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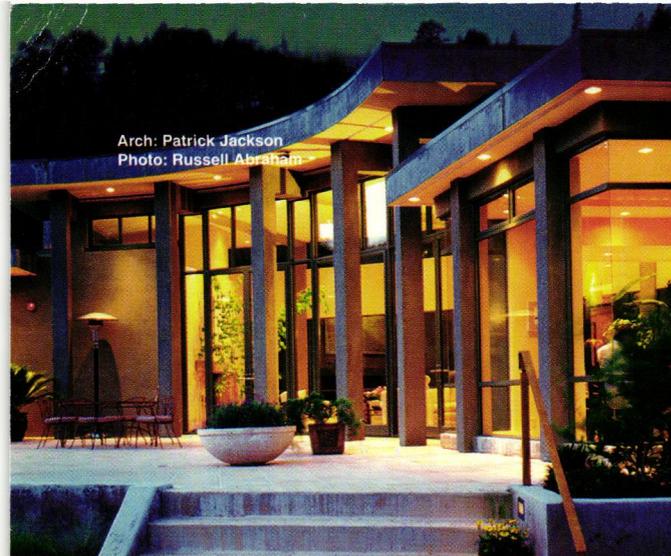
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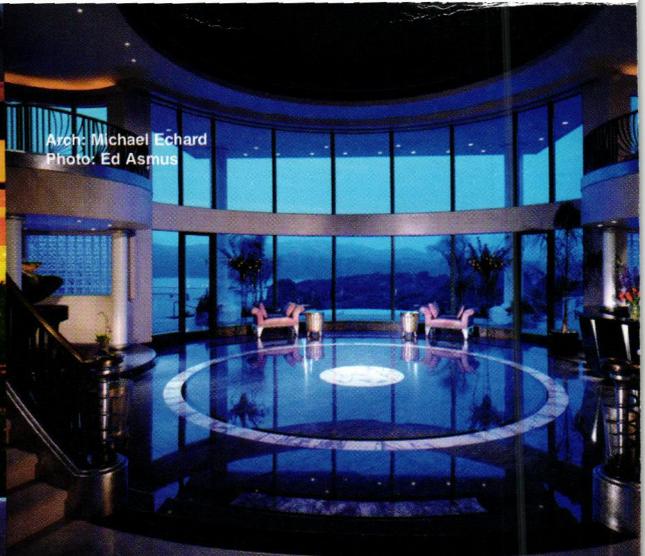
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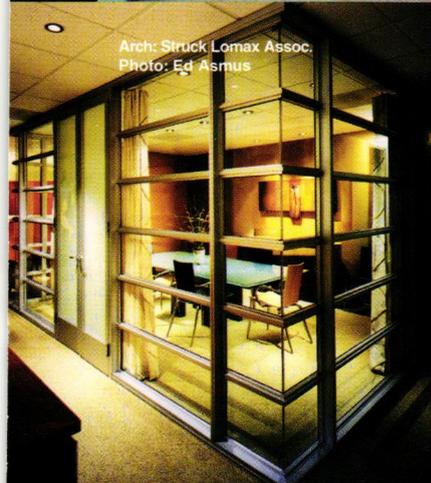
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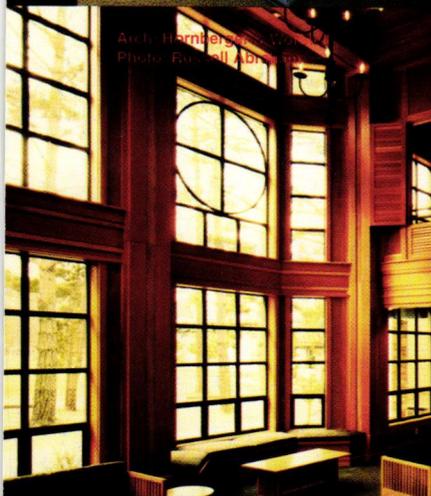


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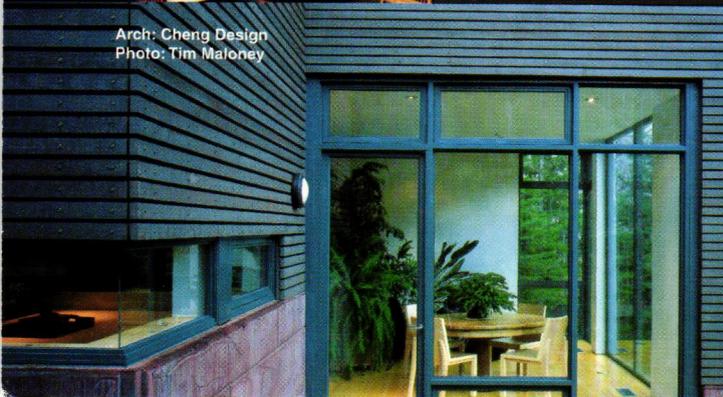
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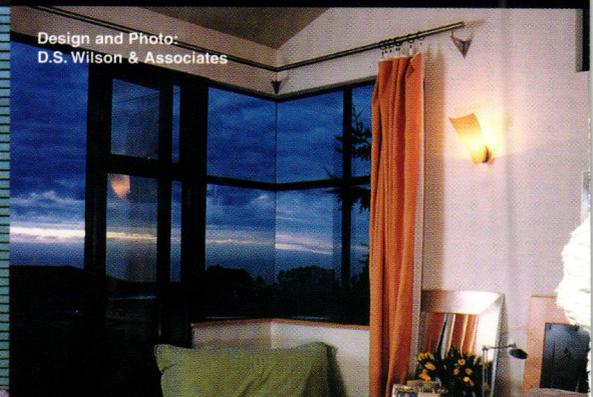
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Comment

I've decided to yield the Comment page to outgoing editorial board member, Daniel Gregory, who wrote the following reflection in response to our request for memorable learning experiences (sampled in "Our Learning Stories" in this issue). In these mean and fearful days, when we mistrust the capacity of our hearts and minds to embrace a rich and complex world, it is good to recall voices of generosity. Vincent Scully's is one such voice. Take it, Dan.

— Tim Culvahouse, AIA, editor

Prospero's Other Cave: Vincent Scully's Classroom

Daniel Gregory

"Exultation," wrote Emily Dickinson, "is the going of an inland soul to sea; past the houses, past the headlands, into deep infinity." Exultation is what I and many others felt when we sat down for the first time in the Law School Auditorium and the lights dimmed and the first pair of slides—an Arapahoe camp tepee compared to Buckminster Fuller's Dymaxion House—leapt onto the gigantic screen, and Vincent Scully began discussing American architecture.

You could say time began there on Tuesdays and Thursdays at 1:00 p.m., which, after a late night, a full morning, and a hurried lunch, was a risky time for anything to begin that required some concentration. But we stayed awake for these lectures. It wasn't just the announcement discouraging the taking of notes that captured our attention—though refreshing and novel to me, it seemed merely to puzzle the pre-med students—it was the reasoning behind the requirement.

Naturally, the reason was to spend the time studying the buildings and following Scully's analyses of architectural intent and social effect as closely as possible. The point was to think about what he was saying. Now that was the real novelty. He was teaching us to look. The facts we assimilated; they did not

change much and they could be memorized. But architectural form, from the ordinary or vernacular to the monumental or heroic, took on a life of its own in the hands of the sorcerer-historian.

He has said: "It is always a mistake to forsake the art for its makers. It is in their art, not in themselves, that artists are at their most human. In it they transcend the littleness of humanity and magnify its grandeur. It is therefore only through art of one kind or another, and perhaps through architecture most of all, that the shape of a larger humanity can be suggested, imagined, or perceived." He showed us a larger picture and gave us architectural judgment.

Occasionally, Scully became so intent on the process of visual analysis that crazy things happened. He favored an incredibly long, but apparently lightweight bamboo staff as a pointer. I think a rug had originally been wrapped around it. One day he banged so forcefully on the screen while emphasizing a point that the rod shattered with a mighty crack—Prospero launching his *Tempest*—thoroughly terrifying the back-benchers.

Another time he lingered a little too long on a particularly suggestive slide comparison, forgetting that some slide projectors—at least the ancient dreadnoughts that Yale had in those days—can overheat. He was discussing the dynamism of the two designs, punctuating his remarks with great diagonal arm-thrusts, saying "Look at the feeling of movement evident here," when all of a sudden the two slides really did move, as first one and then the other blurred and then burst into a smear of melting and smoking Kodachrome. It was a wonderfully Dada moment; a sort of mad overdramatization of exactly what he had been talking about.

You couldn't help but get caught up in the exuberance and passion that he showed for his subject. Indeed, Scully's lectures changed forever the way his students viewed the world. He opened our eyes to the life of forms in art and architecture and showed us how the simple and complex act of shaping space for human use can articulate our sense of value, influence our view of the past, and embody our ideals and aspirations. And he made me want to find a career in writing about the built environment. ●

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Philip J. Bona, AIA, recently opened Wolf Lang Christopher Architects' Emeryville, California, office. He led Silicon Valley's *Housing the Next One Million* AIA Design Charrette and is past president of AIA San Mateo County. He is a member of the AIA National Mentorship Taskforce, the AIA National Livable Communities Committee, the AIACC Long Range Planning Committee, an AIACC CalcPac Trustee, a consultant to the AIACC Mentoring Committee, and an Alternate Director of the AIACC Board.

Lynn Call, AIA, is principal of L. R. C. A. I. A. Architects and Arc/Con Associates Contractors, a design/build organization. Extensive studio and site collaboration with John Lautner, FAIA, Architects; restoration of various projects including Frank Lloyd Wright's Freeman and Sturges houses; and a previous design/build partnership with Raymond Kappe, FAIA, Architects Planners, form the practice of the Call studio and the Arc/Con partnership.

John M. Cary, Jr., Assoc. AIA, and Casius Pealer, Assoc. AIA, are co-founders of *ArchVoices*, a nonprofit think tank on architectural education and internship. John earned his M.Arch from UC Berkeley and is currently pursuing his PhD. He has written extensively on professional education and training, as well as on community engagement opportunities in architecture. Casius earned his B.Arch from Tulane University and has since worked in a variety of capacities for nonprofit organizations focused on the built environment, including the American Architectural Foundation, the Mayors' Institute on City Design, and the Tulane Regional Urban Design Center. He has also worked as a carpenter and taught carpentry and small business skills in the U.S. Peace Corps. Casius is currently pursuing a J.D./M.P.P. degree conferred jointly by the University of Michigan and Harvard University. *The editor would like to thank John M. Cary, Jr., for compiling the list of links that appears at the conclusion of Philip J. Bona's "Mentoring the New Thought Leaders."*

Daniel Gregory, PhD, Assoc. AIA, is home editor for *Sunset* magazine.

Donlyn Lyndon, FAIA, is Eva Li Professor of Architecture at UC Berkeley and Editor of the journal *PLACES*. He has served as Chair or Head of Department at UC Berkeley, MIT, and the University of Oregon and has been awarded both the the AIACC Excellence in Education Award and the AIA/ACSA Topaz Medalion. He is past President of the Association of Collegiate Schools of Architecture. Lyndon was a founding member of MLTW, architects for Condominium One at The Sea Ranch, which has received the AIA Twenty-Five Year Award, and practiced until recently as a principal in Lyndon/Buchanan Associates in Berkeley. *The Sea Ranch*, a book co-authored with Jim Alinder, is scheduled for publication by Princeton Architectural Press in February 2004. His previous books include *The Place of Houses*, with Charles W. Moore and Gerald Allen, *Chambers for a Memory Palace*, also co-authored with Charles W. Moore, and *The City Observed: Boston*. Lyndon's first intern experiences were in the offices of his father, Maynard Lyndon, and Raphael Soriano, and his first executed building was designed as an Associate of Maynard Lyndon, FAIA.

Kirk Miller, FAIA, CDS, is a member and past president of the California Architects Board. He has served the AIA as Secretary of the California Council and as Chair of the National Ethics Council. He is one of the authors of the national AIA *Code of Ethics*. Miller is in private practice in San Francisco. He received his Master of Architecture degree from UC Berkeley and his Bachelor of Arts degree from the University of Alberta.

Craig Park, FSMPS, Assoc. AIA, serves as Vice President, Professional Systems, for the Harman Pro Group, worldwide leaders in sound technology (www.harman.com). He holds a BS in Architecture from California Polytechnic State University, San Luis Obispo. He has 30 years' experience in multimedia facilities design and technology consulting for the building industry. He is a Fellow of the Society of Marketing Professional Services and serves as their national president for 2002/03. He is a frequent writer on marketing and business for industry journals, and his book, *Design. Market. Grow!: Building an Enduring Practice through Expertise, Excellence and Experience* was published by SMPS in January 2003. He can be reached at (818) 830-8754 or at craig@craigpark.com.

Patrick L. Pinnell, AIA, is an architect and town planner in Haddam, Connecticut.

Anne Zimmerman, AIA, is principal of AZ Architecture Studio in Santa Monica, a firm focusing on quality designs for the public realm and the underserved, inspired by place and urban issues. She is a member of the *arcCA* editorial board.

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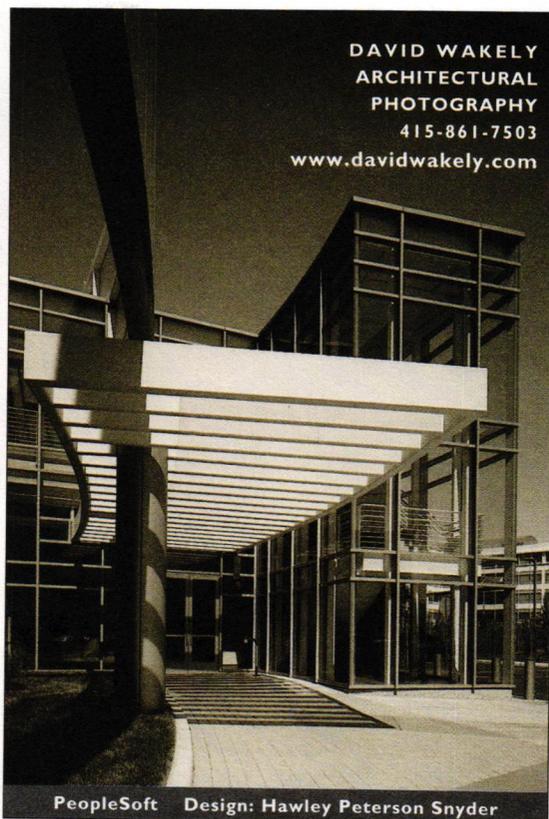
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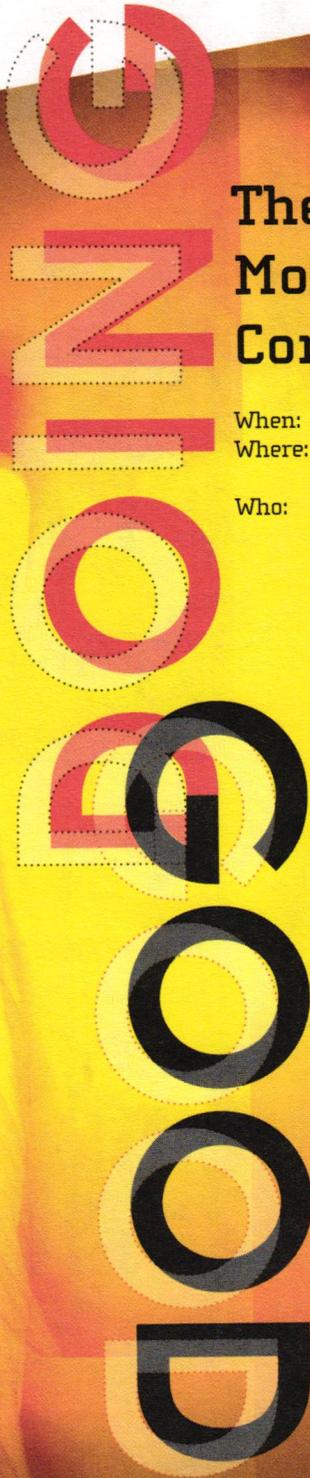


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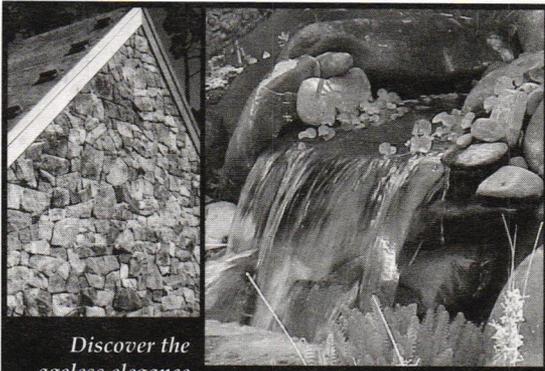
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John Cage walking onto the podium in the Royal Festival Hall in London in 1979, smiling from ear to ear as if the whole auditorium were filled with his closest friends (never true in London). He said:

“Nothing is accomplished by writing music.

“Nothing is accomplished by playing music.

“Nothing is accomplished by listening to music.

“Our ears are now perfectly in tune.”

– Clive Wilkinson, AIA, Los Angeles

Our Learning Stories

AIACC Members

For all the responses to our request for memorable educational experiences, please see our website at www.aiacc.org/communications/arcca.html.

Minoru Takeyama, who now practices and teaches in Tokyo, is the most talented architect I have ever known. As a student at Harvard, his initial command of English (now excellent) was almost non-existent. He and I were teamed for a design project and had to communicate, despite the language barrier. He resorted to the use of graphic algebraic symbols (plus, minus, more, less, add, divide, subtract, approximate, infinity, differentiate, etc.). That graphic language was quickly extended to simple diagrams, precursors to the Pattern Language. If ever one were to suddenly, really understand the notion of "diagrams to architecture," that was a seminal, learning experience!

—Robert Herman, FAIA, San Francisco

My Mom took me out to the garden one spring morning when I was four. She picked an iris and then sliced it into two halves with a razor blade, showing me the pistil and stamen, the stigma and the filaments. In this moment, she opened up a whole new world by showing me the wonder of looking beyond the surface of flowers, . . . of all things.

—Ruth Gilliland, AIA, Burbank

Charles Moore, FAIA, was simply the best teacher of his generation. He taught everyone to tune in to the world, and especially to popular culture, and to connect it to the deepest traditions and aspirations of history. He exemplified the teaching that engaging the world is essential and that meaning and value may exist everywhere and can be invested in places.

Bob Mather (Univ. of Texas) lived and taught the inevitable interdependence of architecture and social responsibility. His was not the consciousness of the moment, but rather a Quaker's abiding and deep respect for the perpetuation of life and of wonder. His students and colleagues were continuously puzzled by his positions and actions, and subsequently informed by the power of his independent thoughtfulness.

—Robert S. Harris, FAIA, Los Angeles

"The same as those for a good person." - Folke Bjorg, Assistant Professor of Architecture, Univ. of Hongkong, 1953, when asked by a student about the important ingredients for a good architect.

—Ted Wu, AIA-E, Los Angeles

In *Drawing 101* at the Univ. of Idaho, we spent the first four class periods, of three hours each, drawing the same still life. I don't recall anyone with exceptional artistic skills among us; however, after working the same drawing for twelve hours, everyone had developed a drawing worth keeping. Since that time, I have never been intimidated at trying something new, and I am always prepared to spend enough time to make it a success.

—Christopher Mehren, AIA, Los Angeles

Summer of 1949, as I stood in vestibule of train moving through New York state and commented to woman standing near me how unkempt the landscape appeared compared to what I'd been seeing in Europe, and she looked at me and asked, "So what are you going to do about it?"

—Frank E. Hotchkiss, AIA, Laguna Niguel

The tone for the balance of my education was set at the end of my first quarter of design with Wes Ward at Cal Poly, SLO. The class was essentially the design-of-the-week club, with ten or eleven projects during the quarter. Half of my projects came out brilliantly, and the other half were miserable.

Wes debriefed each student before issuing final grades. I sat down for my appointment with him and he immediately asked, "So, what did you learn this quarter?"

I recounted my own observation of my erratic performance, then went through each project in order, identifying what I did successfully in those that came out well and what had gone wrong with those that did not. Wes listened patiently,

nodding occasionally, with a faint smile on his lips. He paused very briefly at the end of my discourse, then remarked, "Well, you've certainly learned this quarter," and marked an A in his book.

Wes uttered all of two sentences in the whole conversation and made two stokes of his pen, but they formed the most profound learning experience of my adult life. At that moment, I realized it wasn't about doing perfect work, but about learning.

