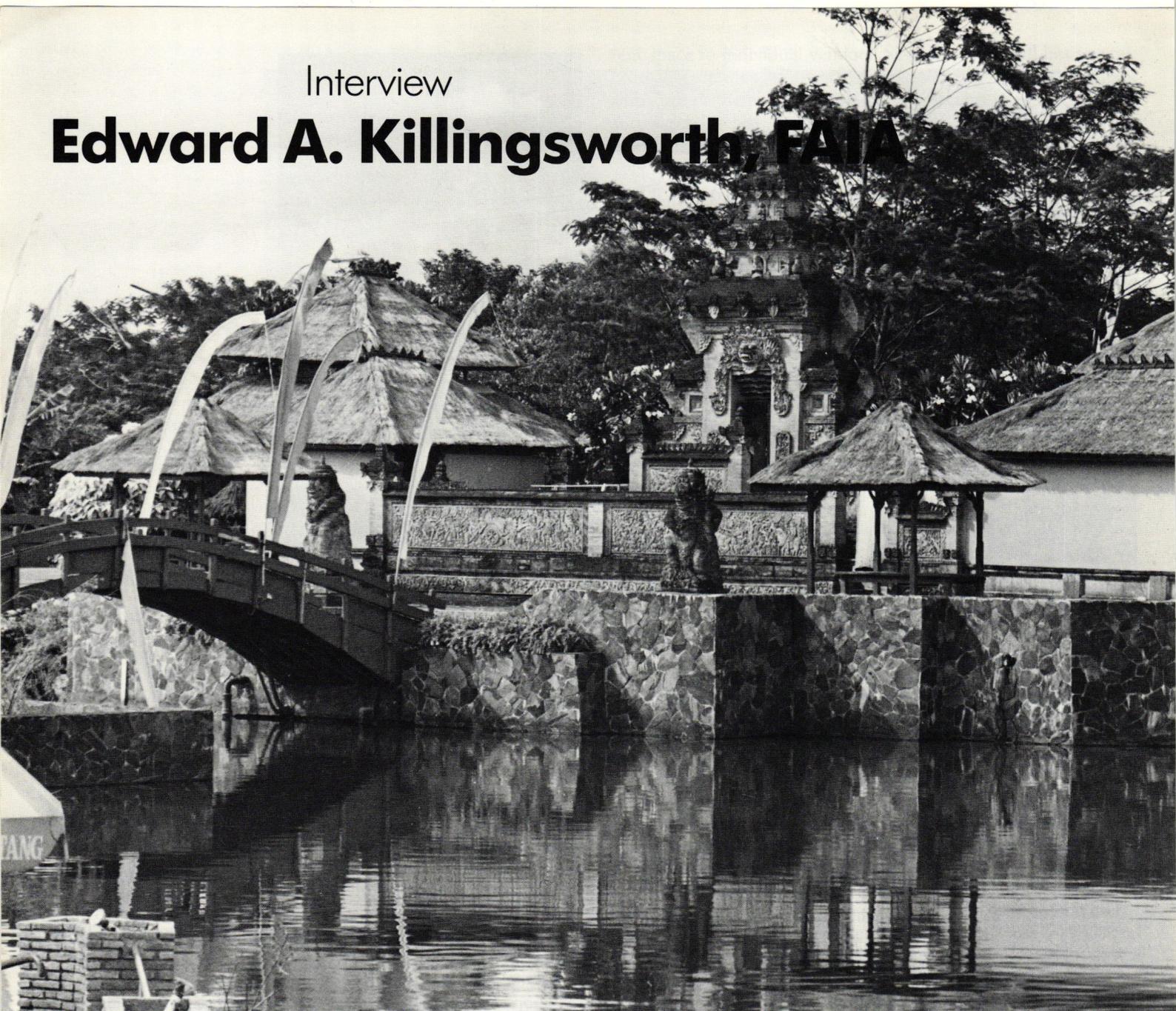
To mitigate the crowding and density, the roofs of the podiums are elaborately treated with landscaping, fountains, and seating areas. The residents of Taikoo Shing will be able to shop and, for some, work in City Plaza, the development's commercial area. Phase I of City Plaza contains 215,000 square meters of office space and shops. The commercial area is a six-level atrium featuring the obligatory first level ice skating rink that is reminiscent of the Omni in Atlanta. While the size and density of Wong & Tung's housing designs may be disconcerting to some Americans, local architects respect the firm's work, and the projects are huge financial successes for the developers.

Housing on a more Western scale currently is being designed by Backen, Arrigoni & Ross of San Francisco for an abandoned quarry site above the new Discovery Bay residential community on the island of Lantau. Working with CYS Architects of Hong Kong, Backen, Arrigoni & Ross designed a variety of building types for the narrow 15 acre site: detached garden homes, low rise three and four story buildings, and four 20 story towers. Because of careful site planning, most of the 570 two bedroom units will have views of Tai Pak Bay. The designers emphasized use of local materials for the project. The exterior finish will be simple painted concrete. The tops of the towers will step back to introduce roof terraces and relieve the rectilinear shape.

In contrast to Backen, Arrigoni & Ross's conscious effort to work with the local forms and materials, MLTW/Turnbull of San Francisco is planning no overt reference to traditional Hong Kong design in the new American Club at Tai Tam which they are designing with M. Moser and Associates of Hong Kong. The primary emphasis in their preliminary work has been to reach the best possible accommodation of the elements of a complex program on a steeply sloping site. They envision the buildings as simple concrete and stone walls, with metal standing seam roofs.

Interview

Edward A. Killingsworth, FAIA



Jakarta Hilton



Janice Philip

Edward Killingsworth, FAIA, describes himself as a collector of cultures. His clientele of international hotel chains has given him ample opportunity to expand his collection over the past 30 years. Ed is a classicist at heart. Wherever he's working, he immerses himself

in the local culture and allows indigenous influences to inform his design. The Kabala Hilton in Honolulu, Hawaii may be the best-known example of Ed's success in integrating architecture and place. Ed credits John Entenza with launching his career by insisting that Killingsworth, Brady & Smith participate in the Case Study House Program sponsored by Arts + Architecture. That career has continued to flourish. A room in the Long Beach office of what is now Killingsworth, Stricker, Lindgren, Wilson & Associates, displays 42 national, regional, local and international design awards including AIA Honor Awards and the Sao Paulo Medal of Honor. A past president of the California Council, The American Institute

of Architects, Ed continues to be active in the AIA. "What I like most about architecture is to be found in its rich past," Ed says. "I love balance, a clear and compelling axis, careful proportion, respect for tradition. With a sense of balance and proportion we can create spaces where the spirit can soar. What better goal in life could there be?"

Elements of traditional art and architecture are used extensively in the Jakarta Hilton, particularly in the lobby and bazaar. How do local architects react when you incorporate elements of the indigenous culture into your design?

We always try to encourage the local architects to incorporate indigenous architecture into the design, but normally they resist. I believe this is brought about by their architectural education. This is true in Indonesia where they have a fine architectural school, and where most of their instructors are from the United States or Europe. Unfortunately, the students are encouraged to create the typical architecture of today, thereby turning away from their local cultures. I've always been offended by this, since Indonesia has a wealth of architectural heritages which should



Wayne Thom

be the roots of Indonesian architecture.

All of Indonesia before the 15th century practiced the Hindu-Indonesian religion. After the 15th century, the Moslems conquered all but Bali. Moslems do not believe in representational architecture, painting or sculpture, but the Hindu-Indonesians do. For this reason the great architecture, painting and sculpture of today is in Bali. In Bali there are ten thousand temples and they're building new ones every day with beautiful traditional forms and sculpture. Bali is magic. Even the children, from the time they start to walk, are carving and painting and creating sculpture.

We used the Palace of Joga Jakarta for inspiration for the lobby interiors at the Jakarta Hilton. We felt strongly that the lobby should reflect the warmth and beauty of traditional Indonesian architecture. Fortunately, Robinson and Conn, the interior designers from London, were sympathetic to our thoughts. The ceilings are a faithful reproduction of the Palace at Joga Jakarta. The floor originally was to be compressed cement tile with an intricate pattern in the traditional manner. Unfortunately the art of creating the tile is lost, so a warm Indonesian marble was

substituted. Three hundred native artists and craftsmen were brought in from Bali to develop the Indonesian Shopping Bazaar. They brought their stone with them. For over a year they carved intricate shapes and patterns to create temple gates, bridges, bell towers and other wonderful structures. These remarkable artisans are from 12 to 30 years old.

In Bangkok we took the basic form and proportions of an existing temple as a model for the lobby of the proposed Regent Hotel. Instead of including shops in the hotel we developed a Thai Village connecting to another hotel. The Thai architects were not pleased with our design. They preferred a hotel modeled after the Boston City Hall. Throughout Bangkok, Jakarta and other Far East cities, new buildings bear a strong resemblance to the latest in the architectural magazines and the latest in buildings in the United States.

In the Middle East, there is a great interaction of various cultures. Dubai, a part of the Arab Emirates, has some charming old buildings with large wind towers which are beautiful. But they're being torn down. I asked a local planner why. He answered, "They're Persian. The Persians came across the Gulf, destroyed everything, and built their own buildings. Throughout the years the people of Dubai have hated these buildings and are determined to have them removed."

If your client is an international hotel chain rather than a local development company, do they have a different attitude about wanting a modern structure versus one that is more culturally indigenous?

Yes, I would say so. We have more difficulty putting together a project which reflects the atmosphere of the area with a local group than we do with an international group. One of the things the international group respects is tourism. When their guests arrive in Bangkok or Indonesia, they don't want to feel as though they just arrived at a Holiday Inn in Chicago.

What countries do you see as emerging markets for California architects?

Immediately my thoughts are, of course, the Middle East. But with all the turmoil, it has quieted down as a market.

