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Official Magazine of the Tennessee Society of Architects, a state organization of the American Institute of Architects.

TENNESSEE ARCHITECT is published quarterly by the Tennessee Society of Architects, 223½ Sixth Avenue N., Nashville, Tennessee 37219.
Subscriptions: $12.00 annually; single copies, $3.50. Advertising rates upon request.

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Omnigraphics, Inc., Graphics and Production

Cover
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Eureka Springs, Arkansas
Christopher Lark, Photographer
Some Elementary Questions About Architecture

Architectural societies are established and receive continuing membership support to present the profession—art and business—of architecture to its many publics in an understandable language. Problem solving is a primary element of architecture, and architects expect their professional association to provide the public with answers to some elementary questions: Does an architect do more than provide blueprints? Why is registered better? Should I hire an architect? How come architects charge so much? The editors and advisors of the TENNESSEE ARCHITECT agreed that these were worthy goals and announced their intentions of answering these questions and more in this issue of the magazine.

Fortunately, several wise people throughout history have commented philosophically on the nature of questions and problems ("Life is not a problem to be solved, but a mystery . . . ."); otherwise, we'd be hard-pressed to explain to you how a diligent search for answers only raised additional questions. What we found is that "New Directions" as a theme for 1980 at national, state and local levels has been no accident. Probably at no time in history has architecture been more complex and elusive than it is in 1980. James R. Pratt, FAIA, utilized three columns in the TEXAS ARCHITECT to describe the range of expertise necessary to practice today: chemistry, manufacturing, construction, equipment engineering, finance, law, ecology, bureaucracy, psychology, art, communication, design, management, politics—to name a few.

"New Directions" began in Cincinnati at the national convention where we were reminded that architects should be heroes who save the world from economic and ecologic chaos. Pursuing this theme at the Gulf States Regional Convention we explored how to inject humanism into the architecture of Tennessee. This issue contrasts that quest of lofty ideals by considering "how architects get better at what they do"—perhaps the most realistic and necessary goal for the 80's. The dialogue we begin here will be expanded throughout 1981 in TSA seminars, convention, magazine issues, committee work and program goals established by President-Elect Ed Johnson and TSA's planning task force. Perhaps then we'll be better equipped to return to our original questions enumerated at the beginning of this article.

Where is Design Headed?
The 1980 Gulf States Region design awards raised some provocative questions about the nature of design. Why do Gulf States architects seek inspiration from national magazines instead of regional traditions and culture? Why is interior design superior to the exterior? The jury's answers are represented by the winning designs featured in this issue, Jim Patrick's companion article is the most coherent response to Post-Modernism we've seen in awhile; while Bruce Crabtree, AIA, and Roy Harrover, AIA, provide project illustrations of two major pieces of public architecture. CRS Executive Vice President, William Pena, examines design and programming in an overview of thirty years of squatters' sessions.

How Do I Get the Work?
Frank Stasiowski, AIA, has broken the bureaucracy barrier in "Two-Fifty-What?", an excellent primer on SF 254/255; and marketing coordinator, Patricia Stepp, warns us to the subject of cold calls. Tennessee's answer to Will Rogers—Bob Holsapple—shares his humorous insights to client relationships.

How Do I Get the Work Done?
Articles on solar technology, by Ed Palmer; system drafting by Ed Powers; and computer technology by Jim Franklin; underline the high level of expertise available in Tennessee and offer new directions in practice management. Perhaps, after all, this issue addresses our original goals rather well.
Seven Awards of Excellence in the 1980 Gulf States Regional Design program were selected from a field of 85 entries submitted by architects in Tennessee, Alabama, Mississippi, Louisiana and Arkansas. Jurors for this year's awards program were Robert L. Geddes, FAIA, Dean of the Princeton School of Architecture and Urban Design; and Wolf Von Eckardt, architecture critic for the Washington Post. Roy Knight, AIA, Dean of the University of Tennessee, coordinated the jury; and Max Robinson, AIA, McCarty-Bullock-Holsaple, chaired the awards program.

The jury commented that there were many good buildings among the entries, representing a wide range of project types. Functional workability, design quality, regional character, use of effective materials and the relationship to the site were important considerations in their selection.