—Greg Allen Barker, AIA, San Luis Obispo

My most memorable learning experience was the six-year period I spent working with the person I consider my mentor, Frank Tomsick, FAIA. I remember vividly one of his simple lessons: Never use one of anything (can be applied at all scales, from large formal devices down to simple fasteners).

—Jerry Veverka, AIA, San Francisco

My first visit to Kahn's Yale Center for British Art in New Haven touched me in a profound way. As I walked through the formally precise spaces, so clearly oriented to one another, and looked at the splendid craftsmanship, I had the distinct impression, although clearly not actually possible, that the architect cared about me personally.

—Paul Adamson, AIA, San Francisco

While in graduate school at the Harvard GSD, I was fortunate enough to be able to take a studio from Jerzy Soltan, a Polish architect who had worked with Le Corbusier in Paris after being liberated from a German prisoner of war camp. More than anyone else, he taught me about the moral obligations we face as architects. The remark that really made an impact was one he credited to Le Corbusier.

It seems Le Corbusier was challenging the proposed design of a new major building in New York. Someone pointed out how well the building worked for the people who would be using it. He responded by saying that yes, the building worked for the few hundred people who would be inside it every day, but didn't it have the greater obligation to work as well for the thousands who would walk by and look at it each day as well?

—Mark Schatz, AIA, San Francisco

I was truly amazed that I had made it through four years of architectural school at USC. We had a first year class of over two hundred and a potential graduating class of about forty. My first professor had said, "Look at the person to the left and to the right; only one of you will finish." School became a challenge rather than an adventure.

The competition was fierce and took an emotional toll. By fifth year, I had lost my enthusiasm for architecture and was ready to admit that I was not cut out for this profession. Bill Pereira was head of the fifth year design studio and was assisted by John Rex, Bill Beckett, and A. Quincy Jones, all practicing architects spending a few hours each week at the school. I drew Quincy Jones as my critic. Talk about the luck of the draw. In my first session with Quincy, he complimented me on my planning concept but said that I was pushing too hard for an image. He told me to relax, let the forms flow naturally from the plan. I was guilty of "over design," not knowing when to stop. "Simplicity and honesty in form and materials are not in conflict with meaningful architecture." Words to live by.

Quincy Jones eliminated the doubt that I had about a career in architecture and renewed my desire to give it a go. He became not only my mentor but also a good friend. He left us far too soon.

—George Bissell, FAIA, Newport Beach

Lou Kahn was my thesis critic. He was a very kind man and inspirational in his criticism during the formation of the design concept, but he really wasn't much interested in working out the details of an idea. In spite of that, he came in the drafting room one day late in the refinement stage of our work and could see the anguish on my face, so he came up to look at what I was doing. My thesis project was a museum and, try as I might, I couldn't work it out so that the elevator doors opened in a good place on each of the three levels. I knew it wasn't the sort of problem to ask him about, but he let me explain why each floor had to have the elevator in a different place. When I finished, he looked at me and said, "John, has it occurred to you that you are refining a mistake?"

—John L. Field, FAIA, San Francisco

I remember George Hasslein, founder of California Polytechnic State University, College of Architecture and Environmental Design, coming to the California Desert Chapter of the AIA board of directors installation dinner in 1986. A number of the board members were Cal Poly alumni. He read each board member's answers to a questionnaire from his ARCH 101, *Introduction to Architecture* class for all first-year students. As new associate director of the chapter, I shared the realization that some of the top design professionals I'd come to admire were once just wide-eyed college students with the same dreams and ambitions I had. George's presence always seemed to remind me that people, no matter their professional status, were just plain folks.

—Paul S. Anderson, AIA, Newport Beach

I was an unhappy business major and took a history of architecture course to fulfill a liberal arts requirement. I remember the first class where I became transfixed by architecture – not by soaring cathedrals, which came later in the course – but by the little mud huts, the earliest human efforts to provide shelter for ourselves.

—*Andy Pease, AIA, San Luis Obispo*

The most influential architecture professor for me was an outsider, William Garnett, the noted aerial landscape photographer. Garnett was a legendary master of black & white photography and was part of the nebulous 'visual studies' group at Berkeley. He did his work from the sky. I stumbled into his class one day, to fill out my schedule of undergraduate electives, and I was changed forever. He taught me to see. He understood light, shadow, form, and three-dimensional viewpoint better than most architects that I know. As a teacher, he accepted no excuses or cute cosmetic tricks in our work. He demanded old-fashioned excellence and rigorous technique. Buildings are frames of reference, like the photographer's frame, and their perspective will be asserted for many years. Garnett understood this and burned it into my brain.

—*Kurt Lavenson, AIA, Oakland*

Wurster Hall Graduate Studio: Joseph Esherick addressing a couple of students at a desk "crit": "Sure, beauty should be our concern as designers. However, I don't think it can be about following rules, guidelines, and doctrines. If we were functioning properly, I think it should be just the way we do things normally, automatically. It should be more like breathing for architects. It keeps the work alive."

—*John Lucchesi, AIA, San Mateo*

When I was just a freshman in my Basic Design class, a group of seniors came in to talk to us, representing themselves as teachers' assistants for the day. They gave us a long list of items to purchase at the bookstore, consisting of the following: a T-Square, scales, erasers, and a set of "focal points." Needless to say, I never found the "focal points" until my second year Perspective Graphics class!

—*Maurice Camargo, AIA, San Jose*

The best lesson I ever learned happened my last year at Cal Poly, SLO. I was taking a construction management course on project delivery. Our teacher, Barbara Jackson, had us work in groups of four (I represented the Architect and the others were C.M.s). Our challenge was to work together to present a proposal for a design/build project. We had many conflicts. It

seemed that the C.M.s wanted things to go their way, and I wanted things my way. Our teacher brought us together to discuss the problems we were experiencing, and once we cleared the air about our differences and created our "team goals," our team delivered a great presentation. We all got As for the project and parted as friends. I walked away from that experience with a new understanding: that everyone is valuable and has something valuable to contribute; and, furthermore, that if we share our perspectives openly, usually the outcome is extraordinary! I know that my parents told me this lesson many times before, but I needed to experience it first hand.

—*Tina Bauer, Assoc. AIA, Long Beach*

During one of our class juries at MIT, Alvar Aalto made a statement that helped me choose from the bewildering variety of possible design directions. Our sophomore class, largely made up of men seriously searching for answers to the design conundrum, had been asked to submit their solutions for a nursery school. The younger teachers all made perfunctory remarks about the required number of toilet fixtures, legal door swings, or the height of handrails. Aalto waited for the last word. "These are all very nice proposals, filled with very modern ideas of steel, bricks, and glass, but," he continued, "Where do the children go when the lions come?" Most of the sixty student faces looked bewildered. Alvar explained, "Don't you know the story about the little boy in the jungle? When the lions came, little Sambo went and hid under the trees. Where do the children go when the lions come?"

—*Sherwood Stockwell, FAIA, Wolcott, Colorado*

My grandparent's home near Ann Arbor, Michigan, brings back vivid memories. The sequence of rooms allowed me to chase my sister from the kitchen to the living room through the master bedroom into a hallway leading back to the kitchen. I have always thought that a house for children should have such a circular plan

You may be conjuring up images of Currier and Ives or Kincade's cottages. Not so! In the early '40s, my grandfather had built a long, low-slung, modern house, undoubtedly influenced by Wright's popular Prairie style. My grandfather selected a slate roof with deep overhangs, stone and plaster walls, on a concrete slab with radiant floor heating. I was content to run toy trucks along the geometric patterns of the Oriental rug on the warm floor in front of the large stone fireplace. Curiously, I remember the small metal clips that fastened large panes of butted plate glass in the front bay window.

—*Thomas J. Carleton, AIA, Salinas*



Mentoring

the



New Thought

Leaders





Philip J. Bona, AIA

We talk nostalgically of the mentor relationships between notable masters and their apprentices, such as Bernard Maybeck and Julia Morgan, William Jenny and Louis Sullivan, Louis Sullivan and Frank Lloyd Wright, and Ludwig Mies van der Rohe and Philip Johnson. While the mentors of Richard Meier, Michael Graves, Frank Gehry, and Thom Mayne are not yet well known or celebrated, these great architects had their own masters early in their careers, you can be sure.

Over the past few years, architects in California have discussed and debated the benefits of mentoring. While the proponents of mentoring have won the creation of the AIACC "Mentoring Program," most AIA members remain focused on objective constraints, such as the marketplace, fees, and—as much as possible today—good design. We are talking the talk of mentoring but haven't yet committed to walking the walk.

Since the late 1970s, the Intern Development Program (IDP) has traveled across the country, being adopted by state after state as a recognized mentoring program with a common structure to standardize nationwide the experiential skills of interns. In 2005, California jumps on the train as a commitment to its young architects that a culture of mentoring will prevail in this state. We can look towards mentors as educators, leaders, and partners in creating a future for the profession that ensures success and prosperity for all.

IDENTIFYING WHAT WE DO BEST

Before we know how to be a proper mentor for the generations to come, before we can offer wisdom that will be appropriate and effective for our protégés, we must be sure we know where we are going as a profession and as individuals.

If our professional mission is to advance the art and science of building, then the skill sets needed are fairly straightforward. If our mission also includes strategic planning of integrated ensembles of buildings and business operations using principles of smart economic growth and sustainable

materials to shape a built environment that is representative of a more inclusive social context, then many more diverse skill sets are needed.

In our never-ending search to strengthen our credibility as professionals, we have recently committed to strive for a synergy around a broader knowledge base. We have learned over the past few decades that alone we can't be all things to all people in the complex and highly regulated design and construction process. Instead, motivated architects, through a new collaborative culture with more specialized individual skill sets, can create new leadership opportunities in the construction industry and the construction economy as well. Know more, be more, be the expert—or give in to others who will.

As "Thought Leaders," architects can use these new skill sets to redirect the economy and public policy towards the contemporary priorities of livable communities, smart growth, and sustainability. Developing strategic alliances with others, we enhance the future opportunities for the architect to become not only a building design professional, but also an educator, politician, advocate, critic, and even "Development Strategist."

We have already played many of these roles during our careers. Now each of us must ask what it is that we, individually, know best, and how can we offer it to a protégé, so that someday he or she may become a master of these skills. And we must ask, as well, the aspirations and goals of each protégé.

DEFINING TERMS

As mature, experienced architects in leadership positions in our firms, we all believe that we are, to some extent, mentoring our young staff. Why, then, do so many of them say that we are not available or not approachable? Is it that we don't have the time or that they're not asking the right questions? It's both.

First, it is necessary to make a distinction between the historic Mentor/Protégé or Master/Apprentice relationship and what has become the usual Advisor/Intern or Supervisor/Employee relationship. It is not just semantics; it is about commitment and relationships.

We all enjoy the opportunity to share advice or wisdom with our peers, our staff, and even our employers. These important exchanges can be construed as mentoring, but perhaps it would be wiser

to distinguish between advising and mentoring, so as to strengthen the credibility and value of the latter. Both are important to the journey of an architect in his/her pursuit of lifelong learning and success. But the difference is about the level of commitment in the relationship between two individuals. Advising is a critical component of "on the job training" and daily growth. Mentoring is more; it connotes a commitment and a lasting career relationship between master and apprentice or mentor and protégé. The success of a mentorship program will be measured, not in day-to-day learning, but in the strength of the relationships made and how they reshape our profession. We shape our protégés, and afterwards our protégés shape us.

WHAT INTERNS WANT, WHAT THEY OFFER

So what do today's protégés want, and what do they have to offer? What are students, interns, and young architects really thinking? Perhaps it is no one thing—having an accredited degree, or taking the state exams and getting licensed, getting a raise, paying back the enormous student loans, developing a meaningful relationship with a significant other, exercising, eating healthier, living longer, or being an active member of the X or Y-Generation. They have passion, focus, motivation, curiosity, compassion, concern, and righteousness, and they want it all.

The work ethic is there, but only to a point. They have been told that it is healthier to strive for a balance between life and work, to avoid divorce or burnout, and that is what many are doing. They want answers, experiential skill sets, more of their supervisor's time, and more opportunity to design, to meet clients, and to be in the field during construction—and they want all these things to fit into an eight-hour workday. This is their contradiction, their weakness and their strength.

Many of us came up with graphite and erasing shields doing the job day or night till it was done. It is just not that way anymore. Being consummate architects with much time "on the boards," how do we learn to achieve balance in our own lives? We can watch and learn from our protégés. Because mentoring is truly a two-way relationship, we are able to give what we know while we observe how to achieve balance between living and passion for one's

work. A protégé can bring us not merely exposure to highly useful technology skills, but a renewed *joie de vivre*, a balance of life.

CHOOSING

Remembering that good mentoring is about the benefits of a lasting relationship, it is important to choose

LINKS SUGGESTED by John M. Cary, Jr., Assoc. AIA

Resources for Interns

- ArchVoices
<http://www.archvoices.org>
- National Internship Summit
<http://www.internshipsummit.org>
- Archinect
<http://www.archinect.com>

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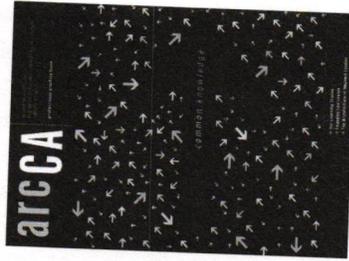
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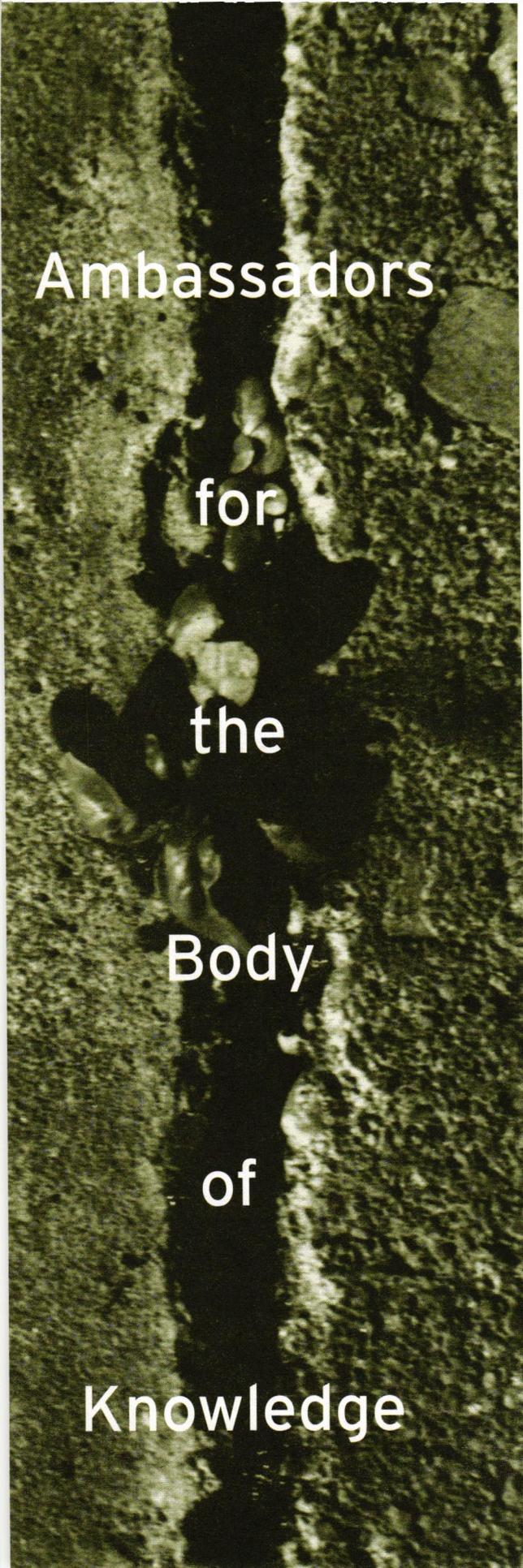
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 as a benefit of their dues.

*For Ken Ross's article, see <http://www.aiaa.org/aiarchitect/thisweek02/tw1025/1025tw5bestpract-mentoring>.

For more information regarding the AIACC Mentoring Program, its framework and tools, contact Letrice Sherrillo, Associate AIA, at lsherrillo@aol.com and visit the AIACC Website at www.aiacc.org. ●

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<http://www.architectureink.com/>
- Architecture Cafe
<http://www.architecturecafe.com/home.asp>
- InsideArch
<http://www.insidearch.org/>



Ambassadors

for

the

Body

of

Knowledge

John M. Cary, Jr., Assoc. AIA, and
Casius Pealer, Assoc. AIA

Although there have never been any conclusive studies to prove this, many members of our profession regularly bemoan the notion that half of all architecture graduates never enter into “traditional” or mainstream practice. “Alternative career” is an inappropriate and out-dated label for these nontraditional pursuits, but not because of the important insight that old “alternatives” are becoming more common; rather, because of the reality that the word “career” is losing its traditionally singular meaning. If graduates today are expected to have five or six “careers” (as was suggested by a noted futurist in a recent issue of *Fast Company*), how can we call any one of those five or six pursuits a career?

One answer can be found in the relevance of alternative practitioners to traditional practice. There are fundamental similarities about how we architects approach a problem, how we view the world, and what goals and ideas drive that view. We can work within a particular tradition, even if not in a traditional way. Architects working outside of mainstream practice settings—corporate boardrooms, community design centers, government offices, classrooms, and even courtrooms—all share common bonds.

As a profession, we collectively recognize the need to communicate effectively with members of the public. Accordingly, practitioners want interns to be better versed in

skills such as writing, economics, and business practices. Yet, rather than encourage more liberal arts classes, we encourage more architecture requirements: codes, materials, professional practice, CAD, studio, and more CAD. We also encourage students to start working in architecture firms prior to graduation. These important efforts to better prepare young people for the profession focus on fundamental skills with immediate applicability in architectural practice as it is currently configured. They confuse "professional education" with "technical education." Most significantly, they fail to realize that liberal arts classes and "non-architectural" experiences are preparing students for professional practice, often more so than yet another class or setting filled with architects, led by architects, ever will.

Additionally, requiring more architecture classes implies that the skills needed to practice are identifiable and static—or that, perhaps more questionably, the academy will be able to keep pace with what skills are needed and introduce them as appropriate. Recognizing the importance of flexibility in a professional curriculum, the National Architectural Accrediting Board (NAAB) requirements specify that a maximum of 60% of coursework can be core architecture requirements. This leaves a minimum of 40% free electives. Though this requirement is intended to refer to completely free electives, many schools have required that these electives be fulfilled strictly in architecture courses.

The current structure of the Intern Development Program (IDP) also works against the exploration and discovery that is so important for the profession. If a graduate has an opportunity to work for, say, an Internet firm, and does so for just two years, she has likely placed herself out of any entry-level architecture job. NCARB requires that she still put in seat time drawing construction documents to complete IDP. Instead, her firm enlists her to provide an effective online presence, and economically it will never make sense to put her skills in front of a CAD machine for ten hours a day. Though she may design projects, interact with clients, and be perceived as a competent professional, she will never have the opportunity to get licensed—not because she can't pass the ARE, but because she isn't allowed even to take it. In fact, the AIA's *2000-2002 Firm* and *2002 Compensation Surveys* recently acknowledged this situation by including a category for "non-registered architects" and "architect/designer" respectively, essentially removing the artificial distinction between licensed and non-licensed professionals. According to the *AIA Firm Survey*, non-registered architects account for 17% of all employees in architecture firms nationwide (second only to the 29% of employees who are licensed architects). We

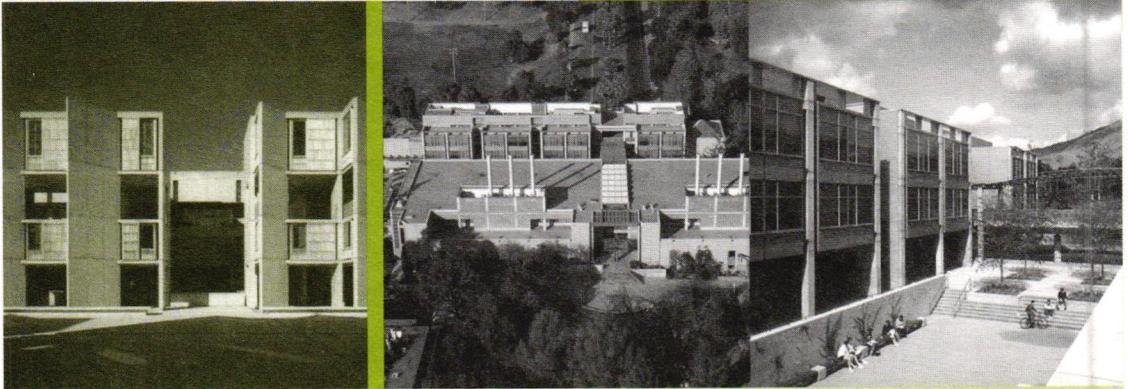
like to compare our profession to law and medicine, but both of those professions encourage, facilitate, and place great importance on professional licensure. There would be a crisis in the legal profession if just two-thirds of lawyers were actually "licensed" to practice. We are here arguing that there is already such a crisis in the architectural profession.