China keeps being referred to our firm, yet we have repeatedly turned down possible work in China because working relations are very difficult. I've purposely stayed out of South America and Central America for the same reason.

Hong Kong has real problems now that the British lease with China is coming up for renewal. The big construction boom is slowing. I suspect that much of the wealth from Hong Kong is going to Singapore. Personally, I would invest in Hong Kong with great question, but I wouldn't hesitate to put all my funds into the right project in Singapore. I would avoid hotels since there are too many under construction. Singapore has a very stable government, as does Japan.

Malaysia, with all its wealth, is a tough market. Singapore is one of the most aggressive cities in the world. By the year 2000, they hope to overtake Japan in electronics and finance. Singapore welcomes outside consultants to help their architects. Lee Kuan Yew, the enlightened head of the Singapore government, has had an open door policy for outside architects for years.

Thailand isn't that way. Local architects and politicians make certain that there is not an open door policy. The Japanese, too, are very parochial about letting any outside architects in, as is Korea.

There is a trend in most of the countries where we have worked to make certain that the principal architect on a project is a native. In Indonesia, this influence is coming from the archi-



Wayne Thom

tectural organizations. They are insisting that part of the drawings be in the Indonesian language. This makes it very difficult for bidding, or tendering, since generally the international language is English.

How do you go about finding clients outside this country?

This office has never gone searching for clients; never in its 30 years. We also do not get involved with architectural competitions. We prefer for a potential client to review our past work and assess our value as an architect by what we have achieved. Our clients usually come from referrals. We have worked with Hilton International for 22 years. They've been very pleased with our work, and have referred many projects to us.

There was an architectural firm, which I prefer to leave nameless, which had a sales force in the Far East. They are now out of business. There is a resistance from clients to a strong sales approach. Architecture is a very personal business. It's like going to a doctor. Clients want a particular person, in a particular firm to put their project together.

One thing architects should be very cautious about is a call

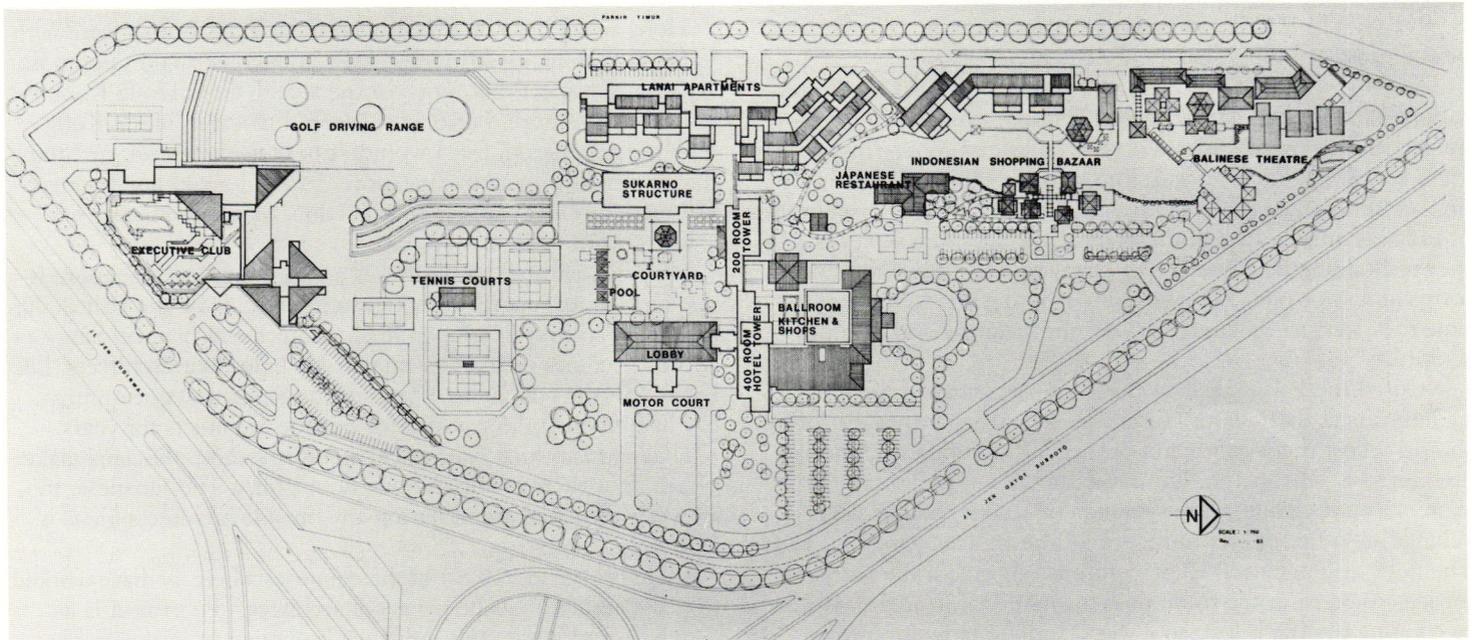
from an old friend or a college buddy. Nearly every architect has gone to school with someone from Saudi Arabia, the Middle East or Korea; either that or they have a friend who has. These friends call and say they have a guaranteed project, and all that is necessary is to put the drawings together. At one time we were receiving two to three calls of this kind a week. We responded to the calls by saying, "We think your project is great, and we would like to be your architect. Please send us a retainer, a round-trip airplane ticket and paid hotel accommodations." We usually never heard from the "eager client" again. When we did and there was a retainer and tickets, it was always a good job.

We make certain to get reimbursed for all travel expenses, since these can become rather horrendous. At one time, my vice president and I were about to check out of a hotel in Dubai. We were there for two days, and found we had a hotel bill for \$900. The hotel would not take any credit cards. Now what do we do? By combining our travelers checks we covered the bill, but I was left with only \$75, and I still had to go to Beirut and Damascus before I came home.

In competing for overseas projects, is there any advantage to an architect in being from California? Is it perceived that California architects are more progressive, for example.

California is the promised land: everyone wants to come to California. But people in the Far East or out of our country might question a California architect's credentials, because they are mainly looking for experience in the fields of office buildings and hotels. I suspect they might be looking to the East Coast or Chicago.

The problem also has to do with our architectural publications. After the original *Arts & Architecture* stopped publishing, most of the architectural magazines turned away from California. Your magazine has helped greatly in reversing that, but it needs wider distribution. *Architectural Digest* has had a great influence. I haven't been anywhere in the major parts of the world where I haven't seen *Architectural Digest* on the newsstands. Many architects don't care for the "decorator quality" of *Architectural Digest*, but the rest of the world does. What you're doing in *Architecture California*, and what the Los Angeles Chapter is doing with *LA Architect*, is badly needed to stimulate and show what is being accomplished in California architecture.



What country is the major competitor to U.S. firms in the international arena?

In the Middle East and the Far East, the English are very strong. Architectural practice in England is almost nonexistent due to their economy. Our friends who are practicing architecture in England have set up offices in Singapore, Hong Kong, Dubai, Abu Dhabi and the rest of the Middle East. It's very difficult for a California architectural firm, 27 hours away by plane, to compete with the English. Also, the old friendships and banking relationships established through the years are English.

The English government has a parochial interest in this too. At the Jakarta Hilton, for example, the British financed the project. Sixty percent of all products and services used on the project had to be English. All of our fees came to us in pounds through an English architect whom we had to select and work with to develop the project. All the design was ours, but the working documents had to be developed by an English architect with English consultants including contractor, mechanical and electrical engineers and interior designers.

Do you have difficulty establishing your authority over other architects and consultants working with you on international projects?

Yes, that is always a problem. We must play what I call the "architects' game." Fortunately, I've been working with architects for a number of years. We have been master planners at the California State University at Long Beach for 21 years. I've had 12 to 14 architects to coordinate, but fortunately I know all the architects' egos and problems, and I know our own egos and problems.

It's necessary to get the job rules worked out. Who's doing what? That is the most important thing. If everyone wants to be involved in design, it's very difficult.

All architects think they are designers. That's the first hurdle to cross. So this must be defined. We've had two disasters where we could not establish our relations and had to have a separation along the way.

If you are the owner's representative, you have the authority. One project turned out to be very difficult, so I finally said, "We have three choices on this project: we can do it, you can do it, or we can do it together. Since you want to be the architect, I think you should be the architect and we should withdraw. You coordinate it with the owner. You tell the owner that we are no longer involved and that you are going to be the architect." Before the meeting was over, they were begging me to work together. I said, "O.K., the nonsense is over. We've played the game. Now let's design a hotel."

It's important to develop a rapport and also a respect. They must respect who they're working with. This is tough because they do resent the outsider and they will cut your throat.

Once we were working in a joint venture with a French architect. He put the contract together in French and asked me to sign. I refused, brought the contract back to California, and had it translated. It had nothing to do with what we had agreed upon. At this point we called the owner and told him we would have nothing to do with the project. He fired the French architect. I didn't tell the client what had happened. After all, they are architects and we try to be professionals.

One of our secrets that I would recommend to any architect is that wherever in the world the project is, if there is a U.S. owner, have the meetings in his office. On projects for Hilton International, I always try to have the meetings in New York. That way we have access to all their personnel, all their technical



Wayne Thom

services.

Right now, I should be in Indonesia on the addition of the Jakarta Hilton Hotel because there are too many factions going in too many directions. It's to be built by the Japanese. It's going to have a steel frame work and pre-cast concrete. A Japanese architect will put the working documents together. The engineer of the project is in Indonesia coordinating the whole thing, and we are in California. We have an interiors person in Singapore and it's getting complicated.

What impact has the current global depression and shifting political climates had on your projects?

The only time I really believe in a project is when I see a shovel in the ground. We do very little wishful thinking. Everything you read in the newspaper affects the project.