The jury expressed a concern that several designs reflected the trendy work from other parts of the country, having nothing to do with southern traditions and culture, with an admonition to Gulf States architects to consult fewer architectural magazines.

That the talent, understanding and ability are all here is evident in the winning designs which follow. Fay Jones, FAIA, recipient of two awards, is one outstanding example. Thorncrown Chapel is a remarkable building which contributes richly to the whole field of architecture, and it underscores the jurors' point that architects need look only within for inspiration.
1980 Gulf States Regional Design Awards

Roheen/Robert Alexander House
Hazel Valley, Arkansas
E. Fay Jones and Associates,
Fayetteville, Arkansas, Architect
E. Fay Jones, Photographer

Christ Community Church
Clinton, Mississippi
Goodman and Mockbee, Architect
Jackson, Mississippi
Tom Joynt, Photographer
Arkansas Game and Fish Commission
Little Rock, Arkansas
Cromwell, Neyland, Truemper, Levy and Gatchell, Inc., Architect, Little Rock, Arkansas
Greg Hursley, Photographer

First American Bank Anytime Teller
Nashville, Tennessee
Gresham and Smith, Architect
Nashville, Tennessee
Steven L. Standifer, AIA, Photographer
Collins House (Dr. Morris W.H. Collins, Jr., Owner)
Starkville, Mississippi
Robert M. Ford, AIA, in association with Donlyn Lyndon, FAIA
Mississippi State, Mississippi

Lamar House-Bijou Theater (Knoxville Heritage, Inc., Owner)
Knoxville, Tennessee
Restoration and Rehabilitation
Ronald E. Childress, W. Glenn Bullock
Robert W. Carpenter, Architect
Ronald E. Childress, Photographer
The Vocabulary Of The '80's

William E. Palmer, AIA

Direct gain, trombe walls, daylighting, collector area, solar savings, fraction... is this the vocabulary of the 1980's? Our clients are demanding energy efficient buildings; they can afford no other option. As architects, we need to be aware of our design options, our resources and our costs in order to make the proper response to these demands.

Four Ways To Make It Better

Traditionally, our approach to building energy use has been to rely on our engineering consultants. Sealing buildings up tight and buying good mechanical systems to keep them comfortable once seemed easy solutions. Given today's energy crisis, improving a building's energy efficiency by sealing it up even tighter and buying more efficient and sophisticated mechanical systems might be one valid approach for some situations.

A second way of responding to our clients' energy efficiency requirements might involve the purchase of active hardware. A great variety are available from roof solar collectors to heat hot water, to windmills to make electricity, or simple wood stoves to replace our electrically operated mechanical systems. While not cutting down on our buildings' total energy use, such gadgets can certainly reduce monthly utility payments.

A third approach to energy efficient design might be labelled the "granola approach," since everything is done by natural means. Natural ventilation through operable windows or doors, direct heat gain from the sun, earth insulation, natural radiation of heat from thermal storage masses are examples. In this passive approach, nothing is mechanically assisted.

A hybrid system utilizing elements from these three approaches can be a most sensible fourth alternative. Combining an efficient mechanical system with solar panels and the appropriate passive design elements may be the most effective way of saving energy the year round.

Change of Emphasis

Due to our preoccupation with technology, our lack of historical awareness and lack of motivation, as a profession we have taken the easy way and emphasized the first approach, purchasing more and more mechanical equipment without really exploring the advantages of passive energy design.

Passive energy design is not a technique developed recently by a computer or postulated in last year's PROGRESSIVE ARCHITECTURE. The Eskimo igloo with its snow insulated walls and sheltered entry is a fine example of passive design that has been around for thousands of years.

Not that architects have totally ignored passive energy design, many have employed passive techniques for years. Proper siting of a structure to take advantage of natural wind currents and natural shading, the use of operable windows for ventilation and light, provision of good insulation, and even attached solar greenhouses (Victorian conservatories) have been among the passive elements architects of the past have used. But passive design has not been stressed or practiced extensively and has not been truly realized in large scale projects.

New Design Parameters

In passive energy design, the entire building becomes the heating, cooling and ventilating system. Walls, floors, and ceilings store and radiate heat or reflect heat or light as conditions dictate. In this way, each piece of the building's construction plays an important role in tempering the building's environment. Each element has a dual purpose.