As opportunities within the traditional practice of architecture increase exponentially, young and experienced architects are pursuing "alternative" careers to a degree that the term "alternative" hardly applies. As Thomas Fisher notes in his recent book, *In the Scheme of Things*, "We call [what architects do] design, but it also goes by the name of leadership, and there are few things in the world that people value more than that." The advent of "alternative careers" is exactly what we have hoped for for years: that architects should be as ubiquitous as lawyers throughout society. The difference is that the legal profession embraces and facilitates these alternatives, while the architectural profession—in disavowal of the incredible range of architects' contributions throughout history—increasingly defines itself narrowly and technically.

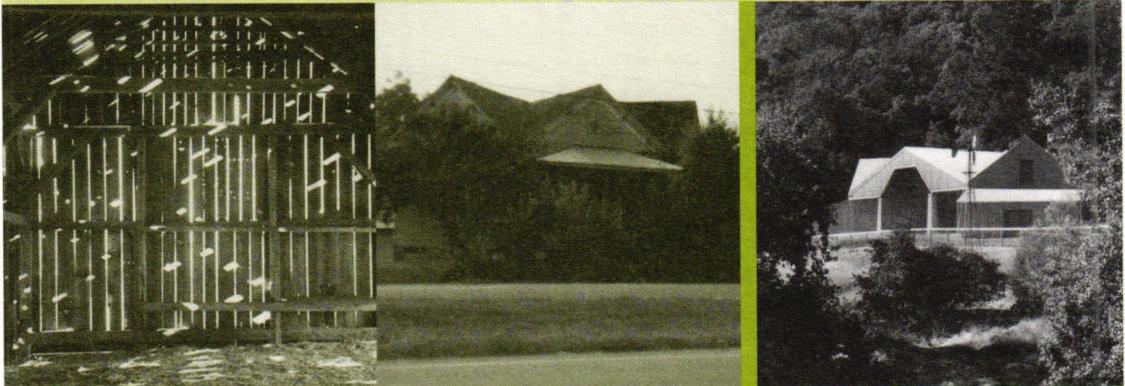
If architects are finding satisfying opportunities to utilize their design skills in other fields and aspects of society, the profession needs to empower these people as ambassadors. Our profession has much to gain from the sort of public relations and behind-the-scenes work that these experienced ambassadors can offer. But does the architecture profession itself benefit or change somehow as a result of their experiences? In short, are we simply exporting our discipline's knowledge and abilities, or are we exchanging? If we are exchanging, what knowledge and abilities should "alternative practitioners" bring back to the discipline? And how can we structure the profession to encourage people who have experimented outside the discipline to return to the development of mainstream practice?

The profession has an incredible opportunity to embrace every architecture school graduate as its own, regardless of where their careers have led them. The authors of this article have grown personally and professionally from the range of unique experiences and opportunities that have shaped our relatively short careers. At least one of us will likely never be licensed to practice architecture, though few people are more involved in the profession itself. The good news is that there are many other people, just like us, who care deeply about the profession that trained them. The profession needs to recognize and empower these many "non-architects" as ambassadors. ●

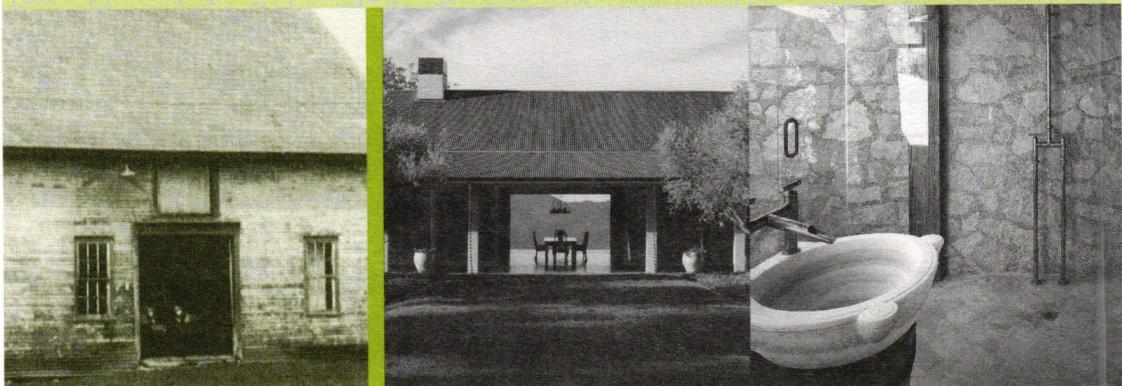
Some Built Influences



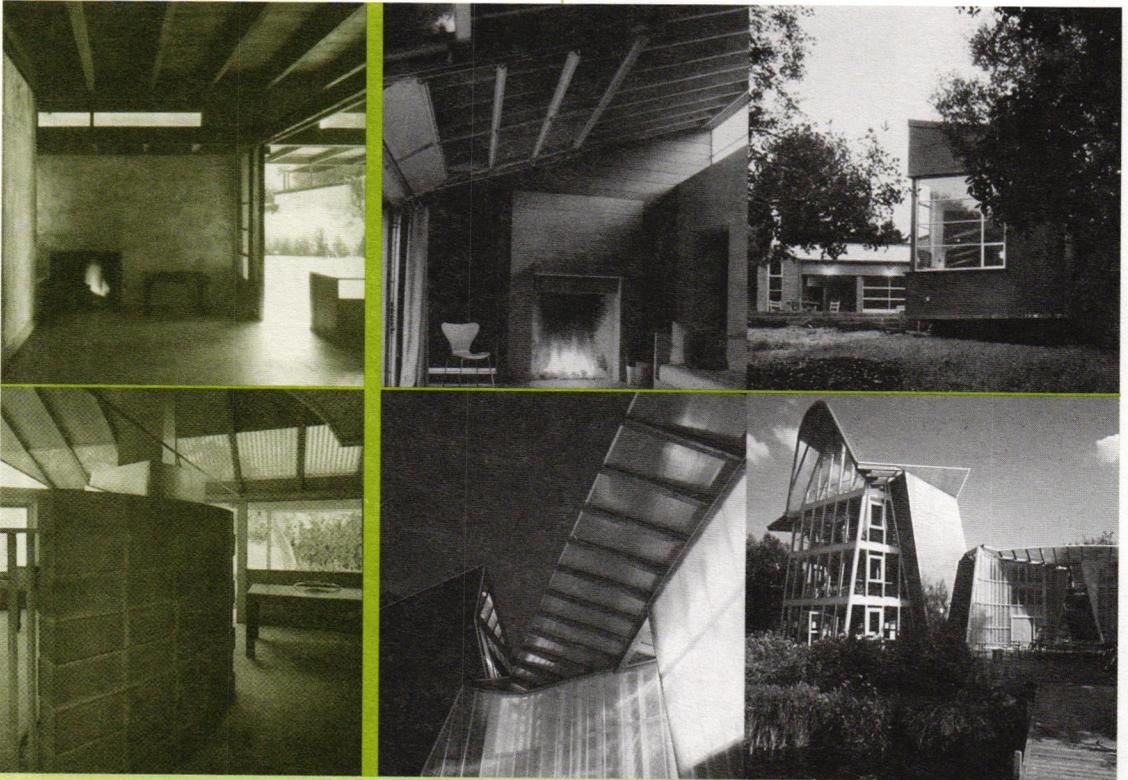
Bourns Hall College of Engineering at UC Riverside (1996) is one of a series of projects by Anshen + Allen, L.A. that learn from Louis Kahn's Salk Institute (1959-65). It embraces and transforms concepts developed for the Salk, which include flexible and adaptable modular laboratories, highly serviced loft spaces, a central court as the heart of the complex, a separation of spaces for technical experimentation and spaces for contemplation, the separation and articulation of material systems, and the refinement of cast-in-place concrete.



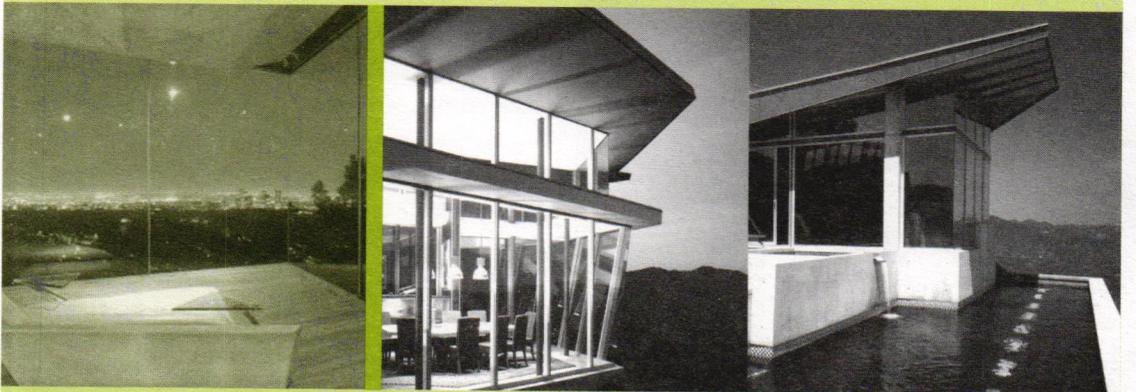
Turnbull Griffin Haesloop's Long Meadow Ranch Winery (1997) continues the firm's long-standing investigation of California's farm vernacular but broadens the frame of reference to include triple-gabled dwellings from South Carolina.



Traditional craft meets contemporary craft in Backen Gillam Architects' Constant Residence (2002), which draws from a rich history of rural American building types, including the drive-through barn and the dogtrot house.



Two examples of work influenced by the houses of R.M. Schindler demonstrate the range of expression afforded by the study of precedent. Fernau & Hartman Architects' House in West Marin (1999) (above top,) transforms a set of elements—fireplace, bearing wall, open roof framing, and clerestory lighting—of Schindler's Kings Road House (1922). In their Steinhüde Sea Recreational Facility (above bottom), Randall Stout Architects make rather freer use of a tectonic vocabulary inspired by Schindler's Tischler House (1950).



Hagy Belzberg's Mataja Residence reflects the careful study of houses by John Lautner, in particular the glazed, prismatic forms of Lautner's Sheats-Goldstein Residence of 1963/1989.



The Art of Building: Reintroducing Practice into Education

This article is the personal perspective of the author, and not the policy of the California Architects Board, of which he is a member.

Kirk Miller, FAIA, CDS

Architecture has been recognized as the Queen of the Arts. It is the art that is seen by anyone walking or driving by a building—one does not have to pay to see it. It affects the behavior of the users of the building. Moreover, buildings impact not only those near the building, but those afar. Architecture is truly in the public domain. And the palette of materials from which an architect designs is the largest, deepest, most diverse, and the most complex in their interactions of any that an artist might use.

The title Architect is derived from *archi* (Latin and Greek) for chief, and *tekton* (Greek) for carpenter, particularly as a carpenter applies art. Thus, the term Master Builder has, until recently, been used for architect. The State Board of Architecture, immediately after its formation by the California Legislature in 1901, reinforced this view of the profession. They required that any candidate for the title Architect must demonstrate “knowledge to the design and construction of buildings and to supervise the execution of the work.”

Today the architect is no longer the “chief” with regard to how buildings come about. Not only are we no longer the carpenters, the builders, or even overseers of the construction process; too often we no longer adequately know how buildings go together or how to document how they go together. We, as a profession, have lost the Art of Building.

The ultimate decisions about buildings are made by other players in the entitlement, financing, construction, and development processes. The newest, and "hottest," project delivery system is design-build, in which the architect often works for the building contractor. Construction managers have taken over a large portion of architects' traditional work. Value engineers redesign architects' work to get projects within budget. Government agencies interpret codes. Banks determine the feasibility of projects. Many clients do not want the design architect to be involved during construction. The architect is no longer even the final arbiter of the building's design. For architects again to be Master Builders, or even to regain their former influence, the profession must recapture the Art of Building. The process by which we prepare architects for practice must be improved.

How are we currently passing on the body of knowledge of the architectural profession through our educational, experiential, and examination processes? On the examination side, we have a California Supplemental Examination that queries applicants on their knowledge of practice areas peculiar to California and California practice areas not adequately covered in the national ARE (Architectural Registration Exam). An outstanding question about the exams is whether or not the comprehensive design examination, which was dropped by NCARB (National Council of Architectural Registration Boards) in 1995, should again be required to demonstrate that candidates can synthesize the elements of a building, within the many real-world constraints, and actually design a functional building.

To improve experiential preparation for practice, the CAB (California Architects Board) is requiring aspiring architects, subject to regulatory approval and as of January 1, 2005, to enroll in and complete the national IDP (Internship Development Program). California is also including a comprehensive requirement (C-IDP). This program will ensure that interns have a more diverse and thorough experience during the time between their formal education and licensure.

Education is the foundation upon which experience and internship grow. But a large gap exists between education and practice, as evidenced in forty years of innumerable articles in professional journals, studies, and books by architects, academicians, sociologists, and government agencies.

NCARB's "Architectural Practice Analysis Study," completed last year, identifies areas with the greatest gaps between education and practice. Those areas mirror the practice competencies that need improvement according to the California Board of Architects' "Post Licensure Proficiency Survey." Both conclude that architects should improve their proficiency, knowledge, and competency in four core areas:

(1) codes and regulations, (2) complete and coordinated construction documents, (3) construction contract administration, and (4) communication: written, verbal, and graphic. These two studies demonstrate that what is not taught to a student in architecture school remains as weak spots throughout that architect's professional life.

Architectural educators correctly argue that one of their roles is to teach students how to think and how to solve problems. Knowing how to get the answer is a permanent skill: once you know the process, you will always be able to get the answer. They do not teach all the answers, but educators claim that they teach how to get the answers. But how can graduates learn to get answers for those areas not even addressed in studios or other course work?

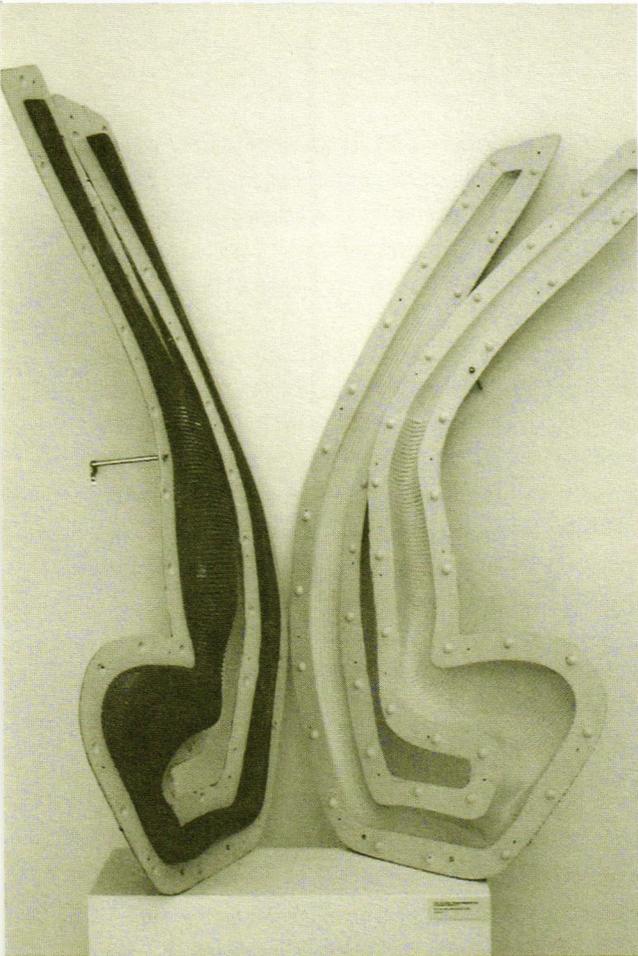
Unfortunately, the typical schools of architecture, in studio classes, only go through schematic design and, sometimes, into design development. Construction documents classes are rarely mandatory, and when taught are usually a part of a limited professional practice course.

Should not the *entire* process of designing a building, and how it is to be constructed, be formally taught in school? Should not the studio culture be changed to take students through the entire architectural process, and to integrate all the aspects that determine the design, documentation, and construction of a building? Knowing the basics of that process, interns can then apply this knowledge to the varying situations in which they find themselves.

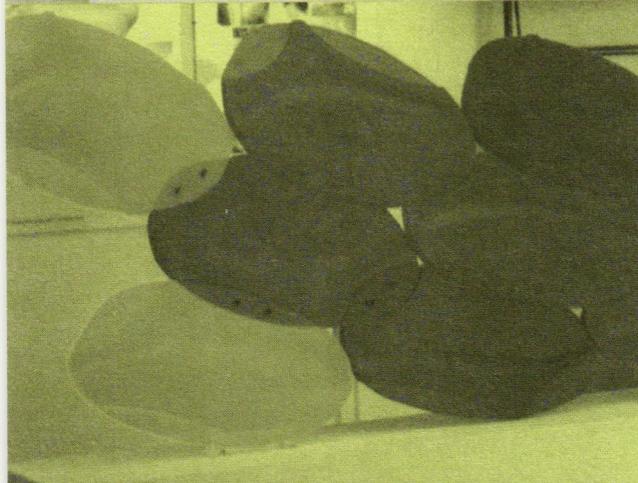
Architecture is an applied art. What must be applied are not only aesthetics, form, site conditions, and meeting the design program, but the total function of the building, including codes (arguably the largest design determinant), major building systems, materials and methods, and constructability.

One of the greatest challenges facing academia is to how to teach students that the integration of these areas into design is essential. How can they be made less mundane? Students must understand that architects must design within the constraints of the real world, or must design around those constraints. All too often, however, the goal of the studios is to not constrain the student by the "facts of life" of the real world. They are encouraged to "think outside the box." But how can one think outside the box until one knows what the box is? Cannot the pure art of design be offered in an art class, rather than in an architectural design studio?

The Queen of the Arts is dependent on the Art of Building. It defines our constructed environment. Designing buildings correctly is essential to protect the public health, safety, and welfare. The profession of architecture must recapture the Art of Building. ●



Engaging Coursework in California and Beyond



arcCA asked each of California's nine NAAB accredited architecture programs for descriptions of coursework that addresses the realities of architectural practice. USC responded with an overview of their curricular and extra-curricular engagement with practice, which provides a useful introduction to this section. From Woodbury University, we include a synopsis of their three-course Professional Practice sequence, a straightforward approach to the question. SCIArc contributes an eloquent description of coursework in construction documents. The two Cal Polys, unbeknownst to one another, each submitted instances of integration of technical knowledge into design studios. UCLA describes its emphasis on research through digital technology. And CCAC and UCB offer examples of investigations at the level of constructability, through a detailing class and a seminar in off-site fabrication. For reasons obscure to the editor, a green building course offered by the New School never reached us, and we regret its absence. We supplement these items—which, we should emphasize, are meant not as a comprehensive survey but as food for thought—with two 'ringers': an award winning construction documents course from Arizona State University and a Washington University course in which students build a concrete wall to Tadao Ando's specifications.

PRACTICE INTEGRATION

Robert Timme, FAIA, Dean, USC

As a professional institution with a long-standing tradition of providing education and training to architects in Southern California and beyond, the USC School of Architecture has always presented the practice of architecture as an integrated component of the professional degree programs. This integration is reflected both in the introduction of professional practice issues in the curriculum from the first year through the upper division and in the reinforcement of those issues by involvement of the professional architectural community in the school through the activities of the USC Architectural Guild, activities that expose students to the full range of "real world" professional issues.

The curriculum initiates this exposure with the first year course Architecture 114: *Architecture, Culture and Community*, which presents the responsibilities of the profession by discussing practical and spiritual needs represented by the cultures of the communities which architects serve and the social and urban environments that result. The student has contact with professionals from many areas of architecture, from landscape, planning, and development to lighting design, construction, and law.