The global recession about five years ago in the Pacific cancelled two projects in Fiji and two in Tahiti, since the financing was not there and the tourism had dropped. Unless there is a strong owner or government, there are problems.

The Saudi Arabia area is strongly affected by the Iranian war. This has held up two of our projects in Al Khobar and Al Jubail. We have the foundations poured, the drawings are finished and there are millions of dollars in the project. I expect they will both be built eventually.

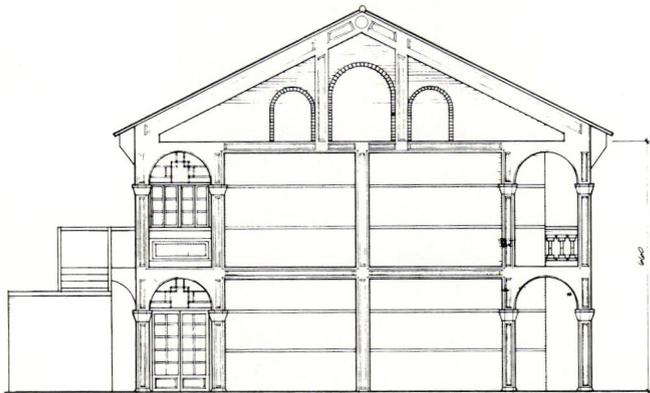
Do you arrange a prepayment system so that you're not left holding the bag?

As our work progresses we are paid. We try to do it on a monthly billing basis. Most clients don't like this—it's too much book-keeping. But we try to do that as much as we can. Generally, if there's any doubt about the financing, we won't get involved in the project. Whenever there's a project which is not financially successful, there is no way an architect can win, because it will be a disaster. Then the client starts pointing fingers.

We have been very fortunate to have built many beautiful buildings, and most of them are based upon traditional values. Whenever there's a gimmick we don't want to have anything to do with the project. We have never created a beautiful building for a client who is not sympathetic. Architecture must be a hand in glove personal relationship. I feel very strongly that when the project is complete, it should be the owner's project, not the architect's.

The Stone Flower Inn

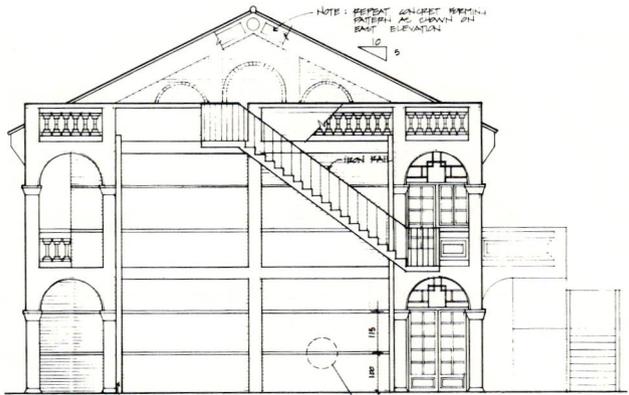
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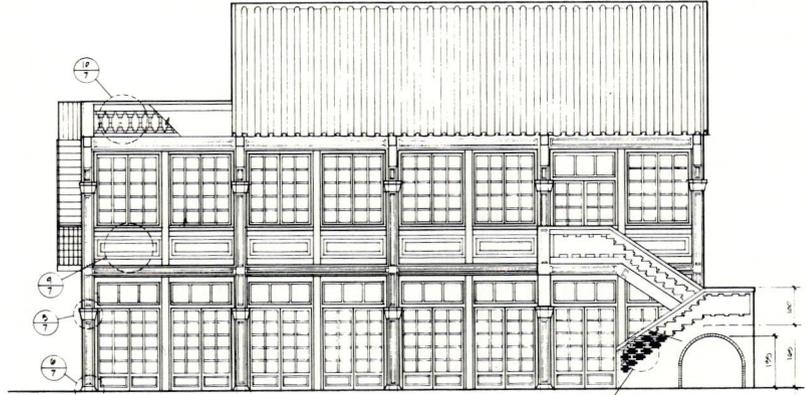
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Jonathan Hammond 2001


The Stone Flower Inn is a small solar heated hotel in southern China designed for an American company, the Chinamerica Corporation, which had a joint venture contract with the Chinese. While the project seemed totally unprecedented and unusual to me at first, I learned that it fits into an ongoing web of human relationships and traditions, dating back thousands of years, that finally brought me, an architect specializing in the design of solar buildings, together with local people in a rural community in the People's Republic of China.

There is a long history of Chinese people coming to the United States, which they traditionally call "Gold Mountain." Many Chinese emigrants have remained true to their filial duties and send back money to their relatives in ancestral villages. Most Americans don't realize that this practice continued even when the American government thought it had China isolated behind the "Bamboo Curtain."

Taishan County, the location of the Stone Flower Inn, is a major center of emigration to the United States. During the 1950s, the villages and towns where the families of these emigrants lived were reorganized into communes, the current basic agricultural unit in China.

A spin-off of the long standing relationship between American overseas Chinese and the people of mainland China made the Stone Flower Inn possible. Buck Lhu, a Chinese American, went

to Taishan in 1977 to visit an aunt who works for the local tourist authority. He proposed the idea of developing a hotel for American tourists and overseas Chinese visitors. Later Buck organized the Chinamerica Corporation with a partner, Larry Davis.

The project was to be a joint venture between Chinamerica Corporation and the Taishan China Travel Service (the local tourist entity), with Chinamerica providing financing and design, and a local Chinese construction collective doing the building. Chinamerica would get the exclusive use of the hotel for ten years, at which point it would become the property of the Chinese. Although final approval of any foreign deal must be made in Beijing, all of the terms of the agreement were worked out locally. Later they were rubber stamped by the provincial authorities in Quangchow, and finally by the national authorities in Beijing.

If there is a heaven for "appropriate technology" buffs, it must be a good deal like China. Larry Davis appreciated this fact, and decided that there would be a strong market among Americans for low cost trips to rural China which emphasized the "appropriate" aspects of the Chinese culture, ecosystem, and economy, and which allowed nonstructured time and freedom of movement for the travelers. Larry also wanted to create an "appropriate technology" idea exchange that would help the Chinese to see that not all American innovation is expensive, shiny, and high tech. Building a passive solar hotel was one way

to accomplish this.

I went with Larry as a tourist on one of his first Taishan tours in the winter of 1979-80, and after this trip became the architect of the proposed hotel. Although I had many notions about the Great Wall and Forbidden City, the architecture of rural southern China was a complete surprise to me. What I found was a spectacularly beautiful vernacular architecture of orderly villages made up of blue-grey brick buildings. These buildings have an amazingly rich variety of ornamentation including concrete and ceramic dragons, fish, and deities which help protect the homes and bring good luck.

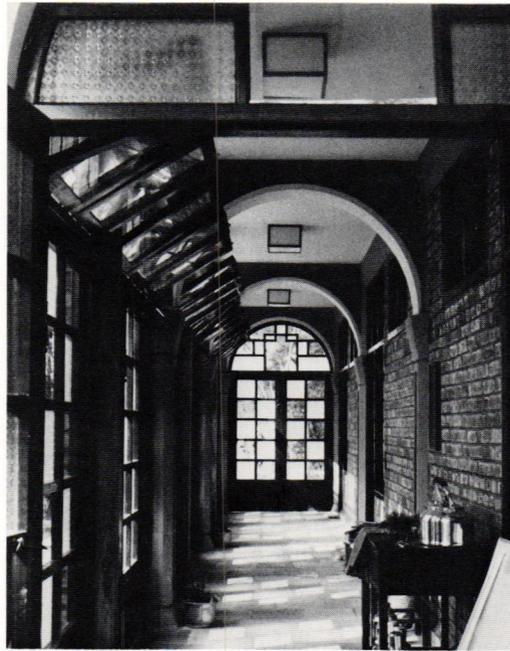
In the warm humid climate of southern China, a great deal of household work and living is done out of doors. The larger houses are built around courtyards. This style of architecture is intended to provide both good ventilation and security from the robbers common before the revolution. I was greatly impressed by a house we visited and later stayed in. It had typical heavily barred doors on the first floor and a large grate in the second story floor. This combination allowed light from the roof skylight into the first floor and breezes to circulate through the house.

The program called for a hotel that would provide travelers with a Chinese experience much like what they would have had in a traditional Chinese country inn. The buildings were to be traditional in character, yet designed so that American visitors would feel comfortable in them (*i.e.*, with controlled temperature, running hot water, and flush toilets). In addition, the buildings were to combine traditional Chinese architectural principles with passive solar design. The passive solar design was extremely important, both because of the lack of a reliable power source other than Taishan's already overextended electrical grid, and because the Chinese were very enthusiastic about having a passive solar design in Taishan. The budget was set at \$12 per square foot.

Passive solar design works well with Chinese architectural concepts. The idea of orienting buildings to take advantage of the elements is not new to the Chinese. The ancient tradition of the *Fung Shui*, literally meaning the "Winds and Waters," embodies a set of rules for siting houses, tombs, villages, and cities. The south is regarded as the source of male energy. The south gives blessings from heaven in the form of warmth and rain without which plants cannot survive. Hence it is very appropriate to orient buildings to the south from the standpoint of the *Fung Shui*, as well as from a solar perspective. Such southern orientation channels the cooling summer breezes into the house while blocking the cold northern winter winds. I was able to use my knowledge of the *Fung Shui* to explain my solar designs to the Chinese.

Taishan is located in southern China at approximately 22 degrees north latitude near the coast. The winters are relatively cool and dry, while the summers are hot, humid, and rainy. Occasionally, there are typhoons. The climate is fairly similar to Houston, Texas. Buildings in this area of China are not usually heated, although they get quite cold in the winter. Cooling is a problem during the hot summers, with summer cooling breezes coming from the south. There is only a 13°F temperature difference between the mean maximum and the mean minimum during the summer. Since the mean minimum is 78°F, there is little chance to keep buildings very cool by natural means. The best strategy for keeping people comfortable under these circumstances is to provide for good ventilation.