Consider the simple task of designing a window. Normally, a window would be sized and located because of a particular view or to provide quality...
and/or general quantity of light desired for a space. Consideration would be given to how the window fits into the exterior design. But, if this window is to become a passive energy design element, additional parameters must be considered. The window’s size and location might then also be based on the need for a specific quantity and velocity of outside air, or to supply specific quantities of heat or light based on predicted paths of the sun. Passive design pushes the architect to add quantitative parameters to the subjective and qualitative criteria already in his paradigm. He must be able to understand specifically the effects each piece of the building have on energy loss or gain. The analysis tasks required to generate this understanding are not simple.

A Word About Analysis
Generally, buildings fall into two types of energy load conditions. The first type, skin dominated structures, are mostly residences and light commercial buildings whose interior environments are directly affected by climatic changes at the outside walls. In contrast, internally dominated buildings are not as directly affected by energy changes at the skin of the building. Structures in this category such as commercial and industrial buildings are more affected by energy loads produced within the building by its occupants, lights and machinery. Obviously, the two building types require very different approaches.

A lot of information of every level of sophistication is available to aid in the passive solar design of houses. Rules of thumb, simple manual calculations, hand held calculator programs are all readily available. But, analysis techniques for large internal load-dominated structures are neither so readily available nor easily used. Since the effects of climate and internal loading conditions must be considered simultaneously, many and complex calculations are required. The simulation analysis required for each piece of the building in order to really predict energy performance, savings, and payback periods for the whole building requires the use of a large main frame computer and sophisticated programs. The time and costs required for this type of study are staggering.

Certainly with experience, the need for extensive calculations can be diminished. In fact, on certain types of projects where the difference of a few degrees in temperature or use of a few additional BTU’s may not be critical, the gutsy client and experienced architect may choose to build what appears reasonable and fine-tune the results with minor construction changes later.

Daylighting
Daylighting is one passive design approach that can be easily predicted and simulated by the architect, and a very effective one. As much as a 70% savings in energy can be realized from the reduction of electricity required for artificial lighting and from the reduced demand on air conditioning equipment caused by the deletion of the heat generated by these lights.

---

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The first is still the best.
Since the rotation of the sun is predictable, the exact lighting conditions of a space for any time of the year can be simulated by rotating and tilting a scale model to correspond to the correct angle and azimuth of the sun. By use of a simple photo cell setup, light levels can be measured in footcandles for each space. Adjustments can be made in the model to fine-tune the daylighting design. Extensive model testing on such pioneering projects as the TVA Office of Power in Chattanooga indicate fairly high footcandle levels are attainable even for north-facing spaces and for all exposures on cloudy days.

The key to the use of daylighting is to keep it indirect. Sunlight must be reflected or bounced to avoid heat and glare. Interestingly, the quality of light achieved through indirect daylighting is so much better than the glare and shadow producing light from artificial sources that considerable lower footcandle levels can be used without decreasing, and even sometimes improving, a person's ability to see.

A Valuable Resource

The Tennessee Valley Authority is a tremendous resource on energy efficient design in our region. A book entitled THE CLIMATIC DATA BASE, published by TVA, graphically presents statistical information on year round weather conditions for the major cities of the state. Data is given for amounts of rainfall, number and types of clear and cloudy days, hours of sunshine, amount of solar radiation, wind speed and direction, etc. TVA has also assembled a competent staff of solar designers to work with architects and their clients through the Solar Applications Branch in Knoxville. On a limited number of projects, TVA even offers computer simulations for large internally dominated facilities.

A Challenge

In order to understand the energy language of the '80's, the architect and his client must educate themselves in the solar vocabulary. Tennessee, with its high humidity, prevalent overcast conditions, wide temperature swings, and varying topography is a difficult laboratory within which to design energy efficient buildings. But what an opportunity! The wide range of designs appropriate to the variety of conditions that exist here could make our region a showcase of passive energy design applications.
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James K. Polk Center, The Architect's Perspective

Bruce I. Crobtree, AIA

First off, it is not the Performing Arts Center. It's the James K. Polk Center because it houses not only the three theaters of the Performing Arts Center but also the State Museum, the State Educational Television Studio, and 400,000 square feet of office space for various and sundry departments of the State government. Along the way, it was called the James K. Polk State Office Building and Cultural Center. The JKPSOB&CC. Some folks just got to calling it the S.O.B.—but call it the Polk Center, please.