This emphasis on integration of social, cultural, economic, and environmental issues is reinforced by the structure of the design studios, which often use the Los Angeles urban context for project orientation. The studios involve teaching faculty made up overwhelmingly of registered, practicing architects.

Four professional practice courses are required of all upper division students. These courses provide the opportunity for practitioner / educators to discuss issues from predesign to contract documentation using case study methods. These issues are made relevant to the students' design studio work and incorporated with office and project visits.

Internship work experiences are an important and integral part of the education of many USC architecture students. Students are eligible for internships following the completion of the third year of design studio. Selection is based upon application and demonstrated academic achievement. Student interns are paid an hourly wage and many receive an additional tuition scholarship from the sponsoring firm. Internships provide students the opportunity to examine their interests, use newly acquired skills, and test their stamina under the real-time demands of the work place. Students receive practical experience by working directly with top design professionals on current building projects.

Coursework at the School is further reinforced through activities of the USC Architectural Guild. Founded in 1958, the Guild not only functions as a support group for the School of Architecture, it forms a unique link between USC architecture students and the professional community. Its members come from all aspects of the architecture, design, construction, and real estate development industries.

The Guild sponsors a number of educational events, scholarships, and annual traveling fellowships, which allow fourth- and fifth-year students to study architecture and urbanism in a country of their choice. The Guild holds seminars on topics such as portfolio preparation and interviewing as a part of a week of activities related to a spring job fair. Each year, the Guild selects four students to sit on the Guild board, which meets once a month to discuss forthcoming initiatives. The student representatives in the past have organized events designed specifically for students, such as office tours, construction site visits, and career development programs on campus.

All these activities give students the opportunity to enjoy valuable experiences outside the studio and provide them with additional insight into the profession to help prepare them for their future.

PROFESSIONAL PRACTICE SEQUENCE

Woodbury University

"Documentation and Codes," the first of three required professional practice courses, reviews legal codes and regulations that affect architecture and influence design. Students study the development of project documentation based on local codes, with an emphasis on drawing format, organization, and specification.

In the second course in the sequence, "Research and Pre-Design," students investigate theory and techniques for analyzing and integrating design methodologies, site, and social and organizational conditions into criteria for architecture. The theoretical and practical context for the students' degree projects is researched and developed. Along with the completion of a substantiated written position of intent, students are expected to select a project site, to write a program, and to articulate a design methodology.

The final course, "Documents and Project Administration," covers design delivery and project & firm management, including an analysis of documents, services, professional fees, budget and cost estimating, global markets, and professional ethics.

**THE REALITY OF MAKING:
COLLABORATIVE WORKING DRAWINGS**
National AIA Education Honor Award Recipient
Max Underwood, AIA, Arizona State University

This course focuses on the development of a set of collaborative working drawings for a commission under construction. Graduate students divide themselves into teams of three and select an architect to work with for the exercise. (Over the years, students have worked with Frank Gehry, Tadao Ando, Rafael Moneo, Morphosis, Antoine Predock, Rick Joy, William Bruder, and Tod Williams and Billie Tsien.) After researching their architect and taking site visits to previous built work, the team begins developing a speculative theory of construction and detailing for the architect. Utilizing design development documents from publications or the architect's office, the team analyzes the design evolution of the project in an attempt to understand why specific formal and technical vocabulary selections were being made. On the basis of these insights, the team begins a preliminary, speculative set of working drawings and details.

The first test of the team's speculative working drawings comes with a construction site visit. The team visits the project under construction and, in discussions with client, contractor, and crafts people, begins to discover disjunctions between their conjectures and the actual building processes and built reality. As collaborative shop and field documentation continues, issues of the realities of technique, representation, invention, and judgment are raised and discussed.

The team revises both their speculative theory and working drawings, based on this collaborative effort, to reflect their new knowledge and conjectures. The development of structural and detail systems is achieved through the analysis of case studies, professional handbooks, and talking with specific product manufacturers. Students do not copy details, but develop new details that convey an understanding of the architects' aesthetic, functional, and economic intentions.

Utilizing the collaborative working drawing set in office and site visits with the architect, the team discusses the architect's design process, formal and technical vocabulary selections, and construction problems. The team then revises the set and compares it to the actual contract documents produced by the architect. The comparison reveals important professional lessons about the representation of sub-system assemblies, coordination, and construction management.

Four sets of collaborative working drawings are developed concurrently in the seminar. They result in a cross-fertilization of ideas and methodologies that fuels inter-team

debate regarding individual architectural language and its ability to depart from the realities of contemporary technology and construction practices.

CONSTRUCTION DOCUMENTS
John M. Bencher, SCIARC

The essence of developing construction documents is the presentation of complex design through the application of a standard language. This standardized language is the result of the need to clearly communicate the content of the design to a third party that has not been involved in the development of the project and is being introduced to the project in its completed state for the first time. Creativity and expression are found in the organization, clarity, and craftsmanship of construction documents.

Construction documentation requires understanding the process by which the documents are produced, as well as their language. It involves the languages of other disciplines (structure, mechanical, electrical, etc.), the types of documents that should be produced (control drawings, plans, sections, elevations, details, etc.), and the sequence essential to success. It may include the development of unique or atypical drawings (diagrams, three-dimensional, composite). Construction documentation is a craft, and the process is perfectible.

The process of construction documentation involves the sequencing and coordination of multiple authors responsible for varying contents. Structural, mechanical, plumbing, electrical, acoustic, landscape, civil, specifications, and numerous other specialties require the coordination of a singular voice.

Language is comprised of symbols / objects structured by syntax, resulting in the capacity to communicate. In construction documentation, the construction community shares the use of line, tone, symbols, text, and number in a specific, codified system to communicate the means of constructing complex objects.

The work of the course is centered on the creation of a construction document package for a small to medium scale, single story residence. The sites are real, and students are able to select their sites from a master plan. All buildings are designed according to a representative sample of code restrictions applicable to projects of this type. Construction methodologies consist of typical wood or metal framing, concrete block or brick masonry, poured-in-place concrete, and/or steel framing as selected by the student. The student also selects interior and exterior finish materials.

DESIGN RESEARCH

David Erdman, UCLA

In the mid nineties, architecture's first forays into digital environments, digital modeling, and digital fabrication were being played out in the hands of designers in both the academy and private practice. Speculation on these technologies' cultural impact led to a re-positioning of academic design practice. Could this re-positioning shift the teaching of a seminar? A design studio? How could it impact relationships with clients or contractors?

UCLA's Department of Architecture and Urban Design has fully integrated digital design and prototyping technologies into its graduate program. Courses utilizing CNC milling, vacuum forming, and 3D printing bring together design technology and research. The Department provides students the opportunity to interact with instructors who practice actively with a multitude of contemporary technologies and who find different ways in which these technologies affect practice and research. For instance, the design collaborative servo recently taught a studio that focused on the use of rapid prototyping equipment—a 3D printer—as a learning tool rather than a representational device. The output of multiple 3D models/diagrams was seen as a tactile way for students to quickly repeat, re-feed, and re-calibrate models. Thom Mayne's *LA Now* studio also used digital technology both to portray vast amounts of information to Los Angeles City Officials and to develop a design modeling system that can be added to and modified as the city grows and changes. For the Architecture Biennale 2000, Greg Lynn's students, working digitally in collaborative teams, considered the design of various interior elements and manufactured prototypes of their proposals directly from digital models. The result was a chain of investigations, each responding to previously manufactured artifacts, each building knowledge based on the previous discovery (below and page 26, top and center).

Over the last few years, UCLA has developed seminars and studios whose attention to design and technology research has enabled students to obtain a level of facility and ability in those areas unavailable outside of the institution. The scope, rapidity of output, and understanding of research as

a design practice that produces artifacts, experiments on material, and coordinates complex systems has expanded the boundaries of course offerings. Digital design technology (manufacturing/rapid prototyping) and data management (digitally augmented, graphic, modeling systems) both position UCLA squarely between research and practice. The department not only prepares students for future practice, it creates it.

OFF-SITE FABRICATION: OPPORTUNITIES AND EVILS

Dana Buntrock, Assoc. AIA, UC Berkeley/
report by graduate student Brian Padgett

As the production of architecture becomes increasingly complex (with the development of new construction technologies, globalization trends, and economic pressures inflated by rising construction costs), it is more than ever essential for students entering the profession to have a broad understanding of issues of practice. In Professor Dana Buntrock's graduate seminar, "Off-Site Fabrication: Opportunities and Evils," students learn first hand how material fabricators affect design.

Students visit a series of local fabricators working in various materials (metal, concrete, wood framing, etc.), ranging in size from large-scale subcontractors to smaller, craft-house operations. Through these visits, they discover unique, regional capabilities and opportunities offered by fabrication facilities.

Concurrent with these class trips, each student conducts research on a collaborative relation between a Bay Area architect or firm and a fabricator or set of fabricators, in order to see how off-site fabrication is exploited by architects to achieve unique material uses, sophisticated structural systems, refined construction quality, and efficiencies in production. This intensive research involves interviews with building professionals (architects, fabricators, contractors, engineers, and others), broadening students' understanding of architecture as a collaborative process. Students supplement and expand on these profession-related experiences with more conventional academic study. They read and discuss an extensive set of theoretical texts to understand the implications of their field research within a larger historical and global context of fabrication issues.

By merging the unique opportunities offered in field research with expanded insights gained in seminar research and discussion, "Off-Site Fabrication" provides a uniquely rigorous model for efforts in academia to engage with issues of practice.



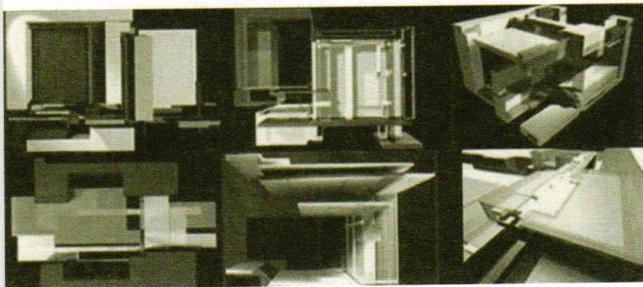
BUILDING TECHNOLOGY IN THE CONTEXT OF DESIGN

Thomas Fowler IV and Brook Muller,
Cal Poly San Luis Obispo

Upper division architecture students enroll in a building integration studio combining an ECS “studio” and a corresponding design studio. The two courses, with different instructors, meet in the same studio space on alternating days.

Early design studio exercises are exploratory and encourage the use of the computer for its facility in generating rich graphic vocabularies, suggestive of spatial character. In the ECS studio, foundation assignments—“conceptual understandings”—focus on systems that provide comfort to interior spaces, with a goal that students recognize that buildings are connected to larger constructs that extend well beyond the building footprint. Formal and material qualities of infrastructure systems that are ordinarily out of sight and out of mind are identified and graphically described.

Later ECS assignments—addressing such topics as day lighting, thermal performance, acoustics, and water and waste systems—directly enrich students’ design work. A typical ECS assignment has students analyze, quantitatively, an aspect of their studio project (however rough) and use this analysis to inform the next step in design. The assumption is that students will more enthusiastically and successfully contend with problems of building technology when they are presented within a larger framework of design.



Acoustics, shading and design model studies (digital and physical)
by third year student Stephen Saude

As an example, “Inner Skins,” a study of room acoustics, required that students make preliminary decisions about interior finishes in the “interactive main space” of their design project, calculate the reverberation time (RT) of the space that would result from these material decisions, and determine the suitability of these RTs given the use of the space. In most cases, the RTs were unsuitable for speech and similar functions. Students reevaluated decisions about materi-

als in an effort to lower the RTs. In most cases, this reevaluation led to an enrichment of the palette; perforated panels and fabrics, for example, were introduced in configurations that supported the established architectural vocabulary.

An emphasis on the skin of a building—“skintegration”—has promoted a compelling dialogue between studios and offers a tactic for considering larger architectural questions. A building’s skin profoundly influences the identity and character of the architecture (design studio) at the same time it mediates relationships between interior and exterior space, facilitating desirable penetrations such as light and views, while blocking undesirable phenomena, such as direct summer sun and moisture (ECS studio). By limiting and directing the scope of the inquiry, students understand more immediately that a working knowledge of building technology and a goal of designing beautiful buildings are not mutually exclusive but, rather, go hand in hand.

THIRD YEAR STUDIO, PROJECT #2 (PRECEDED BY A CASE STUDY ANALYSIS)

Judith Sheine, AIA, et al., Cal Poly Pomona

In this third-year studio, students are asked to design a small dwelling whose program consists of living/dining/cooking/sleeping space (500 sq. ft.), bathroom (50 sq. ft.), and storage (50 sq. ft.), with circulation and outdoor decks and patios as appropriate.

Each student models the building at 1" = 1'-0" scale. The model is constructed of materials that are as close as possible to real construction materials, i.e. concrete modeled in Pourstone with wire and mesh reinforcing, wood framing modeled in wood, and steel framing in wood or plastic. The model is constructed in three phases: foundations, framing, and finish materials. Reviews take the form of inspections at each phase. During the process, a daily log is kept, recording construction activity and supplemented with photographs of the construction phases.

A project analysis precedes the construction of the model; it includes a list of materials, cost estimate, systems analysis, identification of key wall sections and details for development, and a construction schedule.

For the Final Inspection, each student prepares a completed building model in site at 1" = 1'-0"; final plans, sections, and elevations at 1/4" = 1'-0"; a site plan at 1" = 40'-0"; key wall sections at 1" = 1'-0"; key details at 3" = 1'-0"; bound set of 24" x 36" blueprints of all drawings; and project records, including outline specifications, project analysis, log, and photos of the construction process.

CONSTRUCTION CASE STUDIES / DETAILING

Timothy Gray and Geoffrey Holton, CCAC
(California College of Arts and Crafts)

This course is an investigation into the art of building. Through readings, lectures, and field visits, students gain insight into the physical implications of design decisions, the effort and intricacies of construction, and the iterative process of design, as well as an understanding of how design intention is informed and encircled by the tectonics of building. Exercises focus on techniques of construction and the detailing and sourcing of materials required to convey architectural intent. Tours of construction sites are a primary means of study.

Each student first creates a construction document—containing all information required to source and assemble the components—for one of three existing guardrails at CCAC. Students then develop in detail a part of a current studio project—a repetitive feature, such as a window wall or floor system; an “event,” such as an entry or stair; or a joint in the building where different systems interface—using working drawings to specify materials and assembly.

CONSTRUCTING ANDO

Paul Clarkson, Washington University, St. Louis

The course takes students through the design and construction process for the Pulitzer Foundation for the Arts, designed by Tadao Ando, from an owner’s representative/construction manager’s perspective. Students learn why and how decisions were made to achieve a truly outstanding building. Topics addressed include owner requirements, design challenges, site challenges, design and construction team selection, relationship to surrounding buildings, cost issues, contracts, construction administration, perfection/no tolerance construction, construction techniques, quality concerns, and the interrelationship between art and architecture.

Students are given actual situations that confronted the design and construction team and are asked to provide solutions to these problems and challenges. One exercise involves learning to make the trademark, silky-smooth concrete of Ando’s buildings. Students learn about materials, admixtures, mix design, formwork construction, concrete placement, and curing of concrete. They assemble a form, mix concrete, pour concrete, and strip the form to produce a five-foot by three-foot concrete wall. ●

A sampling of recent books by California architects and architecture school faculty

Paul Adamson and Marty Arbunich. *Eichler: Modernism Rebuilds the American Dream*. Layton, UT: Gibbs Smith, 2002.

Nezar AlSayyad and Manuel Castells (UCB), editors. *Muslim Europe or Euro-Islam, Politics, Culture and Citizenship in the Age of Globalization*. Lanham, Maryland: Lexington Books, 2002.

Dana Buntrock (UCB). *Japanese Architecture as a Collaborative Process: Opportunities in a Flexible Construction Culture*. London: Spon Press, 2002.

Renee Y. Chow (UCB). *Suburban Space: the Fabric of Dwelling*. Berkeley: University of California Press, 2002.

Brad Collins, Eric Owen Moss (SCIARC), et al. *Eric Owen Moss: Buildings and Projects (Volume 3)*. New York: Rizzoli, 2002.

Rodolphe el-Khoury (CCAC) and Edward Robbins. *Shaping the City: Studies in History, Theory, and Urban Design*. London: Routledge, 2003.

Bruno Giberti (Cal Poly SLO). *Designing the Centennial: a History of the 1876 International Exhibition in Philadelphia*. Lexington: University Press of Kentucky, 2002.

April Greiman (SCIARC), Aris Janigian, and Lewis Blackwell. *Something from Nothing*. London: Rotovision, 2003.

Peter Grueneisen (SCIARC), et al. *Soundspace: Architecture for Sound and Vision*. Basel: Birkhauser, 2003.

Allan Jacobs (UCB Emeritus), Elizabeth Macdonald (UCB), and Yodan Rofe. *The Boulevard Book: History, Evolution, Design of Multiway Boulevards*. Cambridge: MIT Press, 2001.

Nader Khalili (SCIARC) and Iliona Outram. *Sandbag Houses and Earth Architecture: How to Build Your Own*. Hesperia, CA: Cal-Earth Press, 2003.

Setha Low and Denise Lawrence-Zuniga (UCB), co-editors. *The Anthropology of Space and Place: Locating Culture*. London: Blackwell, 2003.

Greg Lynn (UCLA) and Hani Rashid. *Architectural Laboratories*. Rotterdam: NAI, 2002.

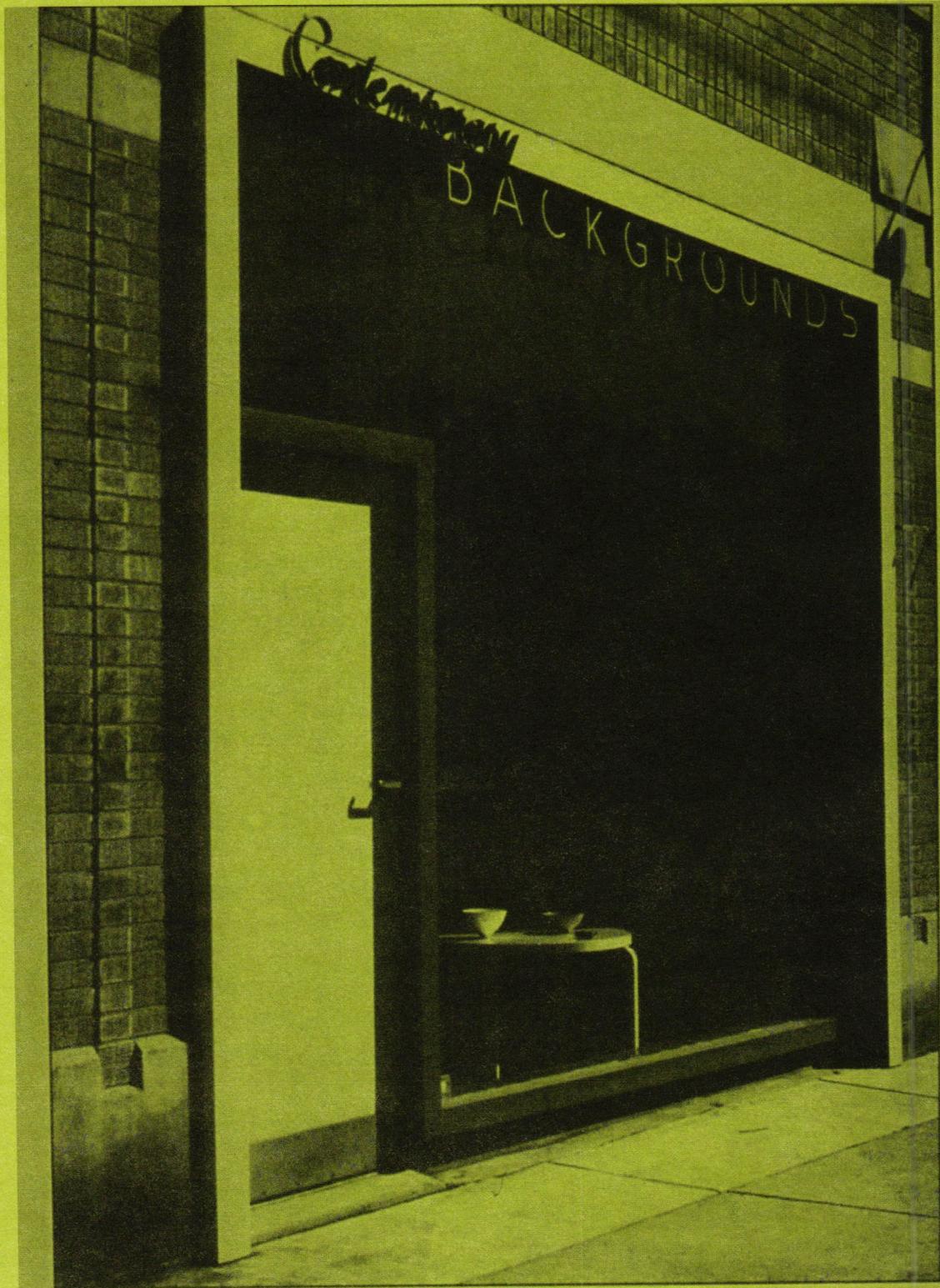
Thom Mayne, et al. (UCLA). *L. A. Now, Volume Two: Shaping a New Vision of Downtown Los Angeles*. Los Angeles: Art Center College of Design, 2002.