In order to take advantage of the best views of the lake and mountains and of the winter sun, the hotel buildings are oriented so that the majority of the rooms open to the north-northwest,



the direction of the view. This puts the entries of the buildings on the south-southeast. The entry hallways are enclosed with glass doors and windows to receive the low winter sun. The heat from this hallway/collector area moves by convection through clerestory and transom vents into the rooms. Cooler air from the rooms moves into the hallway via a louvered vent in the door. The heat is stored in the rooms in the brick masonry walls and the concrete floors and ceilings.

During the summer, the exterior glass doors and windows in the hallway are kept open to prevent heat build-up in the hallway area. Large opening windows are provided on both sides of the rooms to create good ventilation. A Casa Blanca fan also is provided for each room.

Traditionally the Chinese have used brick cavity walls in their buildings. We used the same technique, but increased the insulation value of the air space between the bricks by filling it with two inches of styrofoam insulation. We also used rigid styrofoam insulation under the roof tiles. Other energy conservation features in the hotel include the use of indirect fluorescent lighting with light colored ceilings and light admitting windows on both the north and south sides of the room to provide balanced daylighting. Finally, the hotel was provided with enough bicycles for visitors to use for their local transportation needs in Taishan and the surrounding countryside.

I followed the Chinese practice of siting buildings around courtyard spaces. These spaces are designed to interconnect but avoid long straight axial views which the Chinese consider a source of bad luck. (Later the size of the project was reduced and only two sides of the courtyard were created.)

A set of preliminary plans was sent off to Taishan with Buck in February, 1981. The drawings, based on a "back of an envelope" site plan, were far from accurate, and the building that I had designed would not fit on the actual site. My interpreter John Chan, a 75 year old Chinese intellectual who was proficient in many things including surveying, helped me survey the site with some simple instruments he borrowed from a local school. I soon realized that the site that had originally been chosen was too small and would have to be expanded. In addition, a road would have to be rerouted around the site.

I showed Chan some sketches of my new ideas, which involved developing the hotel buildings around a courtyard and putting the future restaurant and cultural center on a little knoll slightly higher than the rest. We both agreed that the new scheme was in accordance with the *Fung Shui*. But the changes would have to be approved by the Taishan Revolutionary Council, a body more or less equivalent to our county board of supervisors, which was planning to meet the next day. If a new set of plans were prepared in time, they could be presented at that meeting. I worked all night to prepare the plans and gave them to Chan in the morning. By noon Chan was back with the necessary approvals for both the site plan and the road change. A decision of equal magnitude in the United States would take a minimum of six months.

Planning a construction project in China is quite different from working in the United States. Many concepts that we take for granted simply don't work there. For example, during the initial planning for the hotel, it was assumed that we could reduce construction costs by bringing in some modern tools and equipment and by using modern building techniques. What we found out was that when a laborer makes the equivalent of \$1.50 a day (\$2.50 for a skilled craftsman), "labor saving" devices are not necessarily economical. For example, we considered buying an electric roto hammer to drill holes for anchor bolts in the masonry walls, but realized that a worker with a star drill and hammer could drill all the holes by hand for much less than the purchase price of the electric tool.

In the United States, many labor saving devices substitute material resources for manpower. The Chinese have a surplus of labor and a strong tradition of not wasting materials, so their priorities are quite different. Here, we splice rebar by making a long overlap and then wiring the bars together. In China, a more time-consuming technique involving welding the bars together is often used to avoid the rebar wasted in an overlap. The roof beams for the hotel were cut out of teak logs with a two man pit saw. This is the preferred method because the hand saw creates a narrower cut and wastes less wood than a power saw.

When we think of putting together a building, we tend to think of carpenters, masons, and construction sites. We seldom think about the many back-up industries: the window manufacturer, the brick industry, etc. Architectural detailing and specification writing as practiced in the United States are primarily exercises in shopping in catalogs and finding products that most closely match the design idea. In order to make this possible, there are vast armies of sales representatives with color brochures showing beautiful models using everything from doorknobs to prefabricated park benches.

In Taishan the situation is quite different. There are no sales

reps and no *Sweet's Catalogues*. In order to design the Stone Flower Inn, I looked at buildings in and around Taishan and poked around construction sites to see what materials were being used. I studied farmhouses, factory buildings, and local temples to find many of the details and techniques that I wanted to use. It later proved very useful to be able to show the contractor local built examples of what I wanted him to do.

Many problems came up during the building of the hotel which I could not possibly solve in my studio in the U.S., so on-site supervision became essential. To this end Forrest and Eileen Jang, Chinese Americans with ancestral villages in the Taishan area, were sent over to manage the construction of the buildings and other Chinamerica business. Some of my personal experiences at the site will serve to illustrate the construction problems faced by Forrest on a daily basis. For example, when I ordered a wood framed window, I had to have the local wood shop make a sample frame because I didn't know what they could do and they didn't know what I expected.

In other cases I found what I wanted by searching the local hardware stores and building supply shops. I wanted to use a kind of concrete tile that I had seen in the old farm houses, and found what I wanted after searching through several tile shops. Unfortunately, they only had a few on hand, so I went to visit the tiny factory where they are made. About 20 kilometers out of Taishan at the end of a dirt road we found a little factory which could make a few hundred tiles a day. In order for us to get the number of tiles we needed, we would have had to supply the factory with cement because their supply was short. Instead, we ended up using a square brick tile that is in more common use in peasant homes today and was easier to find in quantity.

As I searched for materials, I was amazed at the great variety of local industry and the vast array of building products manufactured in Taishan, a small rural county seat. For example, there are a glass factory, a plastics factory that manufactures plastic pipe, and shops where both wood and metal window frames are made. Bricks and a wide variety of ceramic products are made in and around town, and even the fuel for the brick kilns is gleaned from the local hills: dry grass, ferns, twigs, and pine needles. There is even a truck body factory which produces 300 pre-1940's style truck bodies each year completely by hand. From a self-sufficiency standpoint, Taishan could carry on very well for quite a long time if a major disaster were to cut it off from the rest of the world.

For me, working in China was like going back 1,000 years into the past and going forward 1,000 years into the future both at the same time. It gave me the opportunity to work with an aesthetic system quite different from anything I had ever experienced before. It allowed me to integrate my work as a sculptor into the buildings I design in a new way, and to combine a functional approach to solar design with a traditional set of aesthetic forms which lend themselves perfectly to the use of solar principles.

Architect Jonathan Hammond is a principal in Living Systems, an architectural firm specializing in solar design, located in Winters, California. The following people were essential to the realization of the Stone Flower Inn: the officers of the Chinamerica Corporation, Larry Davis, Buck Lhu, Robert Black, Dan Bryant, and Buck Breiboz; Ann Wickham, job captain; Lester Gabriel, structural engineer; Michael Nolan, interior designer; Forrest and Eileen Jang, onsite construction management; John Chan, interpreter and technical advisor on Chinese construction practices.

Tahiti

Moorea Plantation Hotel and Village

by Ronald F. Kuch, AIA



The Moorea Plantation Hotel and Village is located on a 98 acre palm-studded promontory on the Island of Moorea, two miles from Tahiti. The Island's tropical flowers, white coral sand beaches, blue lagoons, coral reefs and jagged mountain peaks demand a work of architecture to complement the environment, not compete with it.

Our general program was to master plan a world class luxury destination resort and design the Moorea Plantation Hotel. The new resort will be the largest in French Polynesia. The master plan design employs a golf course and lake feature to tie together all varied program ingredients:

- The Moorea Plantation Hotel with 250 view-oriented rooms;
- Parking for 65 automobiles;
- 68 individual bungalows;
- Golf Clubhouse and 18 hole Golf Course (on reclaimed swamp land);
- A Tennis Club with 6 courts;
- An arrival pavillion and boat dock;
- A beach area with cocktail bar; and
- A Plantation Village consisting of a local market, craft studios, clothing boutiques, international bookstore, pearl diving museum, cinema with outdoor stage, pharmacy with gift shop and restaurant.

Building design form reflects French colonization influence which is rooted in island history, in combination with traditional Tahitian cultural heritage. Tahiti's traditional building height limit is "three-quarters of a coconut tree." At four stories in height, our split-level design comfortably fits between many coconut trees preserved from the coconut plantation formerly on the site. The building form accommodates local weather conditions, using large, steep-

pitched roofs with generous overhangs to provide natural shade over open balconies.

The main hotel building consists of the lobby, cocktail lounge, dining room and 22 suite rooms, all open to surrounding views. The open air buildings, cooled by prevailing trade winds, have bamboo walls, screened openings and roofs constructed of timber with metal finish. The base walls constructed of lava stone also form a major water feature which cascades directly through the main lobby.

Individual garden bungalow units are designed in the traditional style of the Tahitian *fare* (house). Using the same material palette as the main building, each unit will be constructed by local craftsmen and individually ornamented with braided cords of various colors in native designs.

Arts and crafts will be employed throughout. Decorative Tahitian carvings, woven mats, and ceramics will be an integral part of the design. Plans call for many rafter timbers and columns to be hand hewn with adzes, fitted with wooden pegs and lashed with strong fibers of the *leie*, a tough mountain plant.

The unique floating cocktail bar and boat dock pole-structure is completely made of indigenous materials consisting of bamboo walls and roofs constructed of *Laubala* (the leaves of the *Pandanus*) thatching.

We hope to design a profitable project that respects the precious heritage of the Tahitian people and fulfills the traveler's dream of a memorable stay in a tropical paradise.

Ronald F. Kuch, AIA is vice president of David Klages and Associates, Inc., Architecture and Planning, in Costa Mesa.