Polk deserves a good monument. He refused to run for a second term as President, and that says a lot for the man in my way of thinking. He knew when to quit. But we didn't, so good or bad, his monument stands; and I'm sure that nothing Polk did as President of these United States caused as much talk and controversy or used up as much newprint as the design and building of his monument—the Polk Center. (The citizens not being blessed with TV in Polk's day, no comparison can be run on TV time. Luckily, I think.)

We started with high hopes. Taylor and Crobtree had a contract to design an office building for the State of Tennessee at the corner of Fourth Avenue and Deaderick Street, the urban renewal plan calling for a hotel up on the Sixth Avenue and Deaderick site. But no hotel was forthcoming, and the State needed a larger office building than would have been permitted by the urban renewal people at Fourth and Deaderick. Various agencies got their heads together, trades were made, and the State ended up deciding to build at Deaderick and Sixth. Then, since there could be a whole city block, the State chose to include the Performing Arts Center and the State Museum!

We were told to go to the drawing board, scheme it out, price it up and see what we'd have. Hot Dog! My dream come true. All this and an entire city block of downtown Nashville to rebuild. Great expectations. We progressed, we looked for consultants. Had to get theater and acoustical consultants, needed a museum man. One thing I had learned early on was that with separate theater and acoustical consultants on projects, there was a good chance of failure. And when failure occurred, it was nobody's fault, just a lot of finger pointing and "Who shot John." We looked at several consultants and when I found

Ron Jerit of BBN actually out on a job, sleeves rolled up, cigar in mouth, standing in the middle of a stage, shouting orders, I knew I had my theater man. BBN also had acoustical people (Larry Kirkkegaard), so I struck a deal for theater and sound all in one package—no split responsibility. (Both men have since left BBN and work on their own, but I kept them tied together as fast as Siamese twins.)

We got Verner Johnson, our museum consultant, out of Boston. And this was a good choice. Verner Johnson is not only a good museum man, but a top-flight architect. He also led me to Bill Lam for special lighting consultation.

With all this vast and assembled knowledge, we started sizing out spaces, shapes of theaters, sight lines, etc. Our first shock was that all this would not just sit down on a city block with no trouble. There wasn't room enough on the lot to place the theaters and the office tower side by side, end to end, side to end, or what have you. It just would not fit. So,
what to do? Place the tower over the theater? Yes . . . that would work! Only what to do with the columns of the office tower? Can’t have these coming down through the theaters (hard to see around). Why not hang the tower from the elevator core? Cantilever trusses out and hang the columns down from the trusses, putting the concrete core in compression and the steel columns in tension. Concrete works best in compression, and steel works best in tension. We discussed this with Mike Fitts, the State Architect, and he agreed to give it a go. Let me point out one of the facts of architectural life—it takes a good client to get a good building. If this is a good solution to the problem, give credit to Mike. He has suffered long and greatly for going with us on this solution, and he deserves credit for his role in promoting good and innovative design in Tennessee.

The theaters and the museum were to be in the base of the building. It was our opinion that there should be an integration of these spaces, so that the theater goers would be drawn to the museum and vice versa. Further, we felt that the bustle of the office tower should add daily activity to the cultural center. To do this, we used the long, multi-story lobby along Deaderick Street to integrate the various functions and levels. This lobby also connects by a bridge to the Legislative Plaza, forming a continual link from the Capitol on down into the building.

To meet the budget, we reduced the museum storage somewhat and in its place added a television studio for the State Educational Television network, in response to a Legislative resolution. The studio was put down below the museum and it all worked out fine. Producing the drawings and specifications for this project was hard. Since this is a one of kind project, we had no precedent, so it all had to be worked out from scratch. Technically, it could be broken down into three categories: (a) Theaters and studio, (b) Museum and (c) Office tower. This enabled us to run three teams on the project, one for each category. It took a lot of manpower, about 50 people working on it at the peak of production. The agony and hard work, the costing back and forth, the army of people to satisfy . . . I won’t go into it. It’s blood, sweat and tears. It would fill volumes, and only bring the reader to tears. But to give you an inkling, we used 541 sheets of drawings and three volumes of specifications. As of now, we have 129 supplemental drawings.