Adi Shamir Zion and Dung Ngo (CCAC). *Open House: Unbound Space and the Modern Dwelling*. New York: Rizzoli, 2002.

Judith Sheine (Cal Poly Pomona). *R.M. Schindler*. New York: Phaidon Press Inc., 2001.

Jill Stoner (UCB). *Poems for Architects, An Anthology*. San Francisco: William Stout Architectural Books, 2002.

Marc Treib (UCB), editor. *The Architecture of Landscape, 1940-1960*. Philadelphia: University of Pennsylvania Press, 2002.



MICHIGAN MODERNIST:

The Early Designs of Maynard Lyndon, 1935-1949

April 16 - June 23, 2002

University Art Museum, UCSB

Forming Contemporary Backgrounds:

the Architecture of Maynard Lyndon FAIA

Donlyn Lyndon, FAIA

A photograph (circa 1940) of Contemporary Backgrounds, a storefront designed by my father, Maynard Lyndon, FAIA, is a suitable point from which to begin a story of the transmission of ideas across generations.

Contemporary Backgrounds is not just the name of this shop, which he and his wife Jo Hale Hand Lyndon created at that time—a shop where Jo sold furniture designed by Alvar Aalto and Bruno Mattheson and offered interior design services—it is a term that clearly represents Maynard Lyndon's fundamental thinking, at least as I have come to understand it. The name represents an approach to design that is deeply important and was embedded in their work. Each of the two words in the term had distinct significance.

"Backgrounds" referred to the conviction that people's lives should be in the foreground of architects' thoughts—and that architecture should serve as a background, which can support, highlight, and lend significance to the actions of the people who inhabit buildings. An appropriate architecture would not call attention to itself, but would rather provide ease and comfort and enjoyment for the lives that people live within it.

"Contemporary" referred to the commitment that architecture should deal directly with the capabilities of the

time and not be distorted by stylistic designation. In this respect, Maynard was very adamant that what he was concerned with was architecture that was “contemporary” and “of the time”—not “International Style,” which he suspected, and certainly not “modernist.”

To be “modernist” in my father’s mind involved a process of affectation that he vigorously opposed. It suggested that the design process was one of selecting one style of architecture or another for the execution of a project. This he had been trained to do within the Beaux-Arts system of architectural education still lingering at the University of Michigan when he graduated. This he was also required to do when he worked on auto executives’ houses while working in Albert Kahn’s office and also later when he designed visitor centers for the US Park Service under Charles Petersen’s direction. These latter were very handsome buildings, designed in the vernacular of their place, with carefully studied details and proportions and attention to the creation of building complexes. But Maynard Lyndon’s ambitions were greater. He longed instead to take part in evolving a formal and organizational language responsive to conditions and opportunities of the time and to the circumstances of the works.

He was not alone in such ambitions, of course. They came to be shared by many of his colleagues, and they were adamant in their mission to find not only new form, but a renewed mission for architecture, a mission embedded in society and its possibilities for change. Indeed, there are many who now feel that the great International Style show organized by Philip Johnson and Henry Russell Hitchcock in 1932 was a decisive step away from the true message of modern architecture, precisely because it seemed to capture and promote the idea that the appearance, or “style,” of the work was the point, rather than the fundamental organization, approach, or thought process.

Maynard’s interest in modern architecture and its intentions had been fueled by his friendship with Knud Lonberg-Holm, an instructor at the University of Michigan when he studied there. Lonberg-Holm had come to the United States from Denmark, where he had early become a member of CIAM, the *Congress International d’Architecture Moderne*, the very influential group in which Walter Gropius, Le Corbusier and Sigfried Giedion played decisive roles. CIAM advocated for the establishment of an international movement that would promote modern architecture and direct attention to the evolving technologies and pressing problems of the time, most notably social housing and industrial production. Twice, during the 1930s, my father made trips to Europe for study. These were a revelation for a young man born in Howell, Michigan, who

graduated from the University of Michigan. He had studied, through drawings and photographs, many of the great buildings of Europe, but he had no experience of its manners and way of life. Biking through France and the Netherlands and staying for longer periods in Paris, he was an energetic observer. His sketchbooks are filled with elegant, precise drawings, and his camera became the vehicle for strong images of the adventurous modern architecture that he sought out. Lonberg-Holm was instrumental in this, too, having given Dad lists of new and important buildings to see and introductions to members of CIAM, including, among others, Le Corbusier in Paris and Van Eesteren, the influential De Stijl architect who became city planner for Rotterdam. These were heady and exhilarating days.

From my discussions with him, much later, and through the evidence of his work, the buildings that most influenced Maynard were those designed by Johannes Duiker and Willem Dudok in the Netherlands, by Le Corbusier in Paris, and the collection of model housing structures at the Weissenhofsiedlung in Stuttgart, perhaps particularly those of J.J.P. Oud. The work of Mies van der Rohe was always present in his thoughts, though I think mostly from drawings and photographs, especially of the Barcelona Pavilion.

The chance to launch out on his own came to Maynard through his college friend Eberle M. Smith. Eb contacted him while he was working for the Park Service in Washington and asked whether he would like to come back to Michigan to join in designing a school for the small town of Northville, Michigan. They formed the firm Lyndon & Smith, with Maynard producing the design and all the architectural drawings in a remarkably short period of time, several weeks, if I recall properly, and Eb providing the engineering. The final drawings are dated 1936, the year of my birth.



Northville School

As a "first work," the Northville School is a wonder. To my knowledge, Neutra's Corona School in Bell, California, is the only earlier public school in the U.S. (1935) that is as uncompromisingly modern in its expression. The volumes of the Northville School are taut and handsomely proportioned, its very large windows set flush with the surface of the brick in a way that emphasizes that volumetric clarity. The massing of the wings, smoke stack, and delicately scaled entry owe much to Dudok. The ample fenestration, which prefigures Maynard's life-long interest in daylighting, clearly has Duiker's "Open Air School" as a background.

The kindergarten wing, scaled down to the size of a domestic volume with a separate entrance and windows low enough for young children to see through, strikes a theme of graduated volumes that also recurs in his subsequent work. The construction system, made up of concrete columns and floor slabs, wrapped with a continuous brick enclosure creating the weather seal, could as well have been one of the advanced factories that Albert Kahn was then creating for the auto industry and was kin to Le Corbusier's Domino system.

The execution of the building's skin was exceptionally refined. The flush windows, another theme that became

persistent in his work, were a way of eliminating exterior sills, Maynard would quickly explain, which would only catch water and create places that could leak. Sharply formed metal drip caps at the head of each window threw water off the surface of the glass and cast small but decisive shadows. These characteristics and the massing and proportioning of parts made up the visual quality of the building, with no applied ornament or obfuscating details.

A large, unnumbered clock over the entry and a sleek sign with cast metal sanserif lettering (two more abiding interests) were the only visual elements that were not directly the result of simplified construction or the accommodation of light, outlook, and entry. The imagery of the school was so clear (clairvoyant, one might say, given the work that followed) and the design so timeless, that a few years ago a nearly 60 year old photograph of the interior of the kindergarten was used for a poster announcing a conference at MIT on "Designing The New American School."

This was the first of a series of school building commissions in Michigan. Others quickly followed. In 1936, the equally handsome and dynamic gymnasium in the neighboring town of Farmington was designed. These buildings received national and international attention, with prizes in a National Competition for Education Buildings, publication in *Architectural Record* and in the *Architectural Review* of London, and a Silver Medal and Diploma from the Pan American Congress in 1940. In 1937, Lyndon & Smith also was given, along with Gropius, Saarinen, and a few others, a special invitation to participate in a competition for a performing arts center at Wheaton College. In all, there seem to have been about 15 projects in Michigan by Lyndon & Smith, mostly schools, with a few industrial buildings and several public housing projects.

Maynard and Jo moved to California in 1942, in the midst of the Second World War and the near absence of domestic construction. In his first years in California he worked for the aircraft industry as a draftsman and on some war housing. Their move to California was characteristically spirited. Before leaving, Maynard called Richard Neutra, whose work he admired and whom he knew slightly through mutual contacts, to ask if he knew whether any of his houses were for sale. As I remember the story, Neutra replied that yes, the Douglas Fir Plywood Model Demonstration House of 1936 had been moved from its exposition site to a plot in West Los Angeles and was now for sale. He gave him the phone number of the agent. My father called, bought the house and the adjoining lot over the telephone and moved to Beloit Avenue. It was a perfectly wonderful house, which opened wide to a patio, a great stretch of lawn, a hillside of Eucalyptus, and a

hedge-enclosed vegetable garden in which we each had our own specially selected fruit tree.

Immediately after the war, there was a very productive rush of professional activity. Dad quickly became involved again in designing schools, this time adapted to the California climate and light and to the common wood frame and stucco skin construction system through which California was being transformed.

His studies for the Saugus School, adopting a filtered system of natural lighting, were published in *Architectural Record* in 1945, and shortly later he developed what he came to call the "Ojai section," which used bounced and filtered light from the south to balance full expanses of glass on the north and create a nearly evenly distributed natural light across the surface of the classroom.

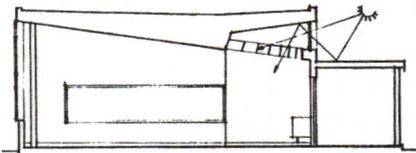
ARCHITECT MAYNARD LYNDON F.A.A.

DAYLIGHT FOR SCHOOL CLASSROOMS

For optimum daylight, this office developed the OJAI SECTION:

- North walls of clear glass full height and full width
- south walls with clerestorey windows above long vertical louvres parallel to the south wall which were positioned to obscure direct sunlight entirely yet permit full reflected light downward into the room
- nearly uniform light at the desk level over the full width of the room resulted from this arrangement.

We used the OJAI SECTION, with slight variations, in schools in Ojai, Vista, Malibu, Los Angeles, Apple Valley, Yucca Valley and Buena Park.

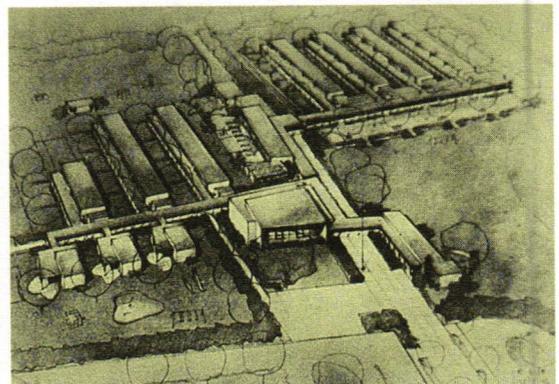


above: Ojai Section; below: Ojai School



These one-floor classrooms were laid out in rows along open passageways. The north walls were open to courts between, the south walls solid below, along open passageways sheltered by flat canopies with slim steel columns. The canopies bounced the bright south light into clerestorey windows above them, where it was diffused through louvers into the classrooms behind. The system was elegant, simple, and entirely straightforward. The "fingerplan" schools that resulted consisted of rows of classrooms and courts, augmented by separate, differently sized masses for service spaces and bathrooms, for administration, multipurpose rooms, and sometimes separate kindergartens. Their stucco walls and canopies were painted in strong, subtle colors, always related to the conditions of the surrounding site. Maynard designed a number of such schools throughout Southern California (more than 20 by my count), with several each in Ojai and Vista.

These schools made up the bulk of my father's practice in Southern California, and he was very proud of them. The Vista Elementary School of 1950 was picked by Henry Russell Hitchcock as one of the buildings to be featured in Arthur Drexler's book, *Built in USA: Postwar Architecture*, published in 1952. The Apperson Street School in Los Angeles received a national AIA Honor Award. A number of other buildings received honor awards and national notice. The most importantly situated of these was the Santa Fe Ticket office on Pershing Square at the center of Los Angeles. It was an immaculately detailed, spacious, and elegant space made romantic by a curving panoramic painting of the Grand Canyon, visible from the street through uninterrupted panes of glass.



Vista Elementary School

During this general period, Maynard was made a Fellow of the AIA and served as president of the local chapter. He was also a fifth year studio critic in the USC School of Architecture. It was at about this time that Project Architects was formed. It was a consortium of architects with small firms

and shared convictions who thought that together they would be able to garner some of the major work that was being given over to larger, corporate practices. The members of the group included Raphael Soriano, Douglas Honnold & John Rex, A. Quincy Jones & Fred Emmons, and Arthur Gallion, a planner. A building for the San Pedro Hospital was the only major project that they finally worked on together, but it was a stimulating association. Quincy Jones, especially, became one of my father's closest friends, and they later did the Ocean Park competition for Venice, California, together.

The largest and most important works of my father's later practice were university buildings at UCLA, California State College at Los Angeles, and UC Riverside. All three were characterized by inventive efforts to deal responsibly with the sun of southern California. All three also play important roles in the larger complexes of which they are a part. Bunche Hall, at UCLA, the first of these, is composed of two parts: an office block and a classroom wing, both framing the passage from the traditional core of the campus to a new complex of buildings that form the north campus. The office block is raised high on piers over an open passage that allows a wide walkway and landscaping to flow under the building and connect with a great, new green space of the north campus, now Franklin Murphy Sculpture garden. The piers, more substantial than conventional cylindrical "pilots," frame a grand, open loggia, which passes under the building in front of the elevators and stairs to reach the classroom wing.

screen capping the space. The whole place is bathed in the soft light filtered through those sun baffles, and it is filled with palm trees, benches, and overlook. This great court has a grandeur that gives dignity and scope to the activities of meeting inside its walls, with no semblance of the flash often associated with commercial atria.

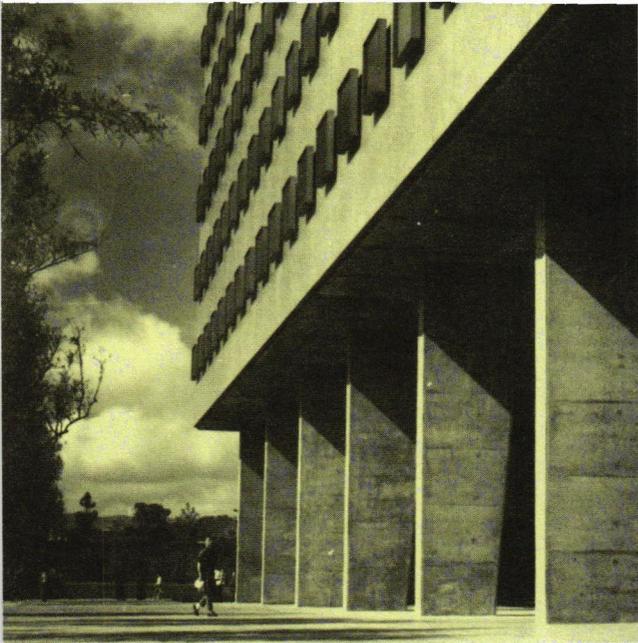


Bunche Hall

The most noticed feature of Bunche Hall is the wall of square openings shielded by glass panels that rise up into the skyline of the campus on the surface of the office block. The wall is surfaced with a glass tile of a gentle but lively brown color, which is comparatively dark in order that it not dominate the skyline or call attention to itself. The tall mass is instead compatible in color with the hills in the background beyond. (This, my father recounted, required considerable persuasion of the campus architect, then Welton Becket, who had decreed that all new buildings should have white frames and light colored surfaces, irrespective of their situation in the landscape.) The square glass panels projecting from the building wall, rather than recessing into it, are the result of an ingenious sun protection system. Each window opening has a dark glass shield mounted in an aluminum frame set out in front of it and free of the wall, so that it can be cooled by breezes rising up the surface of the building. Framed in squares larger than the windows themselves, these shields, though visually pronounced on the face of the building, disappear from view when seen from the inside. The north wall, on the other hand, oriented away from the sun, is full glass, with spandrels as well as windows sheathed in a flush, continuously reflective surface, merging with the sky.

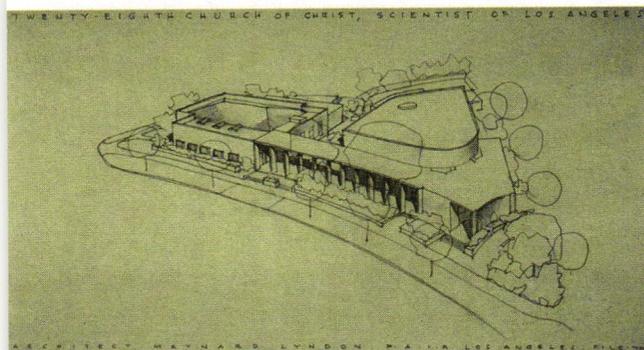
Bunche Hall

The classroom building is very different in character. Rather than opening freely to the surroundings, it seems to be a brick mass, with narrow slits for windows, fortified against the sun. Inside, however, is a very large, high court, which is ringed by several levels of balcony, with an open sun-



Bunche Hall

Throughout this work, Maynard was persistently seeking problems to solve—problems that would have significance in the way in which life could be lived within the places he designed—problems that had to do with the making of things in a way that was true to the possibilities of the time and situation. My father was committed to doing things in the “right” way, a way defined not by custom, but by reason, qualified by an innate sense of elegance. Many elements, devices and motifs recur in his work. Having determined to his own satisfaction that he had found the right way of doing something, he did not abandon it in search of novelty. Fresh invention was fascinating for him, but it needed the stimulus of freshly defined problems. Thinking beyond convention was essential, but novelty for its own sake held no attraction for him.



The Twenty-Eighth Church of Christ, Scientist

Two of his works, a church in Westwood and a house in Malibu—both built during the years that I was first thinking about architecture—have been especially influential in my thought. The Twenty-Eighth Church of Christ, Scientist,

designed in 1952, is one of the most compelling of his works. The composition of the building so deftly incorporates the geometry of its angled corner site that it seems an inevitable solution. The auditorium, set slightly into the sloping ground, is bordered on the Hilgard side by a stately colonnade of concrete fins that follows the curve of the street, connecting the free standing Sunday School to the Church entry, the building to its site and the city. The spacious glass-walled lobby that can be entered from either bordering street is sheltered behind a curved concrete wall, perforated by a pattern of small tubular openings. It makes a quiet but memorable face to the intersection, while allowing light to filter in, minus the confusions of a traffic intersection.

Inside, the church is a serene composition with a wide auditorium that is simple and profound, centered on a carefully arranged and proportioned marble and wood speakers’ platform bearing inscriptions. This focal area is backed by a beautifully simple wood organ grill and flanked on either side by walled gardens, which bring soft reflected light in through plate glass openings. Designed by the late Garrett Eckbo, these sunken gardens are isolated from passing traffic and disturbance. The whole interior space is suffused with the glow of apricot-colored upholstery and carpet, lit from a galaxy of recessed downlights in the black ceiling. All attention, within this warm ambiance, is directed with calm certainty to the Readers and the assembled congregation—to the communal significance of the word.

Nature, tempered,
is given
precedence.
Architecture, tempered,
speaks softly
and
eloquently
of
human presence.

The other great influence, of course, has been the house that he designed for our family in 1949, one of the first houses on Point Dume in Malibu. Like two other notable houses

built that year, the Philip Johnson House and the Charles and Ray Eames House, it had great walls of glass. Unlike either of those, whose wall geometries and floor plans precisely delimit the inside from the outside, the Lyndon House fused the two, with planting areas on either side of the glass, nearly inconsequential mullions, and almost continuous concrete floors.

The plan was extremely simple and efficient; the roof and end walls, painted white, were concrete slabs tapered to a thin continuous edge that was like an orthogonal tent set down on the landscape. Walls and ceiling inside were made with perforated Transite panels, rendered in soft, subtle colors, varied to the visual tasks at hand. The ocean, the sky, and shadows from the sun traced themselves across our consciousness; those and the quiet, purposeful thought that would be revealed when you chose to look.