Project:

Moorea Plantation Hotel and Village, French Polynesia, Tahiti.

Client:

Jean Claude Brouillet.

Architect:

DKA Partnership; David Klages, FAIA, Principal-in-Charge; Ronald Kuch, AIA, Project Architect; Steven Royse and Jack H. Carter, Design Team; Two-Ten Corporation, Project Management.

The Yap Hospital

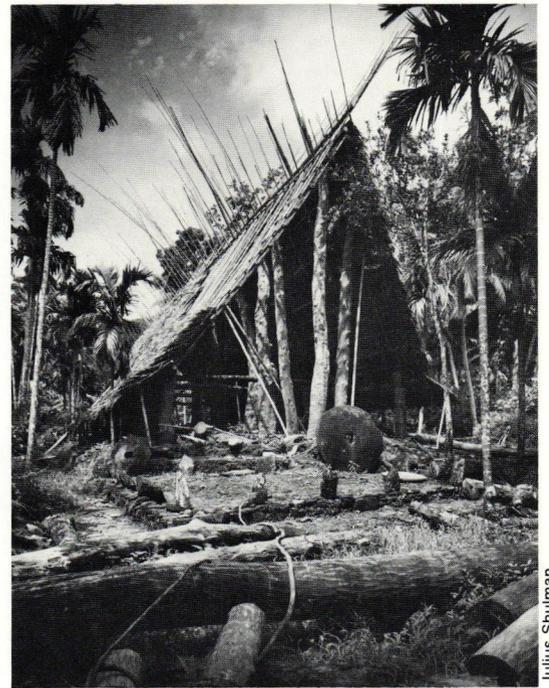
by Jonathan Winer

The Yap Hospital is a 65 bed, acute care hospital with outpatient clinic, surgery, public health facilities, dental clinic and morgue, located at Colonia on Yap Island, one of the Western Caroline Islands. Programming, planning and design of the Yap Hospital proved a fascinating but time-consuming process, involving analysis of the problems particular to Yapese culture and climate. All decisions affecting the community are traditionally made only after a consensus has been reached by tribal councils composed of the various local chiefs. Both the principal-in-charge and project architect (Murray McNeil and James Kirkemo, respectively) for MWM participated in the Council's discussions, which were held in the segregated "Men's Hut."

An earlier program for the hospital had been generated by an official of the Trust Territories government, and a steep hillside site was provided. Neither seemed to please the independent Yapese, so the architects sent a three-man team to the island for what proved to be a revealing week, both for the designers and their clients.

The first order of business was to select a more accessible site for the project. The negotiations involved in putting together parcels of land held by over 60 families in various tribes went on long after the departure of the design team, but the site itself was chosen early for its accessibility from land and sea (patients often arrive by canoe from outlying islands). The chiefs worked out the details in the Men's Hut and the land package was finally delivered.

Initially, the Yapese found it easier to deal with each other than with the American architects, toward whom they were polite but distant. Gradually the ice was broken through a series of social interactions culminating in a day-long feast during which the architects were treated to a steady stream of native foods, entertained by dancers and speeches, and introduced all around. That day, many reservations were dispelled and perceptions altered over drinks in the Chief's Circle.



Julius Shulman

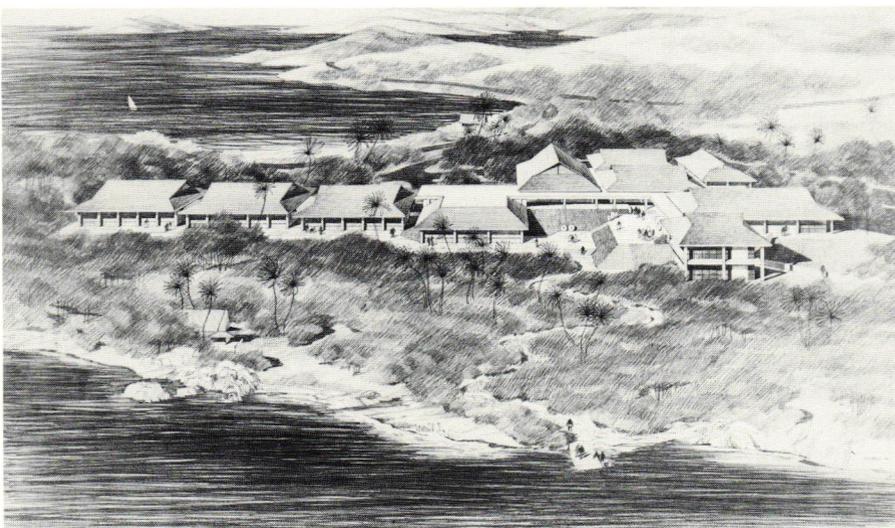
While mutual trust was establishing itself in this fashion, serious discussions concerning fitting the hospital program to local customs were going on with local hospital administrators in the more conventional setting, by American standards, of conference rooms. Designs generated by these discussions were developed at MWM's Guam office, and then presented to the Yapese tribal Chiefs.

Design Program and Solution

The problem was to design a 30,000 square foot building on a very restricted site, provide full hospital services and create a building which was compatible in scale and design with the traditional buildings of Yap. The hospital had to function in a tropical climate and yet be of permanent, nontraditional materials requiring a minimum of maintenance. Yap has no deep water harbor so all building materials except sand had to be unloaded at sea and barged ashore. Since subsurface soils were poor, all excavated material had to be hauled offsite; thus, every effort was made to take advantage of the existing site contours.

The solution was to break the hospital down into its functional parts and design each one as an individual unit. These units relate to one another as do the structures of a typical native village. The pitched roofs not only shed the rain but continue Yapese architectural tradition. Roofs are wood framed, small in scale and covered with shakes, blending with the local architecture.

Corridors linking the units are flat-roofed, open-sided spaces. Separating the pitched roofed units with corridors in this manner maintains the tradition in Yap's tropical climate of meeting places joined by exterior open circulation.





Julius Shulman

The exterior public circulation serves several purposes in addition to reinforcing local architectural tradition. Visiting Yapese families camp around the clock outside the hospital when one of the family is hospitalized. The roofed veranda provides shelter for them, and also serves as a day room for patients who can go directly from their rooms to the outside. This system leaves the interior circulation free for staff use. Where control over the patient is required, the exterior doors are locked and family visitors come inside to get staff permission to visit.

While family visitation and accessibility to off islanders were prime concerns of the chiefs, the administrators had conflicting concerns such as controlling patients' diets while allowing the families easy access, and dealing with the rigid caste system which had caused problems in the open wards of the older, Japanese-built hospital. The former problem was solved by controlling access to the hospital rooms through a central point while providing immediately adjacent, covered areas for family camping, and by convincing the chiefs to ask their tribal members to accommodate themselves to the more stringent regulations of the new hospital for the good of the patients. The caste problem was alleviated through the provision of many multi-bed rooms, rather than wards.

Those spaces which have to be enclosed are oriented toward the tradewinds for natural ventilation. Where the interior functions (such as surgery) demand air conditioning, they are placed downwind of those using the prevailing breezes. Air conditioned spaces were separately cocooned inside the building shell with sprayed polyurethane insulation for ease of installation and shipment to Yap. The variety of building materials and construction systems was

kept to a minimum because of a lack of skilled labor.

The wards utilize a doubled-loaded corridor for efficiency since qualified staff is scarce. Exterior walls are rainproof, bronze anodized aluminum louvers to resist the corrosive effects of the salt spray in the air, and are adjustable to control ventilation. The interior corridor walls, similarly constructed, do not block the flow of air. Ceilings are kept high in the naturally-ventilated spaces to avoid warm air buildup. Warm air escapes through the louvered roof gable ends. Walls perpendicular to the tradewinds are protected from rain intrusion by deep overhangs which also reduce the venturi effect through exterior louvers during typhoons.

All wood roofs and exterior walls are insulated to minimize solar heat gain. Exterior and open corridors preclude the need for any ventilation of circulation spaces. The flat concrete roofs over corridors separating the buildings are coated with white neoprene-hypalon to reflect heat, and they are designed as rain gutters in which water can stand up to two inches deep. This design reduces heat gain in the concrete which might otherwise radiate downward and heat the spaces below. Mechanical systems are supplementary only, except in the surgical and laboratory areas.

The roof structure is wood, supported by a concrete frame below the eave line. All wood is kept at the roof level to avoid rot in the humid climate. No wood is used in a concealed detail. Exterior walls are galvanized metal studs with a cement plaster finish, which was easily shipped to Yap and maximized use of local material—sand. Fungicides are used in all paints. Colors are limited to those used in traditional architecture. Floors are concrete for permanence and ease of maintenance and are colored a reddish shade which matches the spittle of the betel nut chewing Yapese.

Jonathan Winer is a project architect for Mackinlay Winnacker McNeil and Associates Architects, Planners, Interior Designers, Inc. in Oakland.



Project:

Yap Hospital

Client:

The Government of the Trust Territory of the Pacific Islands.

Architect/Structural/

Civil Engineer:

MWM, Mackinlay/Winnacker/McNeil & Associates, Inc.; Murray C. McNeil, FAIA, Principal-in-Charge; James Kirkemo, Project Architect; Michael Thomas, Project Designer.

Mechanical Engineer:

Frederick H. Kobloss & Associates, Inc., San Francisco.

Electrical Engineer:

Engineering Consulting Services, Inc.

Tamuning, Guam.