We had our problems with bidding, being over the budget, rebidding, and then adding back items as well as program changes while the construction moved forward. But it has all come together and after four and three-quarters years of construction, the project is nearing completion. It is such an enormous, complex project and contains so many different "Clients," that I don’t think the process of change and construction really ever will be completed. In fact, there are various portions of the project that in reality are designed for ever recurring change. So be it!

When given this article to write, I was asked to tell how I felt about doing such a project. There are good times to look back on as well as the bad. I can say with all certainty it has not been dull; and on the whole, I feel the good times will outweigh the bad. Let me list both and comment on them briefly.

**A. Good Times**

1. The chance to put to use the architectural education and experience gained over some 30 years. The project offered to us the test of whether we could do this. Since no amount of words from me can add to, detract from, or change what we did, the design stands or falls on its merit.

2. The people with whom I worked. I gained a tremendous respect for the individuals involved in this project, both in design and execution. Many people brought diverse and fascinating skills to the project. I don’t have the space to describe each, but the structural, mechanical, sound, lighting, etc., are complex and demanding. Thank God it all works. As to execution, what greater marvel than men who can lift a 22 ton truss up hundreds of feet in the air and slip it into a socket with 1/8" clearance.
3. Acoustics. What a thrill when the Symphony Orchestra first played in the music hall and proved every seat has excellent acoustics! You cannot imagine the relief.

4. My competition (and friends) coming to my rescue in the newspaper in the midst of the attacks in the media. This feeling is indescribable. It's joy—it's relief—it's self-confidence again.

5. Opening night. People happy. People patting our backs and saying nice things. My knowing it's all worth it.

B. Bad Times

1. Running over the budget. I curse inflation. I feel stupid, but then console myself with the knowledge that I have company, and that we were able to roll up our sleeves and work the problem out.

2. The media. This has been an education. News not only happens—it is made. I believe in a free press, but I think that those who write on a subject should be versed in what they write about.

3. Unions—Non-unions. If any of you readers know how to handle this, let me know.

4. Changes in the department heads and personnel. Tough. Too much going back to ground zero.

5. Construction delays. This is still a matter of controversy. Less said, the better.


Would I do it over? Yes! Except my wife might leave me and she is worth more than the whole bag. Why is she opposed? Because the hole in my life caused by this project is total. I did not realize it as it went forward, but now that we approach an end, I can see that this project has been all-consuming. It should not be so, but then, is not architecture all-consuming?
Michael Charry, Music Director and Conductor of the Nashville Symphony since 1976, epitomizes the cultural growth and versatility which are reshaping the arts in Nashville. His talent and vibrant personality add a liveliness to symphonic music that is best illustrated by the symphony's broad-based community support and by a near sell-out of subscription tickets. In an interview for the Tennessee Architect, Charry talked about the Center's design, its architect and its impact upon the arts in Tennessee:

"The James K. Polk Center is a facility where art, music and professionalism can occur. The open spaces are provocative and fascinating, inviting and stimulating artistic happenings. Restrained and tasteful with its rich, warm textures, the whole center is done with great style.

"To have combined so many elements in one block is a major feat, and the building is a radically innovative engineering concept. I love the distinctive girders at the top; they give me a sense of being in this century and frankly state their function without a cosmetic overlay.

"The plans for the Center had been developed before I arrived in Nashville, but I studied them carefully and recognized the consideration behind them. The design decisions were practical and efficient, reflecting on the architects as artistic, thinking people who carefully did their homework. Bruce Crabtree maintained his artistic integrity throughout the difficult construction period, performing nobly in every way, as a gentleman and an artist.

"I have the highest respect for the work of Larry Kirkegaard, the center's acoustical designer. He is capable in a field where difficulties are enormous and successes rare. We hope he'll spend sufficient time in Nashville to help us explore Andrew Jackson Hall's potential. As one of the best looking, best equipped, and potentially best sounding halls in the world, the presence of Kirkegaard is essential to perfect what he has made possible.