The Mattheson chairs, elegantly formed in Scandinavia, which first entered our family as floor samples at Contemporary Backgrounds in Detroit, appear comfortably in photographs of our Westwood house recently published in *Richard Neutra: Complete Works*, and figure prominently in this photo of the Malibu house. They still beckon human presence today—now in my studio at The Sea Ranch.

Though my own architectural work is very different, the sense of that house (long since transformed by subsequent owners) and the convictions and care that it embodied remain with me always as an exemplar. This photograph, taken by my father decades ago, recently became the cover of the "Dwellings and Outgoings" issue of *PLACES*, a journal that I edit. The accompanying text explained:

"The outgoings at hand consisted of a view of the Pacific Ocean, a perpetually benign climate and soil to cultivate. Neighbors were in short supply. Every decision about the house was intended to emphasize the interdependence of inside and outside: to speak at once of the pleasures of the place and of the importance of giving disciplined thought to its nurture. Nature, tempered, is given precedence. Architecture, tempered, speaks softly and eloquently of human presence. The situation is unique; the values embodied are enduring. The challenge is to extend them to neighboring."

Ideas in architecture are passed on in many ways, through teaching, through companionship, through images, words, and example. Maynard Lyndon provided these for many colleagues, students, and observers. The examination of his buildings, tracing examples of rigorous thought and of inspiring enthusiasms, has certainly been a fundamental part of my education as an architect. Values developed, challenges chosen, and the "chats" we construct around them, are what shape careers and structure the future. ●



Maynard Lyndon Residence

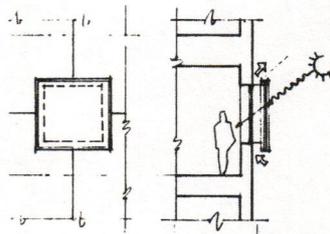
ARCHITECT MAYNARD LYNDON F.A.A.

SUNLIGHT CONTROL

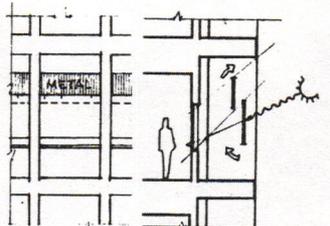
At a latitude of about 33°N, the sunlight in Southern California can be strong, hot and glaring. Several devices were developed in this office to cope with these conditions at windows in rooms facing South and still permit a view of the outside.

- To avoid low transmission glass windows directly in the sun getting hot and radiating heat into the rooms, we found it effective to place in front of these windows a second sheet of low transmission glass which was cooled by outside air circulating around it because it was freestanding.

BUNCHE HALL
University of California
Los Angeles
(56.29)

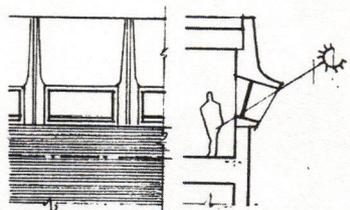


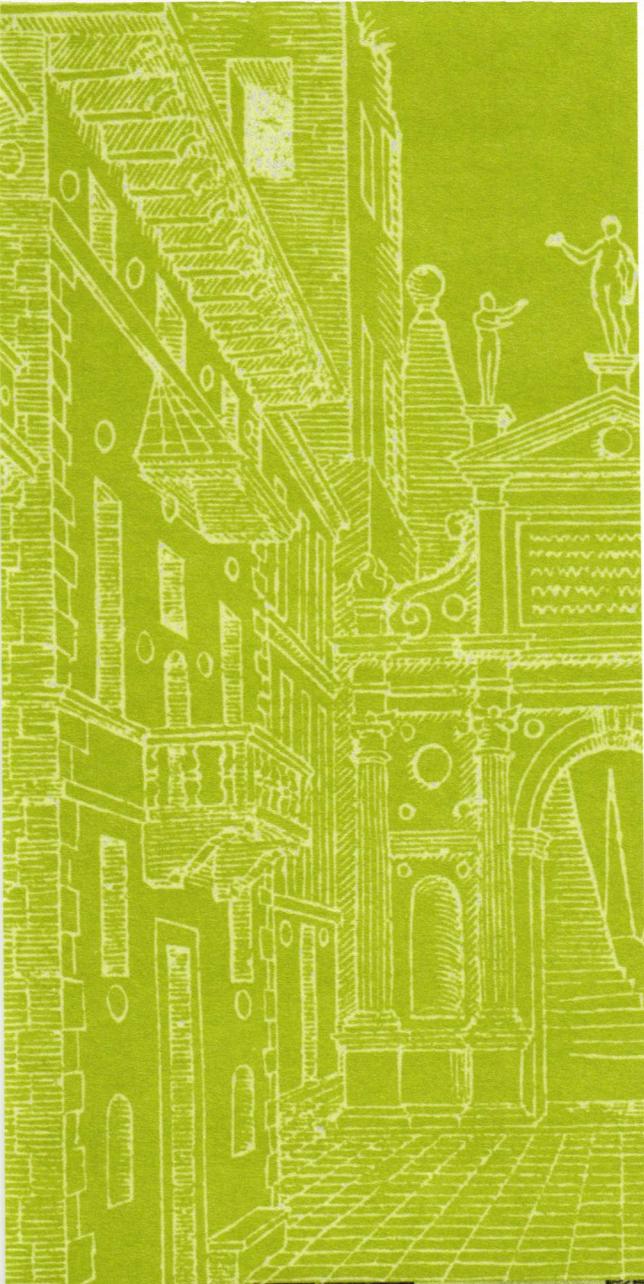
ADMINISTRATION TOWER
California State College
Los Angeles
(61.30)



- A concrete canopy shaped to obscure direct sunlight combined with a single sheet of low transmission glass.

PHYSICS LABORATORY
University of California
Riverside
(61.10)





Theater Knowledge, House Knowledge, and the Place of Architecture

Patrick L. Pinnell, AIA

Editors Note: this article was originally written in 1992. After a decade, its insightful assessment of architectural thinking in the last quarter of the 20th c. is undiminished. We reprint it here by permission of the author.

Because the contemporary West still owes a profound intellectual debt to the ancient Greeks, it is all too easy to misinterpret our understanding of things and terms as identical to theirs. The Greek idea of freedom, for example, was very different from the consumer-culture definition of it as, more or less, being in a position to gratify all possible appetites. Instead, almost exactly to the contrary, it was understood to be the condition of having risen above need, to be as much as possible beyond the grasp of anyone's or anything's force, including your own body's desires and demands. Freedom, beyond Necessity, was necessary in order to be able to make dispassionate judgments and thereby to appear, act, and argue justly within the *polis*.

Such an ideal produces attitudes that carry beyond ethics and politics. Hence the ancient Greek parable of the games or the theater, attributed to Pythagoras, which defined three classes of people

who attend the events. There are those who come to sell their wares (presumably things like Hermes statuettes or the Greek equivalent of hot dogs); these people are doubly unfree, because they are subject both to the constraint of the materials within which they work and to the judgment of the potential customer. Similarly twice unfree are those in the second group, the actors or athletes, bound as they are to a script or engaged with an opponent, and beholden also to the spectators for approval. The third group, highest because most free, is the audience, those who come to the spectacle simply to look on.

From the Greek word for spectators, *theatai*, the later philosophical term "theory" was derived, and the word "theoretical" until a few hundred years ago meant "contemplating," looking upon something from the outside, from a position implying a view that is hidden from those who take part in the spectacle and actualize it¹.

Legitimate knowledge was thus defined, at least for the post-Archaic Greeks, as fundamentally *spectator* knowledge; things known to the eye, things that can be made to appear in public, as it were, were given privilege over the knowledge that could be produced by other sorts of engagement with the world.

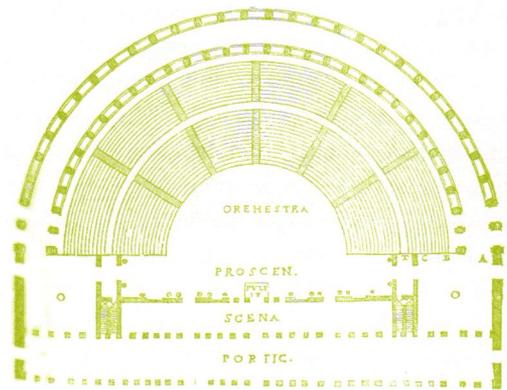
Here is where the Greeks found difficulty dealing with buildings. The first big problem is this: when you go inside a building you quite literally *cannot be theoretical*, because you cannot "spectate" it, cannot view it from outside. Greek theaters were open-air, not just out of convenience but out of theoretical necessity. When inside any other sort of building, no matter how you turn, the enclosure you wish to see insists on keeping half itself back behind your skull. Being inside a building is like being an athlete-competitor enveloped in the grasp of a very large, unbeatable wrestler, subject to his will, subject to Necessity. You are forced out of the condition of being an observing eye and put back into existence as a human body, a body of a certain limited size, engaging the flux of the world. It is no wonder that the Greeks also habitually conducted their politics in the open air, and that processions were brought up short of entry to temples. The fact that *buildings enclose* was profoundly disturbing.

The second difficulty with buildings, and particularly with a house and its land, is their stub-

born will to endure in a place. This is really a multi-fold problem. To begin, the obligation that a citizen possess a house, be head of its household, is a logical embarrassment, for it is paradoxically the necessity required to rise above Necessity. Furthermore, the material obduracy of a building, its resistance to reacting to human presence or action, is a kind of insult, since assent to conversation as equals is what every citizen grants another. To the extent that architecture is solid and endures, the building's indifference treats the viewer as a mere body, invisible as a slave, which can own no house but only be contained by one. Third and perhaps most basically, architecture also exists *in a place*, which endures absolutely.

The Greeks paid a great deal of attention to place-ness. Aristotle, for one, devoted four chapters of his *Physics* to discussion of it and concluded that place is in its essence non-generalizable. As the vessel of particularity, it is the ultimate anti-Idea. To the extent that language is about, and made up of, ideas, it cannot meaningfully discuss place.

To put it another way, *house knowledge*, in its essence cut off, secret, and invisible, is in almost all ways unlike *theater knowledge*. The house and the theater know different worlds and hold different memories. Architecture presented itself as a difficult topic for the Greeks because basic aspects of it were so irreconcilably contradictory. The theater provided the very model for knowledge, while the house, in its enclosure and obduracy, appeared both unknowable and unspeakable.



Polykleites, theater at Epidauros, Greece, 4th century BC

Major consequences ensued from what modern (i.e. Post-Renaissance) culture has done with its Greek patrimony—for, of course, the eye-knowledge of the

theater was given privilege, and the house became invisible. Bruno Latour, a historian and sociologist of science, has proposed that the uniqueness of modern, Western, technological culture lies in the distinct ways that *writing* and *imaging* have been used in knowledge-definition and the production of power. He contends that its distinct character arises from increasingly sophisticated employment of what he calls "immutable mobiles," by which he means all the ways of writing down and making pictures of observations made in one place, so that their *documentation* can be transported intact for use in another place. There, they are considered, compared, used in arguments, which then suggest a new round of observations, which in turn result in new batches of immutable mobiles and arguments from them.²

The effects are very different from that of a bit of knowledge kept in one place, to demonstrate which Latour uses two maps as an example. The French explorer La Pérouse asks a Pacific islander to draw a map of his island. The man complies, drawing in the sand with all the scale and details needed, while La Pérouse copies on paper. The first map is lost to the tide; the second, an immutable mobile, is taken back to Versailles and used in an argument that leads to trade and eventually to subjugation of the island.

This sort of knowledge-production began to be habitual in the West more or less at the onset of the Renaissance. It encouraged and in turn was aided by a series of inventions beginning with the printing press and perspective drawing. A cascading effect occurred and accelerated, cycle upon cycle.

If the only significant aspect of reality is that which can be gotten down on paper and used, then the characteristics of architecture that participate in what I have been shorthandedly calling house-knowledge are clearly in big trouble; obduracy and enclosure are simply untranscribable. The value, for providing knowledge and power, of the aspects of architecture that the theater tries to avoid and the house exaggerates is thereby now made doubly suspect.

Within such a cultural situation, the evidence of the individual senses will tend to be valued in direct proportion to its being transformable into a mobile document. To the aggregation of the senses—that is, the experience of being a body in a particular, unique, immovable place—the culture's participants

will be increasingly blind. Enclosure must therefore be removed and obduracy regarded as an impediment. Buildings, in self defense, acquire document-envy.

The history of architecture since the Renaissance is at bottom the sequence of accommodations to the increasingly pervasive domination of documents in the culture. Latour lists five desirable properties of immutable-mobile *inscriptions* which, by extension, become similarly desirable aspects of *objects* within the culture: things must be made to be not only *mobile* and *immutable*, but *presentable* (that is, visible together), *readable*, and *combinable*. (Perhaps a time-qualifying corollary to *immutable* should be added: *disposable*, since once an object or document has been read and has helped initiate a new cycle of the system, it becomes superfluous.)

The architectural cognates are evident. *Mobility* being difficult, flowing universal space must be invented as a substitute. *Immutability* can be approximated by universality, the idea that one architectural vocabulary could suit any culture or situation. *Presentability* induces the mania for clarity and openness both inside and around buildings; goodbye to the bearing wall and the hidden corners of the traditional city. *Readability* was to be attained by rigorous visibility and clarity of structural system. Finally, *combinability's* architectural translation would have to be the tendency to dissolve the recognizable distinctions among building types. (Bentham's Panopticon is simply a device for turning houses into a theater.) The Modern Movement, for all its many variant versions, now looks not like a new beginning but instead the logical culmination of immutable-mobile envy.

The last quarter century's buildings and theories were not only attempts to deal with the perceived shortcomings of the Modern, but also recognitions of the culture's pervasive, document-based, immutable mobile system for defining legitimate knowledge. Postmodernism wrote postcards reminding us of obduracy and interiority, mostly without suggesting we could really go back and live with them. Deconstruction scribbled the charge that architecture's attempt at simulation of documents had failed; not only that, but the attempt had been halfhearted from the outset. The thing to do was to abandon all vestigial interest in material obduracy and spatial interiority, and operate on the principle that

your design was *first and foremost a document*, because the document was better understood and more highly valued, in contemporary culture, than the building. Thus the characteristic operations of Deconstructivist design were, strikingly, those pertinent to manipulating paper: collage and erasure, cut and paste, photocopy and crumple, fold, spindle, and mutilate.

The ideal Postmodern building type is the museum, and the last quarter of the 20th century not accidentally witnessed the greatest museum-building binge in history. The very concept of the museum depends on the idea of objects being treated like immutable mobile documents. Problems occur when suspicions arise that an object really can't be understood without knowing about its original context. The paradoxical impulse when such suspicions take hold is of course to establish a *museum of contexts* trucked in to supplement the museum of immutable mobiles, and the source of much of the museum-building impulse in the period in question is exactly there. Not only did art museums proliferate—every place was determined to assert its place, and first-rate art museum buildings showed up in secondary cities like Fort Worth and Mönchengladbach—but there was also a revealing multiplication of institutions devoted to examining “material culture” on both the folk and the technological ends of the spectrum. Oddest of all, odder even than the idea of the transportable tragedy implicit in, say the Holocaust Museum in Washington, is the architecture museum; the very conception of such a thing is impossible when obduracy and interiority are considered fundamental attributes of architecture.

Subsequent to Postmodernism, there emerged no single building type particularly attractive to Post-structuralist impulses—“type” itself is suspect, of course—but one notes a constellation of projects that center on announcing the importance of evanescent human movement: parks, highway installations, performing (rather than visual) art centers. Post-structuralism's self-chosen fate, its vigilant editorial grimness the necessary inverse of Postmodern attempts at wit, is to quiz the language-sphinx which it already knows will never answer, and therefore always to understand the world around as desert.

Well. Where do we go from here? What do we take from the last quarter-century into the millennium? I have two suggestions for consideration and action, one general, one

specifically addressed to those of us who play a role as architectural educators.

As educators, teaching the people who, we hope, will be rebuilding—and unbuilding, where appropriate—the earth, I think we can be of service by calling up obduracy and interiority for consideration and questioning. The design studio is, after all, a participant *par excellence* in the economy of immutable mobiles: documents dominate, and by definition obduracy and interiority cannot be present. Perhaps it is possible to at least bring them in by implication by returning periodically to the very un-simple matter of the size (not scale) of the things being designed. To do so is not necessarily anthropocentric; quite the contrary, it is to gain a sense of the reciprocal formation of our selves and the world.

The second suggestion is to consider again the relation of architectural obduracy and interiority to language. If architecture does have aspects unconditioned by language, what are the consequences? Here is another speculation. Language use does not appear in children until after their appreciation of the difference between themselves and the world, between themselves and their two parents. Could our difficulty with obduracy and interiority be because the experience of them is a reenactment of the initial, pre-speech, human desire to overcome the indifferent obduracy of the father and gain recognition as connected, and at the same time overcome the overwhelming interiority of the mother and gain recognition as separated? The wish implicit in all would-be-enduring monuments is to lose individual human fragility in collective, obdurate, material commemoration, to go back into the house of our ancestors and descendants. The wish implicit in the universal space, neither sacred nor profane, through which immutable mobiles travel, is to emerge from the interior of the body to stand free, an eye in the theater of the world. We are fated, or evolved (which term does not matter) to hold both wishes. Deeper and older than language, they may be the origins of architecture. ●

1 Hannah Arendt, *The Life of the Mind* (New York: Harcourt, Brace & Co., 1971), p.93.

2 Bruno Latour, “Drawing Things Together,” in Michael Lynch and Steve Woolgar, eds., *Representation in Scientific Practice* (Cambridge, Mass.: MIT Press, 1990). See also Latour's “Clothing the Naked Truth,” in Hilary Lawson and Lisa Appignanesi, eds., *Dismantling Truth: Reality in the Postmodern World* (London: Palgrave MacMillan, 1989).

Higher Education

The \$50 million Broad Center will house key research groups for biological sciences

- 1 Broad Center for the Biological Sciences
- 2 Learning Resource Center
- 3 Mondavi Center

construction copy:
McGraw-Hill Reports

Paul Napolitano

A beautiful campus with an abundance of brilliant people now has a striking new home for its burgeoning biological sciences research department.

Situated on a tree-lined Pasadena street and surrounded by historic structures, Broad Center for the Biological Sciences will be the site of 13 key research groups that will help the California Institute of Technology maintain the extraordinary pace of discovery and innovation for which it is renowned.

"The Broad Center adds a distinguished architectural achievement to Caltech's already beautiful campus," said Caltech President David Baltimore. "Most importantly, it's a highly functional building, providing a framework for advances in the biological sciences in the 21st century."

The travertine-clad building—designed by Pei Cobb Freed & Partners and built by Rudolph & Sletten—was completed in September. The building's lead designer was James Freed. Allen Rudolph was the project executive for the general contractor.

Measuring 120,000 sq. ft., with three floors above ground and two below, the Broad Center includes laboratories and offices for 13 research teams, as well as conference rooms, compact libraries, an auditorium, and a seminar room. The latest modular design elements have been used to allow the greatest flexibility for rearranging labs and offices to accommodate future needs at minimum cost. The design is intended to maximize scientific interaction.