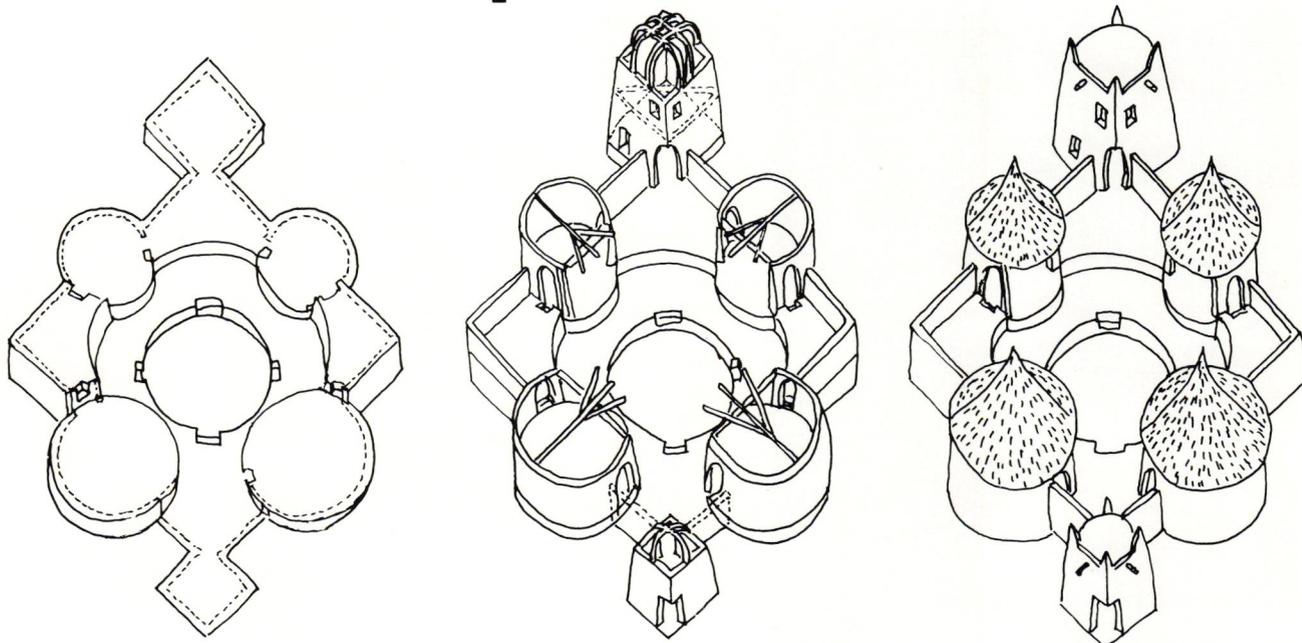
General Contractor:

Chin Heung International, Guam.

Nigeria

Ahmadu Bello University Theater Workshop

by Jack Prichett



How does one design a university theater in Nigeria, where drama is an evolving blend of Western and traditional African styles? While teaching architecture at Nigeria's Ahmadu Bello University in 1976, Steven Ehrlich, AIA—now practicing in Venice, California—was asked by the Drama Department to design a theater for the University.

"We wanted to provide a flexible facility for drama students to act in, and for performers and audience to experiment spatially in their interaction with one another," Ehrlich says. "That primary objective was formulated through close consultation with Michael Etherton, head of the Drama Department." The theater design, with its circular central performance area and the smaller spaces created by four round thatched huts opening onto the circle, permits a variety of staging arrangements, ranging from standard stage plus proscenium to theater in the round. Plays from Shakespeare to the Nigerian comedies of Kasimu Yero have been staged at the theater, which also gets daily use as a drama workshop.

"We felt it was important that while the theater structure must lend itself to a variety of uses and formats, these should always be within the context of strong traditional African visual references," Ehrlich adds. "So we departed from most modern Nigerian architecture and decided to use vernacular, rather than Western building styles and techniques as the basis for our design."

The architect turned for inspiration to the ancient Hausa cities of northern Nigeria with their mud walled compound houses. In plan, the theater consists of a square walled courtyard with the circular performance area at its center. The four circular huts, linked by the compound walls, are positioned on the four sides of the compound. These huts serve as either audience seating or performance areas, depending on the production. During daytime class

work, they are used as individual studio workshops.

The theater is entered through a *soro*, or domed, mud walled square room at the south end of the theater. This entrance *soro* was heavily decorated by local craftsmen skilled in a rapidly disappearing type of bas relief widely used in Hausa architecture. A second *soro* at the opposite end of the compound serves as the theater's backstage. Its doorway, the "mouth" of an elaborately fashioned bas relief representation of an African mask, furnishes a ceremonial entrance to the central performance area from backstage.

Building the theater required two structural and formal developments on traditional forms. The thatched hut required use of four eucalyptus beams supported by two mud columns to achieve the over-size 22 foot openings looking into the stage. The cantilevered entry ways on the corner of the two *soros* were also innovations unfamiliar to local builders. Penetrating the corner, however, permits theatergoers a new experience of a familiar local architectural form.

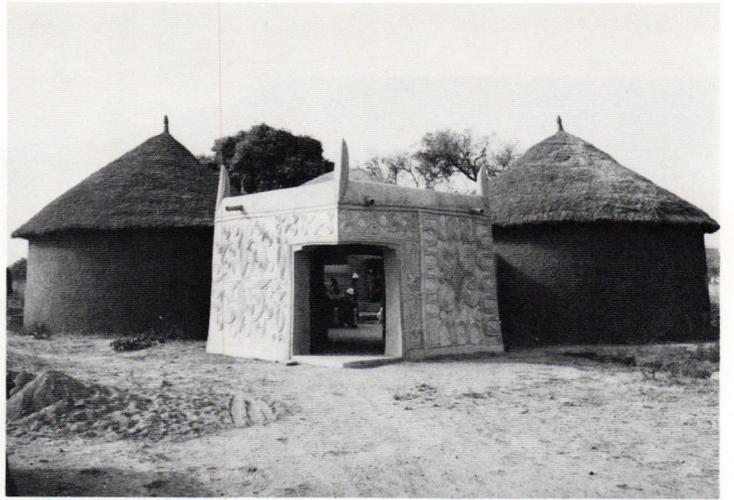
Using indigenous architecture as a basis for the theater permitted speedy and inexpensive construction. It utilized local craftsmen and helped preserve dying local architectural traditions. Of the total \$25,000 cost of the theater, two thirds was spent for the multilevel concrete foundation.

University administrators plan to add a larger steel and glass Western-style theater to the campus. Meanwhile, the A.B.U. Theater Workshop stands as a unique architectural statement to the possibilities of combining traditional building techniques and forms with new purposes. In so doing, the theater gives drama students not only a house, but a home.

Jack Prichett is a freelance writer who has spent time in Nigeria, where he observed the A.B.U. Theater.

Project:
Ahmadu Bello University
Theater Workshop, Zaria, Nigeria.
Client:
Department of Drama,
Ahmadu Bello University.
Architect:
Steven David Ehrlich, AIA.
Systems Consultant:
Umaru Abdu, engineer.
Contractor:
Sarkin Bomo.

Princess Lawu
Cooperative Society



Saudi Arabia

Prince Fawaz Cooperative Housing Project

by Dieter Thomas



Hard Hat Photography

Outside of Jiddah on the road to Mecca, 1,200 villas are under construction on the Prince Fawaz Cooperative Housing Project. Concrete was the building material chosen to best withstand the harsh desert elements. The size of the project presented a major logistics problem in a country that must import all of its labor. So at the design stage, the decision was made to use a modular concrete casting system.

The floor plans and massing were designed to provide buildings with a variety of shapes and sizes. This was achieved with the use of only three different floor plans, ranging from 200 to 400 square meters, each with a right and a left format. The villas are two stories high, with the option of adding a third floor to any of the floor plans.

Because the vertical design of a single detached dwelling would create an ungainly proportion, the units are joined to form a duplex building. The connection (actually there is a separation of 15 mm. between party walls) occurs at the stairwell. This is the tallest element as it leads to the roof terrace and/or penthouse. By combining right and left formats and floor plans, a possibility of 36 different shapes and massings of individual duplexes is accomplished.

The windows are set into precast concrete frames. A hooded section in the window design contains the air-conditioning unit. These frames change position on the different floor plans, adding diversity to the facades.

The roof area and upper floor setbacks are paved with tile and edged at the perimeter with 1 m. high parapets to create roof terraces. Each villa is surrounded by a 2 m. high precast concrete decorative fence. The changing masses, with flat roofed terraces, sculptured parapets, and deeply framed and hooded openings, create an architecture that is indigenous to Saudi Arabia.

The developer selected Anderson Systems International of Dallas, Texas, to design and build all the casting molds and support equipment for the modular units, parapets, fences, window frames, and stairs designed by our firm.

The casting plant is located 20 kilometers from the building site. Castings are 4.4 m. wide by 3 m. high, and range from 6.2 m. to 10.45 m. long. The weight varies from 10 to 30 tons per room cast. Accuracy of the blocks is maintained within a 4 mm. tolerance. The concrete casts are poured, cured, and lifted from the mold within six hours. Specially designed trailers transport the individual casts to the site. There cranes lift them into position in a pre-determined construction sequence. The casting plant produces about two villas per day. (Ten to 15 casts are required for each villa.) The casting plant also supplies the precast concrete fences.

The blocks are joined vertically and horizontally by inserts and weld plates. Electrical conduits are in place when the casts are poured, and junction boxes match adjoining units to complete the circuits. Upon erection of all the blocks, the concrete window frames with A/C units are inserted. The floors are finished in ceramic tile or terrazzo.

In the Arab tradition, the family quarters are separated from the guest area. In this case, the first floor is used for entertaining guests. The main entry, kitchen, servants quarters, dining and living room, and guest bedroom and bath are located here. A side entrance allows access to both ground and upper floors without being seen by visitors. A family room with kitchenette, the master bedroom suite, and children's bedrooms and baths are located on the second floor. Each bedroom opens onto a terrace. An optional third floor has another suite with bedrooms, bath, sitting room and kitchenette.