"Andrew Jackson Hall reminds me of the dazzling halls of Europe, deserving international attention, with its breathtaking view from the stage. It challenges performers to aspire to international artistic standards, as well. A place where the audience can concentrate in comfort, the city and state governments are to be congratulated for their great achievement. That government and citizenry could jointly build an art center is a source of great pride.

"A primary reason I was attracted to Nashville was the privilege and responsibility of building an orchestra and leading it into a new hall. Having struggled with the acoustics of the War Memorial Auditorium, Jackson Hall now gives us a completely honest sound—whatever we do will be heard—and constantly challenges us to strive to be better.

"I read a horror story in the New York Times of an orchestra which moved into a new hall, inviting New York critics to the opening performance. Critical response described a $100,000 orchestra in a million dollar hall. I was determined that no one say the Nashville Symphony was unworthy of the hall. I feel we have succeeded."

(Nashville's million dollar conductor was trained at the Oberlin Conservatory of Music and the Juilliard School of Music. The Fulbright Scholar has traveled from Central and South America to Europe, Scandinavia and the Far East. Selected in a national competition by Conductor George Szell to be apprentice conductor of The Cleveland Orchestra, he served as the Orchestra's Assistant Conductor and Associate Music Director of the Lake Erie Opera Theatre before coming to Nashville.)
System Drafting Technology

By Ed Powers

Following is a summary of the process we at Gresham and Smith experienced as we streamlined our production technology.

A firm cannot formulate a radical new production system overnight. Just a few of the many areas to explore before a system could be developed were incorporating an educational program, working with production companies and purchasing new materials and equipment.

We first established the following goals for our system:

1. The system must produce outstanding quality.
2. The system must be faster to produce than conventional methods.
3. Errors must be kept to a minimum.
4. The system must be flexible.
5. The system must cost less to produce than previous methods.

Task forces investigated means, developed procedures and eventually implemented the new systems. These groups determined that the first prerequisite to successfully produce a system was to find reproduction houses with the expertise to provide the necessary printing. After interviewing several firms to determine their capabilities, the task forces found both Atlanta Blue Print & Graphics Company and Arrow Products, Inc., of Nashville were qualified to assist us in developing the techniques, purchasing the materials and providing direction in the photographic processes. Commercial Engraving and Leilyett and Rogers of Nashville provided the expertise in developing the photographic and offset printing process. As a result of their contributions, these reproduction and lithographic companies have become vital members of the production team. The importance of close communication and working relationships between disciplines and the reproduction houses is essential to our system.

Once the basic framework of the system was established, it was imperative that a "guide" be developed to assure quality control. A drafting manual was developed, printed and issued to all persons engaged in the production of construction documents.

The manual contains the following sections: General Drafting Procedures, Overlay Drafting Procedures, Cut and Paste Drafting Procedures, Photodrafting Procedures, Coordination of Consultant Documents, Drawing Numbering System, Dimensioning, Graphics Symbols, Abbreviations, Materials Indications, Standard Detail Sheets, Standard Stick-on Details, Finish and Color Schedule, Door and Frame Schedule and Details, Casework Schedule, Miscellaneous Details and Reprints.

The sections were designed to insure consistency and accuracy as well as to outline the procedures for our system. All sections are continually updated to reflect changes in our methods.

Overlay drafting is the basis of the system; however, to incorporate other techniques required that we organize and standardize certain features. For example, it was necessary to establish new sheet sizes, provide materials for organizing a project and standardize repetitive drawings.

A standard Mylar sheet size of 34x44", (a multiple of 8½x11") was developed which includes perforations for pin registration and a printed title block. Mylar sheets of the same size with pin registration perforations, a non-reproducible blue grid in ⅛" increments, and a "recipe block" for plan composition are used for overlay drafting.

The printed grid proved beneficial for "lining up" stick-ons and serves as guide lines for lettering.

Without paper organization, needless man hours are wasted and errors occur which result in budget overruns. As an aid to organizing a project we printed 8½x11" vellum sheets of our standard Mylar drafting sheet. The sheets are used for preplanning each project and are a valuable aid in composing the working drawings. Rough sketches are drawn of the detail and plans anticipated in the job. The organizational plan as developed by the project coordinator and his team is reviewed by the Project Architect, Director of Architectural Services and the Director of Quality Control prior to beginning production drawings.