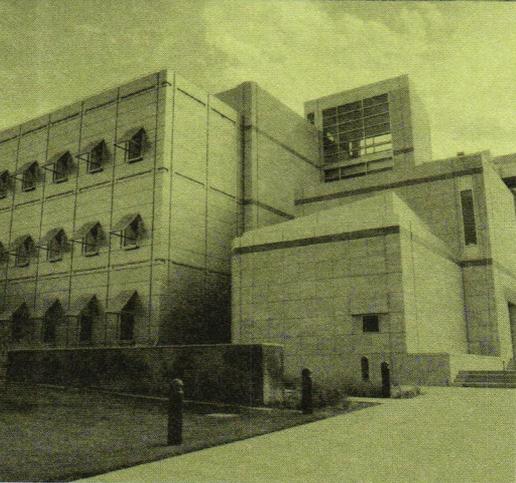
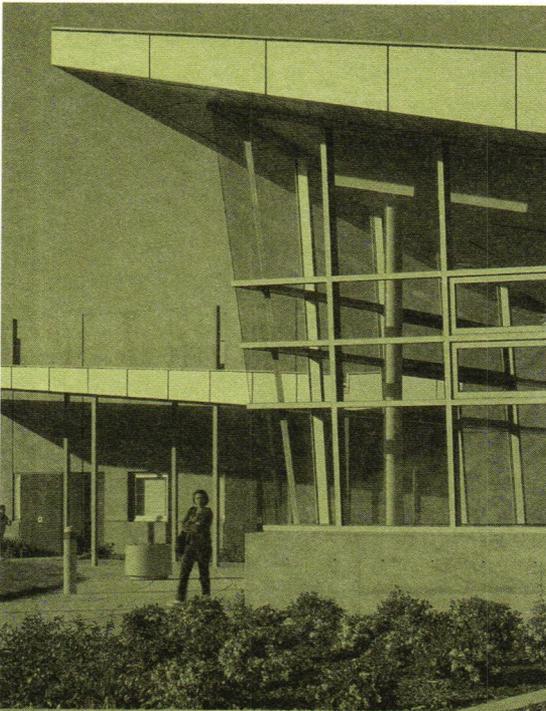
A mall covered by red Chinese pistache trees lines one side of the building. The building's south-facing external wall, which is adjacent to the Beckman Institute, is travertine, while the other exterior walls are covered by embossed stainless steel.

Principal funding for the \$50 million structure was provided by a gift of more than \$20 million from Edythe and Eli

Broad. Eli Broad is chairman of AIG SunAmerica and has been a Caltech trustee since 1993.

"Just as the 20th century was a period of major advancement for chemistry and physics, the 21st century will be the golden age for biology," Eli Broad said at the building's dedication.

The Broad Center's critical areas of investigation will be magnetic imaging, computational molecular biology, and investigation of the biological nature of consciousness, emotion, and perception. ●



top: Learning Resource Center, Mission College, Santa Clara

bottom: Broad Center for the Biological Sciences, Pasadena

An Intelligent Break From Tradition

Learning Resource Center, Mission College, Santa Clara

Architect: MBT Architecture,

General Contractor:

Lathrop Construction Associates

Paul Napolitano

Community colleges have unique needs that often require special solutions. The 39,000-sq.-ft. Learning Resource Center in the Silicon Valley is a prime example.

The layout and organization of the LRC is more open, inviting, and accessible than traditional academic library designs. The building is in a highly visible location: the college's entrance, where a concrete open book both defines the building's function and draws attention to its purpose.

Once inside, the space is clearly organized and user-friendly. Help desks and service counters are placed on main circulation routes. Reference volumes, videotapes, and other traditionally protected materials are placed in self-service locations, while periodicals are displayed adjacent to casual reading areas.

The LRC also houses a telecommunications facility, while the building itself provides a needed boundary for a grassy area where students can talk, study, or just relax.

The structure was sited adjacent to the existing main building and campus center in conformance with the college's master plan. The LRC completes the first of the academic quadrangles envisioned in the plan. Building elements align with existing paths, define outdoor-use areas, and contribute to a sense of place.

The LRC has two distinct natures: it is a digital-era repository of information and an important source of social interaction for the campus. This delineation is evident in the building organization. Functional areas are clearly expressed and given distinct character. Variation within a unifying theme occurs through changes in volume and material and relative degrees of openness and enclosure. ●

Mondavi Center:

A Patient Team Produces Performing Arts Center

Design of UC Davis venue to appeal to 'people in tuxedos or blue jeans'

Cory Golden

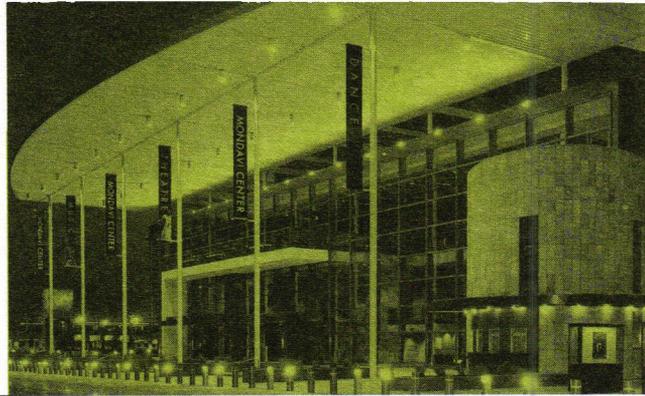
As work went down to the wire on the Robert and Margrit Mondavi Center for the Performing Arts, architect Susan Rainier couldn't help but imagine the relief she'd feel when it was over, at long last. "I'm just hoping I don't start bawling," said Rainier, project manager for UC Davis. "There's been so many sleepless nights for me. I wondered if I'd even live to see the opening."

The \$57 million, 103,637-sq.-ft. Mondavi Center opened last October and Rainier did see it happen after three years of work. The spectacular structure—touted as the "Kennedy Center of the West Coast"—features an 1,800 seat concert hall for music, dance, and theater, as well as public speakers and a 250-seat studio theater, which will most often be used for student rehearsal and performance. The center's splashy inaugural season will bring Broadway shows, plays, and opera and the likes of cellist Yo-Yo Ma, physicist Stephen Hawking, and tap dancer Savion Glover to Davis.

Also included in the project: a 709-car parking garage, surface parking for 905 cars, a new roadway leading to nearby Interstate 80 and a 1-acre entry park.

The building was designed by Portland, Oregon-based Boora Architects. Consultants included engineering firms Arup and Morton and Pitalo Inc.; acoustical experts McKay, Conant, Brook Inc. and theater and lighting design firms Auerbach + Associates and Auerbach+Glasow, respectively. The Roseville office of general contractor McCarthy Building Cos. managed about 100 subcontractors.

Rainier said the project's biggest obstacle was the university-required delivery method: a six-week, lump-sum bidding process. Senior project manager Charlie Murr of McCarthy said that between June of 2000 and February of 2002, progress was often snarled by the slow process of flush-



ing out errors, finding solutions, then finally receiving approval to make changes before the project architect was given the authority to direct work on site. "It's a fantastic product," he said, "but everybody on it is beat to hell."

Given just a one-month window for delays, there was plenty of pressure to go around for a project that was highly visible, sitting just off of Interstate 80, about 15 miles west of Sacramento and 73 miles east of San Francisco.

The new center, funded through discretionary funds and private donations, is part of some dramatic changes at UCD, including a \$42 million Plant and Environmental Sciences Building which opened for the new school year. A \$95 million Genome and Biomedical Center is due next year, as is a \$25 million institute for the study of food and wine.

The center itself, a sort of box-within-a-box built with a steel bearing frame on 200 concrete piers, turned out to be less trouble. Even the building's complex smoke-purge system, which includes use of the front doors as dampers, Rainier noted proudly, passed inspection on the first try.

The university was charged a premium for theater experience, she said, but that paid off. Because of prequalifying of subcontractors, she said, the miles of wiring and complex work inside the concert halls went "effortlessly and flawlessly."

Though the concert hall involved a highly specialized design to maximize acoustics and sight lines for future audiences, the rest of the structure, she said, is deceptively simple: "The rest is just the size. It's not a lab building or a hospital, but it's big—the ducts are 5 feet around to reduce noise." Because the acoustical work means the building's core is not filled with typical linear surfaces, it resulted in some interesting outcomes elsewhere. Take the roof, which Murr said has 29 different elevations.

Principal architect Stanley Boles imagined concert nights at the building when its glass face is "lit like a lantern" and the lobby and entrance will be buzzing with activity. He said the design team balanced functionality with two concepts: a nod toward both the area and UCD's agricultural history and a lobby that is itself a sort of stage.

To begin with, natural materials were chosen, including light-tan veneer sandstone from India and slate pavers on both the exterior and inside the lobby. Glass walls to both the lobby and

studio theater further blur the line between inside the building and out. The university's arboretum adjoins the structure. Inside the main concert hall itself, materials include wood from fir logs salvaged from the bottom of Ruby Lake, Ontario, and bamboo.

Boles said he didn't want "a lot of fluff" that would "look dated in five years." Ranier said the result is a sleek, modern design that because of the warm, natural materials "has a kind of Zen feeling."

"The thing I've been impressed with is the overall character and feeling of it," Boles said. "I think it has sort of a feeling of intimacy, even as big as it is. We didn't want it to be intimidating. We wanted it to be inviting for people in tuxedos and people in blue jeans and cowboy boots."

Visitors entering the lobby step into a three-story, 40-ft. glass box with open stairwells, glass-railed balconies and terraces - a space created for those who enjoy seeing and being seen. "You want the whole experience to be memorable," Boles said.

Seating in the building's main concert hall, with its 75-ft. ceiling, occurs on three levels, with the farthest seat 104 ft. from the stage. The arch of the proscenium (the area between the orchestra and curtain) and the double orchestra lifts create a forestage allowing the orchestra to play in the same room with the audience. Architectural lighting, too, can vary with performance, through a mix of fiber-optic "star lights" in the chandelier, balcony front and box lights, as well as wall-washers and recessed down-lights.

The studio theater was designed for flexibility, with movable seating and staging areas so that it can be used as an arena theater, banquet hall, or lecture room. Adjacent dressing rooms, food servery, and storage areas operate independently of the main concert hall. A "technical street" allows staging equipment to be moved along the length of the structure.

Among the building's unique features is its heating and cooling system, which introduces air at floor level as opposed to at the ceiling, providing both acoustical and energy-saving benefits. Under the main concert hall is a basement space ranging in height from 4 to 6 feet. Hollow cavities are also located under the balconies. Because the air is introduced at the floor, it does not need to be super-chilled; nor does it have to be blown down, allowing for the use of smaller, quieter fan motors.

As work came to a close, Rainier—whose office fielded some 3,000 requests for information and answers from subcontractors—said she would not trade the experience, her first in theaters, after projects like gymnasiums and skyscrapers.

For her, working on the center included everything from a one-week theater design course at Harvard to giving what felt like hundreds of tours she hadn't known were part of her job description. "It's been an education," she said. ●

No Expenses Spared

For all its style, the Mondavi Center is designed to step out of the way, to let performers be seen and, even more importantly, be heard.

"You're going through all that trouble and spending all that money," principal architect Stanley Boles said, "and all it really comes down to is seeing and hearing well in one room."

Jackson Hall, the structure's collaboratively designed main performance room, is a 75-ft.-tall box-within-a-box, with clear sight lines for all 1,800 audience members.

Acoustical designer Ron McKay of McKay, Conant, Brook Inc., said the key to the hall's design was isolating it from the sounds of nearby Interstate 80 and train tracks.

An analysis of the floor vibrations at the nearby UC Davis Alumni Center aided the design of the basement, which also houses the chamber feeding the cooling system. A lined duct to deaden sound backs each grill that feeds cool air into the hall.

The hall is lined with sandstone panels—tilted at precise angles to reflect sound toward Douglas fir panels—and plaster ceilings that are curved to intercept sound waves being distributed to the crowd.

Moreover, each piece of the room is part of the acoustical puzzle: whether it's the double doors that whisper rather than clank shut or perforated seat bottoms so designed that, if a seat is empty, it still absorbs sound.

The varied sorts of performances planned for the hall mandate that its acoustics be flexible—to, as Boles said, "enhance the spoken word or give you that lovely reverberation of the last notes of a symphony."

Three major components allow reverberation to be altered from one second to two, McKay explained:

- The orchestra shell, a sort of "movable garage" at the back of the stage, can be brought forward on air casters. Most of the orchestra sits inside of the shell, the rest on a forestage created by lifts, allowing the orchestra to play in the same room as its audience.

- An acoustical canopy made of a steel frame with curved fir panels above the stage can be raised or lowered. The canopy that lets the string section hear the brass also reflects the first sounds the audience hears. The quicker those sounds arrive, the more intimate and smaller the room feels.

- Velour drapes, lowered from an attic space and from wooden grilles along the walls to reduce reverberation.

"No expense was spared in regard to acoustics," said the university's project manager, architect Susan Ranier. "That was our No. 1 priority." ●

The

Power

of

Marketing

One of the primary

and ongoing

strategic needs

for the architectural

design practice

is to market its services.

After all,

you cannot design it

(and they can't build it)

unless you sell it.

Keys to Building a Successful Practice



Craig Park, FSMPS, Associate AIA

Finding and leveraging resources that can improve marketing and business development acumen is often the key differentiator between the good and the great.

Because there is often confusion, or a least misunderstanding, when it comes to the term "marketing," let us begin with some common vocabulary. Richard Nelson, vice president of building industry application service provider (ASP) Cosential (www.cosential.com), defined the differences very well, saying, "Marketing builds the image of the company and its brand identity, in order to pull clients into the firm's sphere of influence. Business development builds channels through which the company pulls in new business opportunities, such as strategic alliances and partnerships. Selling is all about pushing business into the company by pursuing specific clients and opportunities."

Notwithstanding the natural inclination for architects to avoid the "S" word, marketing, business development, and sales are all necessary to convey and secure the opportunities to demonstrate the services a design practice can provide. The key elements of marketing excellence are easy to identify. Mastering them is the ongoing challenge. To succeed, professional service providers, whether in the design/bid/build or design/build arena, must learn to articulate those strengths that set them apart from their competition.

The Society for Marketing Professional Services (SMPS; www.smps.org) is one group specifically developed to assist the building industry professional with education and networking opportunities in all three areas. Celebrating its 30th anniversary in 2003, SMPS is a nationwide gathering place for more than 5,500 practitioners responsible for marketing or business development for their companies.

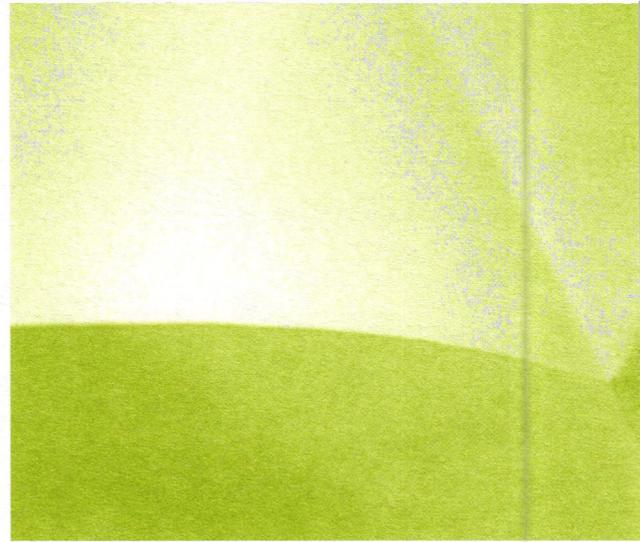
When it began back in 1973, “Bird Doggers Anonymous” (as it was affectionately known) was a small collection of architectural and engineering professionals in San Francisco, Houston, and Boston, who would meet surreptitiously at local restaurants (because their principals and partners forbade their speaking openly with each other) to compare notes on client trends and buying habits. In 1982, SMPS was formally incorporated as a not-for-profit, chapter-based association of like-minded professionals. It has continued to grow and expand since.

Out of this collection of “deviants” (to use Watts Wacker’s terminology for positive transformation using fringe ideas!), sprang a new approach to sharing ideas and developing and implementing new marketing and business development strategies. Imagine the surprise for those early “marketers” if they were to look at the sophisticated networking, business-to-business web options, and database management tools that exist today. In reality, they would probably just comment, “It’s all about relationships—everything else just doesn’t matter.”

Today, SMPS serves its members based on a vision “to become the premier source for marketing and management education, information and resources for the built and natural environments.” Their mission parallels that vision with goals to enhance the abilities of the Society’s members to 1) advance in their careers; 2) secure profitable work for their firms; and 3) create positive client relationships. With more than 50 chapters throughout the U.S., SMPS provides local, regional, and national programs and resources designed to improve the value and perception of its members and the Society overall.

To achieve their vision and in support of its mission, SMPS leadership at both the national and chapter level continues to develop new and innovative learning programs. They are also building affiliate relationships with other design and engineering associations, including the AIA, IIDA, ACEC, and McGraw-Hill (as co-sponsors of their annual Building Industry Economic Outlook programs) by providing marketing-oriented educational programs, publications, and other resources for their members.

Back in 1985, as a young professional myself,



beginning a new role managing one of my firm’s branch offices in Los Angeles, I found SMPS to be a great resource for learning and shared interests. While attending a California AIA-sponsored program on securing federal government contracts (those infamous SF254/255 forms), I spoke with the moderator, Lloyd Backen, FSMPS (then a principal with a large regional AE firm; now a marketing consultant in Sacramento). His recommendation for learning more about marketing my firm’s services: “Join SMPS. You’ll learn everything you need to know there.”

I took his words to heart, and those relationships—built around the common goals of communicating the value of each of our services to meet each client’s needs and understanding the power of the “team”—have continued to this day to help me secure new work for my practice. I always have believed that you get more by participating than just observing, and so I got involved in SMPS leadership. First at a chapter level, then later at the national level, I found that not only did I learn new marketing and business development skills, but also I was able to learn and apply leadership skills that directly related to the increasing responsibilities I had within my practice, while I expanded my network of associates and business contacts.

SMPS builds their service offerings based on six “Domains of Practice” designed to provide mastery of professional service marketing, regardless of whether you are a large or small firm, practice architecture or engineering, or serve the industry as a contractor or consultant. These areas of knowledge building include:

- Marketing Research
- Marketing Plan
- Client & Business Development
- Statements of Qualification (SOQs) & Proposals
- Promotional Activity (Public Relations & Communication)
- Information, Resource, & Organizational Management

These areas of marketing and business development expertise have been thoroughly researched and documented in the Society's very popular book, *The Marketing Handbook for Design & Construction Professionals* (Alexandria, VA: SMPS, 2000).

SMPS's local chapters typically offer a variety of these programs monthly, intermixed with client-focused discussions designed to help secure "real" work. So much has the interest in business development skill-building increased (probably as a direct result of the ever-cyclical economic downturn) that SMPS has created a unique special interest group, known as the Business Development Institute (BDI), designed to provide educational programs focusing on improving client relationships and increasing sales opportunities.

Carla Thompson, FSMPS, Principal and Corporate Marketing Director for Seattle-based MulvannyG2 Architecture (www.mulvannyg2.com) is an active participant in SMPS for a variety of reasons: networking, continuing education, and, more recently, project opportunities and client connections. She notes, "Clients come in all shapes and sizes nowadays. It was not so long ago that architectural firms were at the top of the feeding chain at SMPS events, and it was like being surrounded by a bunch of hungry sharks. Marketers from engineering firms and contractors wanted to get close to you so you'd put them on your project team."

With the slowdown in the economic climate and its impact on the building industry nationwide, today engineering firms are often in the prime position, and general contractors are the lead in design/build projects, so architectural firms are now looking to team with *them*. Thompson continued, "Marketing in the 2000s is much more of a team sport, and today's competitor could be tomorrow's joint venture partner. Architectural firms who are not participating in SMPS are missing a client-rich networking opportunity."

Each year, SMPS stages a national conference (in 2003: August 13-16 at the JW Marriott Desert Ridge in Phoenix, Arizona) that combines teaching and interactive learning from some of the premier thought leaders on marketing with practical applications for business development. In recent years, to further the value to the program's attendees, SMPS has co-produced the conference with the Professional Services Management Association (PSMA; www.psmenet.org) to offer leadership development, organizational development, and technology tracks that provide increased opportunities to find new ideas and new resources for building the successful design practice.

Past conferences have featured out-of-the-box thinkers like Michael Brill, Tom Peters, Ken Blanchard, and Harvey MacKay, along with concurrent learning sessions on all

aspects of marketing, business development, and personal and professional development. All SMPS programs, at the chapter, regional, and national level, qualify for AIA-approved learning credits.

Peter Keinle, FSMPS, Director of Marketing for Columbus, Ohio-based architects, Moody/Nolan Ltd. (www.moodynolan.com), adds, "By far, the best value of being in SMPS is the nationwide network of 5,500 A/E/C marketers." Moody/Nolan has worked in more than 35 states. They continue to grow by pursuing "the right project" anywhere in the US that matches their specific areas of expertise.

Keinle continues, "Our biggest area of specialization is collegiate and community recreation centers. If I hear of a project, I ask myself 'do I know an SMPS member there?' If not, I go to the SMPS directory. When you call an SMPS member, you are calling someone who markets fulltime or has marketing responsibilities, a professional who will answer your call because he or she is interested in finding work, whether it is on his/her own or with another firm. Teaming today is more the norm than ever before."