The tendency in the design and building industries has been to avoid precast systems for fear of getting into the unknown. More important, the prevalent feeling is that modular systems produce a stereotyped set of buildings. The Prince Fawaz project demonstrates the opposite. The time has come for the building industry to enter the field of precision engineering. By using a super sized block that gives freedom in the design of openings and has relief finishes, the architect has an opportunity to be really imaginative.

Architect Dieter Thomas is a principal in the firm of Friel & Thomas Associates, Redondo Beach.

Client:

Prince Fawaz Cooperative Housing Project.

Architect:

Friel & Thomas Associates, Henry J. Friel, AIA and Dieter Thomas.

Structural Engineer:

Kasamoto, Fan & Chan, Hawaii.

Construction:

Fast Contracting Company, Jiddah, Saudi Arabia.

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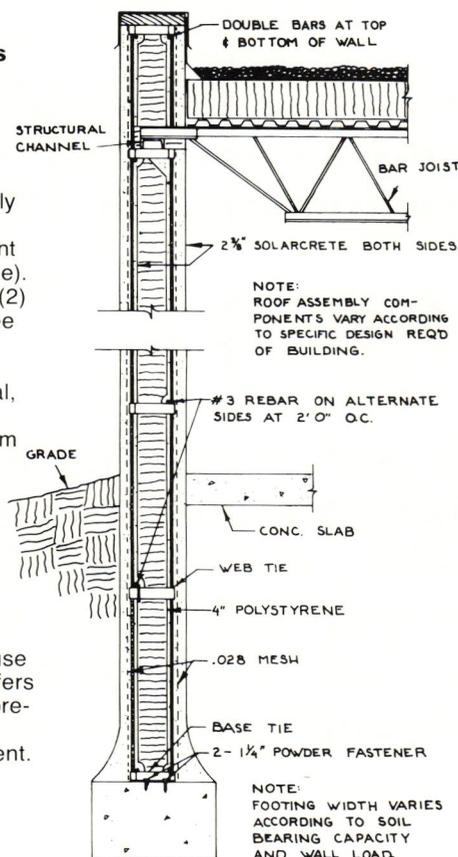
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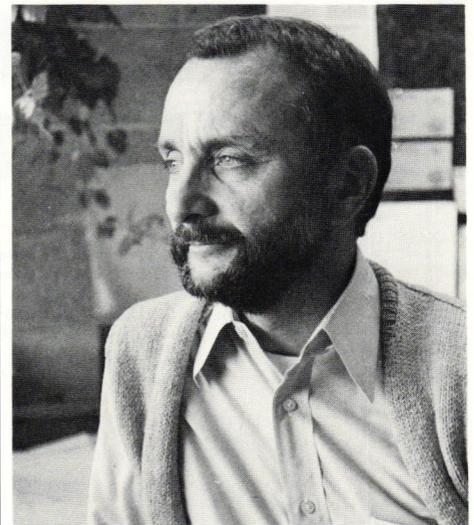
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COUNCIL



Harry Jacobs, AIA.

President's Message

One of the most intensely fulfilling periods of my earlier years was my tenure as an undergraduate student. The degree of intensity was not achieved because of newly acquired friends, nor the physical environment, nor the quality of faculty, nor even the experiences within the structured classroom. It was achieved through the awakening within me of the pleasure, excitement and rewards of being a participant in the experience of shared learning—discussing and debating relevant issues; sharing thoughts and ideas among fellow students; and looking beyond my day to day responsibilities to gain a sense of personal context.

As a practitioner in a small office, I find these opportunities too few and too far between. The AIA is the logical vehicle to provide an environment for such experiences, yet Chapters have uneven ability, and the Council has had checkered success in the provision of the enriched environment required for shared learning.

In 1984, the Council will alter, to some degree, the format of its two major meetings: the Monterey Design Conference and the Annual Convention. The purpose is to reduce the time spent by attendees being talked at, thereby increasing the time for them to participate, and to direct the conversation towards issues of direct relevance to architects as practitioners and professionals.

The Monterey Design Conference will continue to be, largely, an experience of member sharing. The major alteration will be to redirect sessions from simple "show and tell" towards increased opportunities for structured and unstructured discussion of design issues. The purpose

is to make a very good event even better.

The Convention format will be changed to encompass a variety of opportunities including major theme presentations and theme workshops, and professional development experiences ranging from highly structured tutorial sessions through small workshops designed to bring together members to share their expertise.

As a practitioner and Council leader, much of my 1984 time will be allocated toward managing my practice and assisting in the management of Council programs. You may be sure that I will be attending both the Monterey Design Conference and the Convention, not because I owe it to the Council and not because I owe it to the event planners, but because I owe it to my clients, my practice, but most of all because I owe it to myself.

You owe it to yourself too. See you there!

—Harry Jacobs, AIA

CCAIA Elects Officers

The Board of Directors of the California Council, The American Institute of Architects elected the following officers for 1984:

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East Bay Chapter

First Vice President

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Santa Clara Valley Chapter

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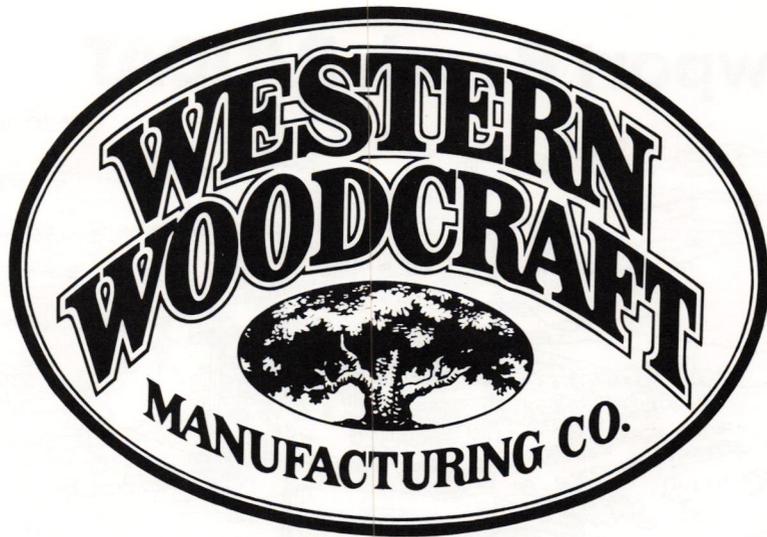
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Kim Larson
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Associate Director/South

Anthony B. Araiza
Inland California Chapter

Officers continuing their terms in 1984 are Secretary, Cyril Chern, AIA, Los Angeles Chapter; Vice President/Communications, Public Awareness, Warren D. Thompson, AIA, San Joaquin Chapter; AIA Directors, Harry C. Hallenbeck, FAIA, East Bay Chapter and William E. Patnaude, AIA, San Joaquin Chapter. Paul W. Welch, Jr. is CCAIA Executive Vice President.



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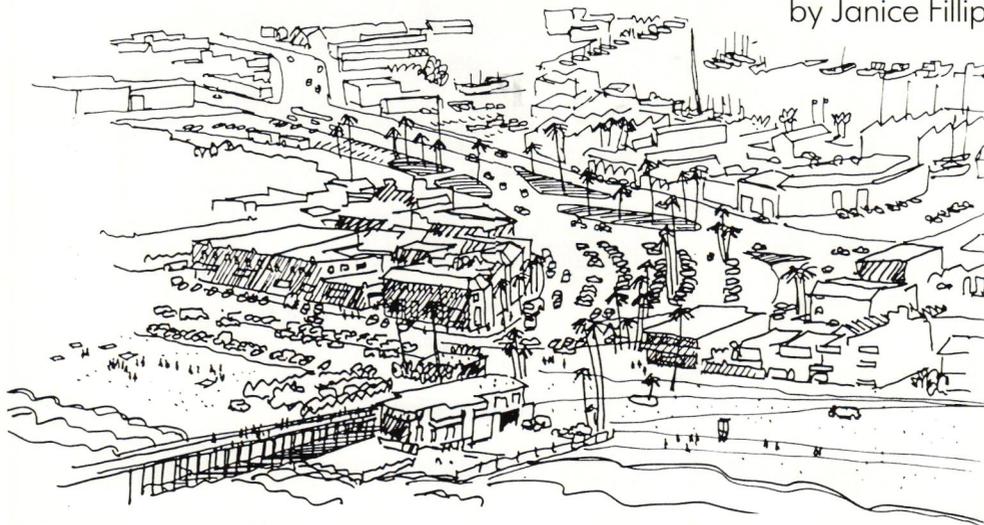
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Newport Beach R/UDAT

by Janice Fillip



Five miles of sandy beach and one of the world's finest sailing bays are mixed blessings for Newport Beach, an Orange County community of 65,000 residents. An estimated 10 million sunlovers visit Newport Beach every year. The resultant problems—traffic jams, lack of adequate parking, restrictive zoning, scarcity of land, redevelopment pressure—are paralyzing the community's growth. At the invitation of the City and the Orange County Chapter, AIA, The American Institute of Architects sent its 85th Regional/Urban Design Assistance Team (R/UDAT) to Newport Beach to devise ways for the community to cope with its growing pains.

The Team was chaired by William G. Conway, a real estate economist from New York. Members of the multi-disciplinary team included Philip B. Caton, AICP, a planner from New Jersey; Tom Laging, AIA, Professor of Architecture at the University of Nebraska; Thomas Joseph Sykes, AIA, architect and land use planner from New Jersey; Ernest R. Munch, AIA, architect and urban planner from Oregon; R. Marlin Smith, a Chicago attorney; Dr. Jacqueline Claire Vischer, social planner and social psychologist from Ottawa, Canada; and Allen E. Gatzke, ASLA, landscape architect, from Berkeley, California.

The R/UDAT concentrated on two areas of Balboa Peninsula—McFadden Square and Cannery Village. Located along the ocean, McFadden Square is a small, regionally important nightclub district adjacent to the fishing pier. Cannery Village, located on the bay, is a 10 block commercial area that also serves as home port for the remnants of a commercial fishing industry.