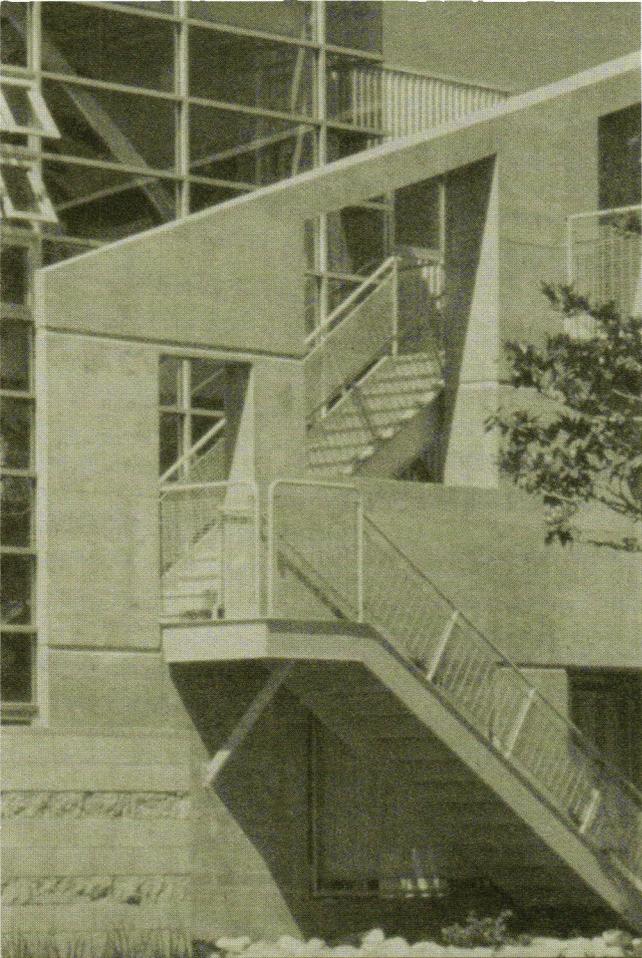
What Keinle finds refreshing is that SMPS members will openly discuss project opportunities and see if there is a fit between the firms. If the local firm is not interested in collaborating, they will usually provide other information as needed, such as the local competition, consultants, or another local SMPS member who can help.

Keinle concludes, "I often say that if I find out about a new lead in the morning, I will know enough about the project by the end of the day to make go/no go and teaming decisions, largely from information given by SMPS members I have contacted."

At the end of the day, finding new clients, developing mutually satisfying (and profitable) relationships based on providing excellent service, creating the teams to provide those services, relating those successes to other potential customers, and as a result building "the brand" for your firm is all about "marketing." The Society for Marketing Professional Services is the best place to learn and apply those skills and to develop a personal professional network that will help your firm succeed now and well into the future.

For more information about SMPS, their Bookstore, and their Marketing Resource Center, visit their website at www.smps.org, or call 800-292-SMPS. ●

1. Mathews, Ryan & Watts Wacker, *The Deviant's Advantage: How Fringe Ideas Become Mass Markets* (New York: Crown Business Publications, 2002).

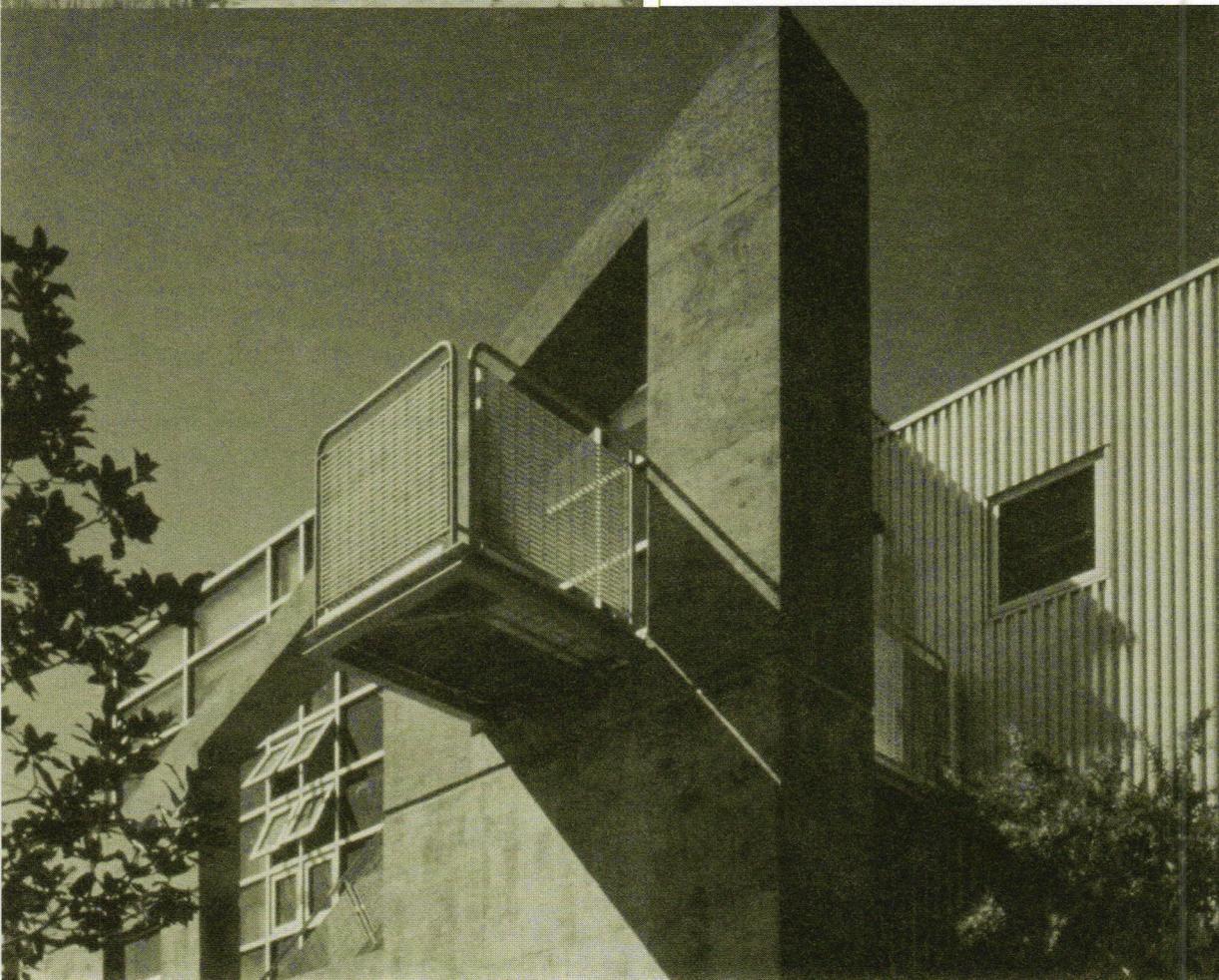


Under the Radar

Ninth Street Office Building,
Santa Monica

David Lawrence Gray Architects

Anne Zimmerman, AIA



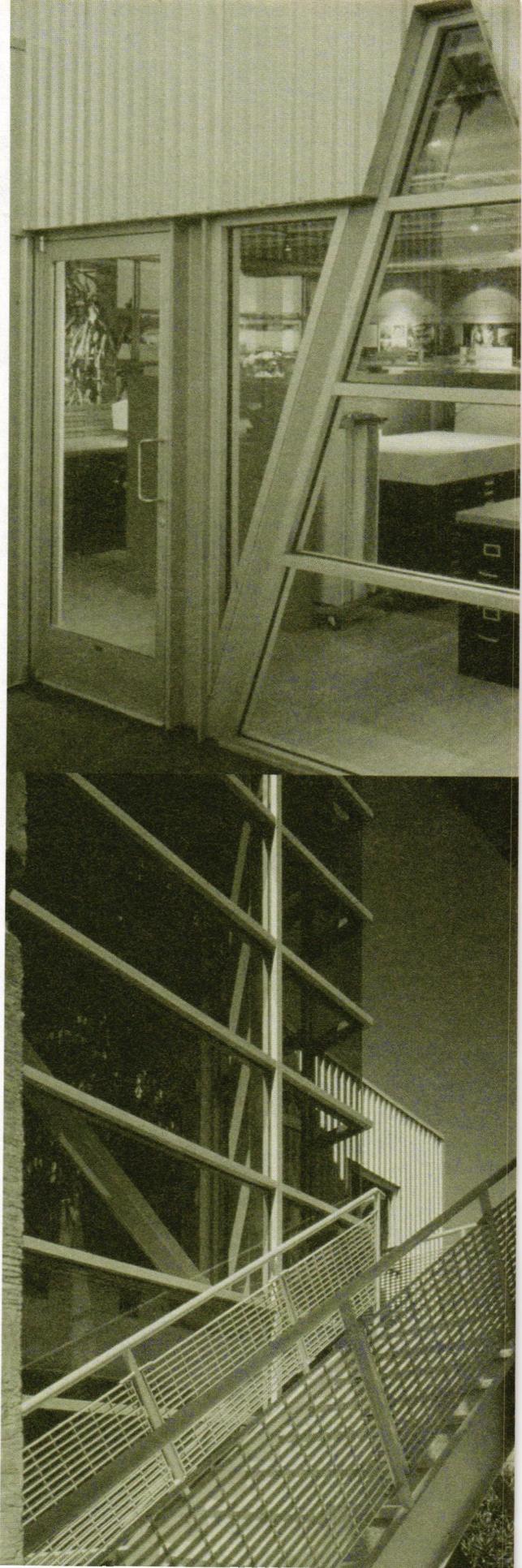
Probably the most "under the radar" aspect of David Lawrence Gray is how he sees through his architectural lens. Gray believes that architects should be the catalysts in our communities. Otherwise, we marginalize ourselves by not understanding the building process and thinking about what should be built to contribute to the community and be "great art."

Gray, a Berkeley architecture school graduate, found himself in Seattle, after a stint working with Frei Otto on the Montreal World's Fair Pavilion. Inspired by the initiative of architect Ralph Anderson, who spearheaded the renewal of Pioneer Square in Seattle by buying historic buildings with his wealthy clients, Gray has been the visionary behind similar efforts in the Los Angeles area, including the restoration of the St. James on Sunset Boulevard. It never occurred to him that architects did not decide what would be built in the community. Since 1973, when he moved to Southern California, he has quietly advanced this approach to design and architecture through his own projects, through design for other client's projects, and through the University of Southern California, where he teaches.

As the developer of several infill office buildings in Santa Monica, Gray and his firm design incremental projects that are not only fully rented, with a waiting list, but contribute to the community as quality architecture. Architects can see things, and when that vision is part of what we do as architects, we contribute so much more than the architect who is just the designer for the client's building. Otherwise, the client has already made the key creative decisions of "what and where" for the project.

The Ninth Street Office Building treats the office as a peaceful, light-filled oasis. The two-story, 4410 square foot structure was built for approximately \$600,000, excluding tenant improvements. Fronting the sidewalk is a freestanding concrete wall that is a sculptural sign and buffers the building from the street. Patios and a sense of layered public and private space are created. Sparingly designed overall, the palette reflects the industrial materials seen in the surrounding warehouses and industrial spaces, now often converted to stylish offices and studios. Concrete, steel, glass and wood are used with conservation in mind and are "off the shelf." A reception desk exposes the 2 x 4 framing used in the formwork for the concrete wall in an elegant, horizontally ribbed design.

Gray and his talented staff have proven that quality, affordable development can be successful and profitable; that architects have the responsibility to maintain the standards on a project. Currently, downtown Los Angeles stirs him, and he will soon show us his vision there. ●



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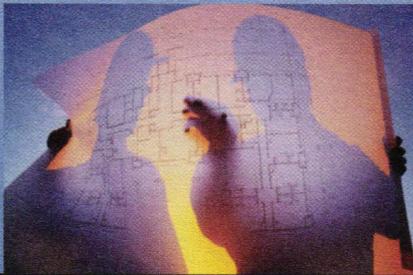
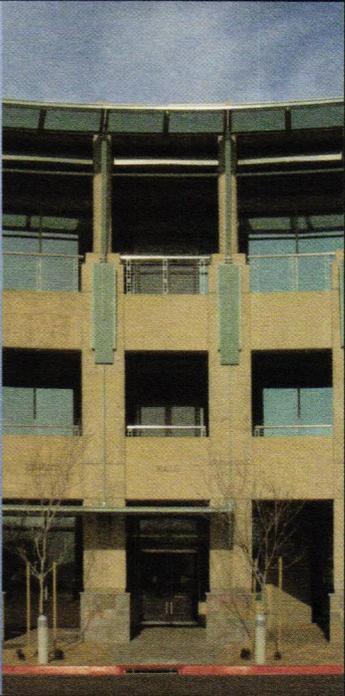
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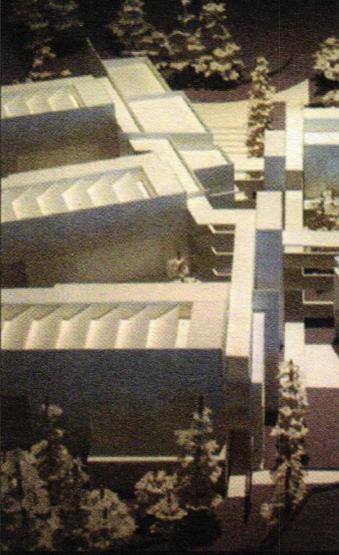
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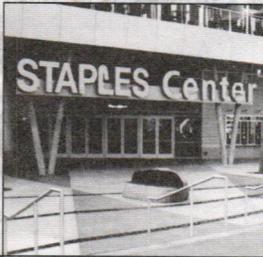
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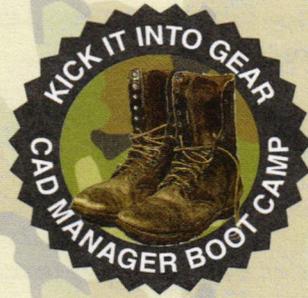
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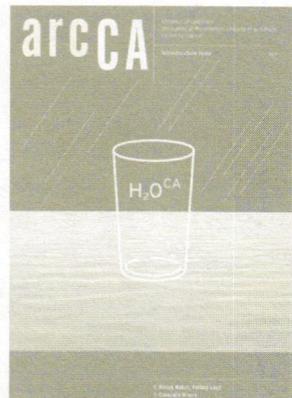
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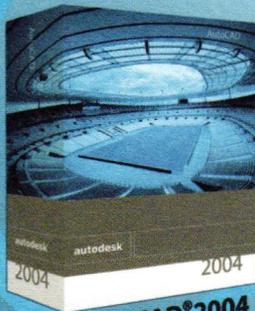
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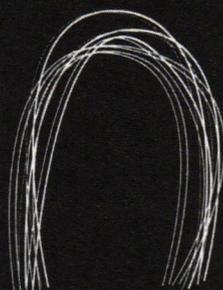
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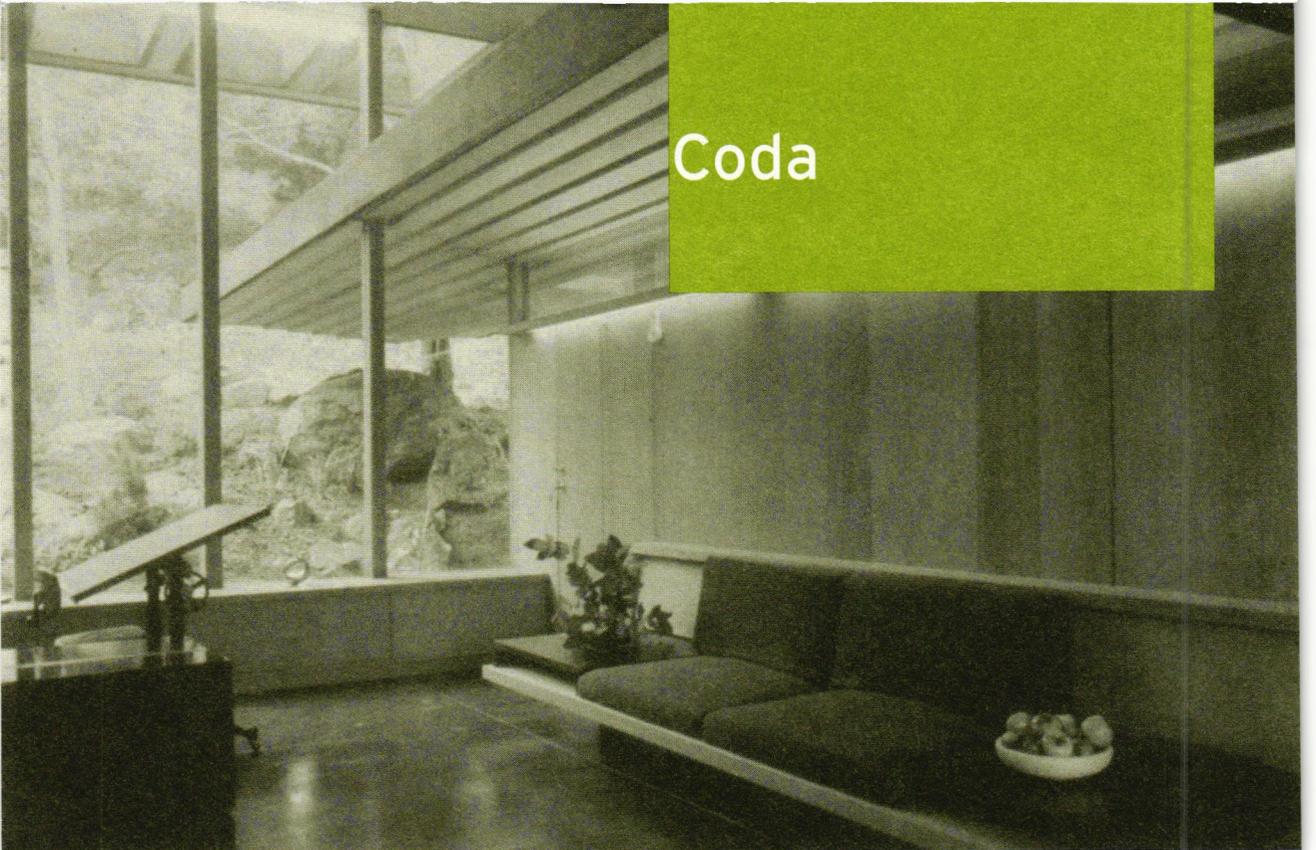
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photo, **courtesy of Elena Manferdini**; photo, **courtesy of**
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Coda

The Ludekins Residence Jack Hillmer, Architect

Lynn Call, AIA

Relatively unknown architect of California modernism, Jack Hillmer, is a dedicated modernist whose predominant influence, Frank Lloyd Wright, tempered Hillmer's intuitive affinity for the structural sensibilities of Mies van der Rohe.

Giving expression to these influences on a remote peninsula of the San Francisco shoreline, Hillmer placed among the blanketing vegetation flat roofs, visually softened under a layer of gray pebbles brought up from the shore. Artfully integrated into nature, the nearly imperceptible 1950 Ludekins residence avoids formal design manipulation. Rather, it addresses the ambiguity between form and the surrounding landscape.

Placing the body of the house over an area of erosion protects the site's elevated northern area and optimizes an uninterrupted shoreline view to the south. The space configuration is elongated east to west, but constrained by the thick cover of trees. "Trees became the termination points for the roof elements. Only one tree was cut down," Hillmer explains. "If the layout of the house was moved three feet in any direction, trees would have been eliminated right and left." The angle of the cypress branches suggested the angle of the three lower, diamond shaped roofs, which define transitional spaces.

Natural woods comprise the unifying material palette: Kelobra hardwood of an earthy brown distinguishes folding doors; dark ebony delineates storage wall sliding doors; soft toned redwood comprises ceiling and wall surfaces. All redwood enclosure and dividing walls are untreated planks glued together, secured to the roof joists and colored concrete slab; no studs are used as framing. The redwood fascias are back-hammered on to headless nails; no surface nailing was allowed. The design specifications eliminated trim, bases, glazing stops, and material butt-joints.

There is no visible cabinet or drawer hardware in the utility areas; no handles, no pulls. The electrical outlets and switches are likewise understated: no outlet or switch cover plates. The finish material is all one discerns.

When asked what he thinks of contemporary technology allowing architects to compose buildings of complex sculptural shapes, Hillmer responds, "Seeing architects such as Frank Gehry develop a project from bent paper models, I feel that the work is somewhat accidental." Hillmer's architecture is not preoccupied with form or the technology of the present, but is concerned with the response to the client and how the building integrates environmentally. Hillmer's architecture belongs where it is placed. ●