Access to and circulation on Balboa Peninsula is severely limited. Only two roads access the Peninsula, and they flow together jamming traffic at an intersection the R/UDAT dubbed the "Mix Master." Many of the R/UDAT recommendations focused on alleviating the traffic congestion and providing adequate parking for residents and visitors.

The Team also addressed issues of density and growth in residential areas. After four days of studying the area and taking testimony from local groups and individuals, the R/UDAT concluded in its report, "Unless public investment in the study area is used to keep the infrastructure in repair and to stimulate responsible private investment, transient tourist volume will steadily erode the quality of the environment. In that event, property values will slowly decline and the area will lose some its appeal . . . The action that is called for is a series of public sector funding initiatives to pave the way for sensitive and responsible development by

the private sector." The R/UDAT went on to recommend ways to handle density of residential and commercial development, alternative methods for reducing the impact of vehicles on the community, and specific improvements to enhance McFadden Square and Cannery Village.

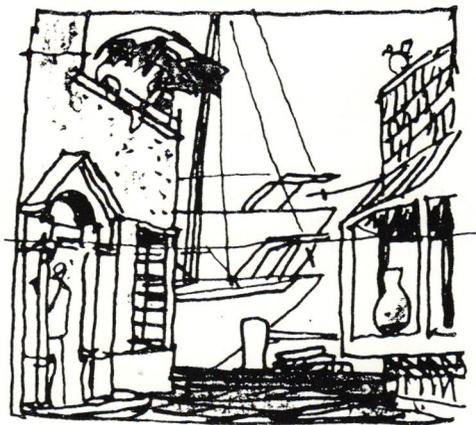
The concern expressed by residents that buildout of current zoning would significantly expand the Peninsula's population was deemed unfounded by the R/UDAT, which pointed out that total buildout of the residential zones would show a net increase in dwelling units of only three percent. The Team projected that older residential neighborhoods on the Peninsula actually would experience a thinning of housing density, and predicted that the "market forces should continue to induce the de-conversion of duplex units to single-family homes in sufficient numbers to offset construction or subdividing on the few remaining parcels."

Departing from the conservative residential pattern of the Peninsula, the R/UDAT recommended high density (25 to 30 du/acre) planned community zoning for the Lido Peninsula area. This planned development concept would include a mixture of residential units, a marine repair yard and a yacht club/recreation facility. "Relaxing density and height limitations would result in a marketable project of approximately 600 residential units which would yield a substantial increase in the tax base of the property," the report summarized.

The R/UDAT also found local apprehension about the rate of commercial growth to be exaggerated. The report concluded, "The current market for commercial space in the target area is not particularly strong . . . If concern is warranted, it is not over the fear of commercial uses sweeping through the Peninsula at maximum density; rather, it should focus on the failure of the commercial market-place to demand the space that is available."

The R/UDAT urged the City to identify development opportunities for commercial projects that would expand the market on Balboa Peninsula while providing a high financial return to the City. As an example, a mixed use solution was suggested for Marina Park, the current site of a trailer park, municipal tennis courts, the American Legion Hall, municipal boat docks and bayfront beaches. The R/UDAT suggested that the site be redeveloped with water oriented uses to open the area and generate more revenue for the City.

Two distinct problems were identified at McFadden Square: accommodation of vehicles and lack of visual interest and focus for activities. A remote parking



Cannery Village

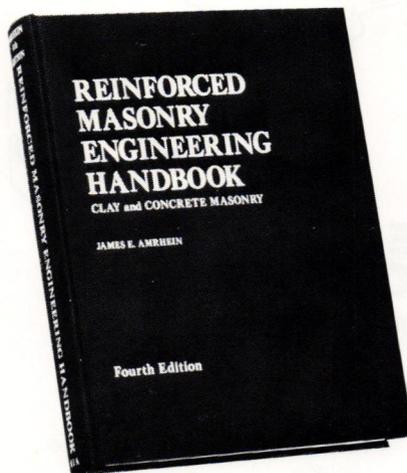
facility was proposed to alleviate the impact of cars. The R/UDAT report said, "In order that McFadden Square become more of an amenity of the community, it is recommended that a Red Line trolley car be erected in the Square, that the area be redefined as a plaza with historical elements commemorating the McFadden brothers, that the public toilets be moved, and that a gate or barrier be installed to control access to beachfront parking."

The R/UDAT concluded that the Canary Village neighborhood "is currently threatened by highly escalated land values, a competition for available lots between surface parking and primary user space, a transition from marine industry to more conventional commercial land uses, a proliferation of tiny lots under separate ownerships, and a general absence of streetscape amenities." The Team urged the City to take the lead in improving the street environment, including improving street drainage and inaugurating a landscaping program.

It also urged that parking be moved to the periphery of the Village, and that surface parking lots within the Village be turned to more productive use through infill construction. Since the current zoning ordinance's parking and rear yard setback requirements reduce by half the amount of buildable area on the Village's small lots, the R/UDAT proposed that the regulations be changed to allow owners as much buildable space as possible.

To untie Newport Beach's traffic knot, the R/UDAT explored a number of alternatives for reducing the impact of tourist vehicles and simplifying traffic flow through the Mix Master. The Team proposed that a major parking facility be constructed on the CalTrans property at the Arches Bridge, to serve as the major point of entry for visitors. Visitors' access to the Peninsula could be restricted to the use of a shuttle bus scheme currently being studied by a consultant to the City. The R/UDAT suggested that the bus system be augmented with a Vaporetto (a water bus system) to service lower bay land points, a residential parking permit system, and increased parking rates on the Peninsula.

To unstop the traffic bottleneck at the entry point to the Peninsula, the Team recommended reconstructing the West Bay Bridge to increase its capacity. Widening Newport Boulevard by acquiring the small island of private land that splits the Boulevard at 30th Street also was recommended.



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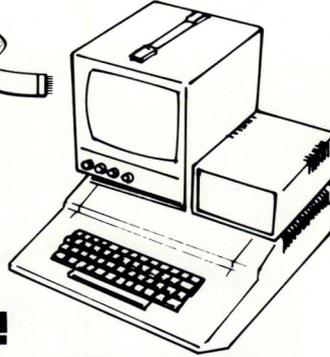
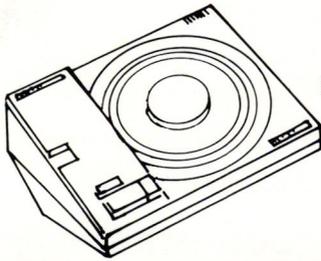
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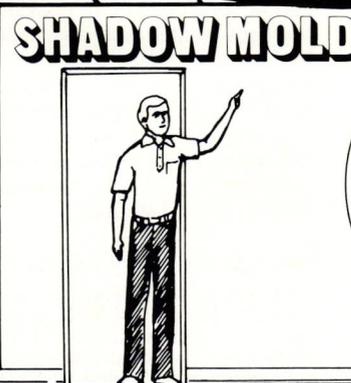
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The R/UDAT concluded that the conditions afflicting Cannery Village and McFadden Square “are largely a consequence of a history of inadequate public expenditure that has persisted for many years.” The report went on to add, “an essential element of any implementation strategy must be the provision of public capital in sufficient amounts to deal with public problems . . .”

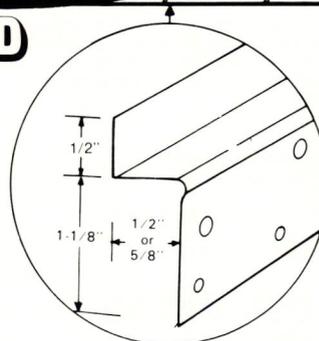
Specific implementation strategies proposed by the R/UDAT include:

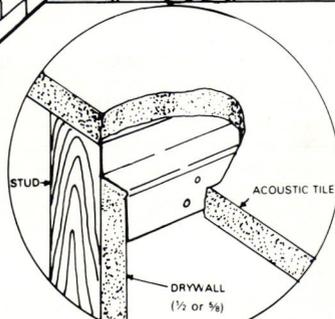
- Designating Cannery Village-McFadden Square as a Special Development Area, completing the Specific Area Plan begun in 1977, and initiating an already-funded Environmental Impact Report;
 - Using the power of eminent domain to expand or modify right-of-way, improve waterfront access, enhance the taxable value of properties in the area, stimulate new private investment, and eliminate the potentially blighting influences that some of the more intensive uses may have;
 - Allocating a portion of the City’s annual surplus to capital improvements. The R/UDAT advised the City that it is time to invest in its future. “Plainly the City presently has sufficient revenue to permit it to devote significant sums to public investment in the Cannery Village-McFadden Square area,” the report said. “The real question is whether it has the will or interest to do so.”
 - Using parking system revenues to support the construction of additional off-street parking, and using parking system revenue bonds to fund construction of additional parking facilities;
 - Rewriting zoning ordinances to relate more directly to existing land use and land use patterns in commercial districts such as Cannery Village;
 - Allowing in-lieu parking payments for new and rehabilitated buildings in Cannery Village;
 - Creating a parking management zone in McFadden Square to reduce circulating traffic;
 - Organizing a capital fund drive among private landowners and businessmen in the study area; and
 - Establishing a Cannery Village-McFadden Square Advisory Council to coordinate private efforts and regular communication between property owners, businessmen and the City.
- The R/UDAT left Newport Beach residents a comprehensive guideline for growth. As one city father said, “The R/UDAT electrified people.”





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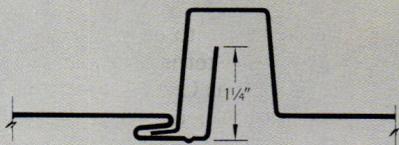
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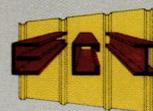


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