The time required for this review has eliminated unnecessary drawing, improved sheet composition and allowed dollar savings in the reproduction process.

For planning a project using the overlay techniques, an overlay kit is furnished to each project coordinator. The package includes 8½x11" organization sheets with 1/8" printed grid, a sheet for listing the printing schedule and an index of Drawings sheet.

Standardization is another feature of the system which has saved considerable man-hours. The area in which we found the most repetition was detailing. Therefore, we developed over one hundred standard...
details on an 8½x11" paper, categorized them according to the CSI divisions for construction documents, and incorporated them in a manual issued to all production personnel. The copies of original details are on file in the printroom and by simply calling the reproduction department an individual can have a print or stick-on made and delivered to his desk. The process requires only a few minutes as compared to hours that would be required for redrawing. We estimate that one full sheet of stick-on details saves approximately 100 man hours compared to redrawing the details. The finished drawings are photographically reduced 50% and printed by offset. Color and screening are applied to certain sheets for added clarity. The readability and excellent quality of the reduced sets have made them acceptable to contractors. The quality of the finished product has resulted in better pricing by the contractor since he was issued an easily-interpreted document. Obviously this has benefitted the client who is interested in receiving the lowest cost possible for his project. The system is faster because it allows for team drafting. This means that more personnel can be involved in the production of the plans at a given time.

Under our system, once the plan layout is complete, a print called a “throwaway sepia” is made. The throwaway sepia is distributed to all disciplines so they can begin their work. A clear Mylar sheet is placed over the sepias and descriptive data is added. Composites of these sheets are then printed by offset. If the project is a renovation, the system uses photography to transfer affected portions of the existing building onto reproducible work sheets which become base plans. This process allows for fast tracking a project by releasing certain portions of the project early, e.g., civil or structural drawings. Standard details, stick-on lettering, standard forms for door, color and finish schedules, applique and cut and paste techniques are all part of the system which produces work in less time than the conventional process.

A final feature of our system, which has proven quite beneficial in reducing errors and inconsistencies, is a book of drawing coordination notes. This book of notes is issued to each production team and is used by personnel to relate each item drawn to its counterpart in the specifications. The notes prevent inconsistencies between drawings and specifications, drawing too much or not showing enough, and assists the specifier in properly covering the product.

The firm has now produced approximately 200 projects with our system and new projects are on the boards. With each new project the system has improved. By establishing goals in the beginning and achieving those goals by a dedicated team effort, our documents have been favorably received by builders, materials suppliers, agencies, and, most of all, by our clients.

EDITOR’S NOTE: Ed Powers, Jr., is a technical associate with Gresham and Smith. He will be conducting two TSA seminars on system drafting: December 12-13, Buffalo Valley Resort, Johnson City; January 16-17, Memphis. Contact the TSA office for details.

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CRS has used the squatters technique for over 30 years. It would seem good to evaluate its effectiveness now and to determine the potential for its future use in our architectural practice.

History and Evolution
The term "squatters" has a Southwestern origin. It was easily understood in Oklahoma where we used it to refer to intensive programming and design activities on our first school project 400 miles away from our office. We "squatted"—we set up a temporary office in our client's territory (a borrowed library classroom) so that our clients (school board members, school superintendent and principals, teachers and parents) could participate in the programming/design process involving two elementary schools.

Since two of the firm's principals were architectural professors, it should not be surprising that we adapted the academic sketch problem intensity to solve three operational problems: (1) long-distance practice, (2) the need for concentrated team effort, and (3) the need for client participation.

Setting up an "office" practically in view of the site and in the client's territory where the users and the owners are available for interaction and decision-making is a good solution to the problems of long-distance practice. Excellent efficiency is achievable by isolating the team members from the telephone and other projects. In this way they can concentrate on the task at hand.

Most colleges still use one to three-day sketch problems to teach design. CRS extended the time to a five-day working week domestically and to ten days internationally. Initially the last week of a long design problem was known as "charette week," from the French word for the wheeled cart used to transport the finished drawings. Today the profession uses "squatters" and "charette" interchangeably to refer to intensive work sessions. Short sketch problems are international in character. They are called "repentinases" (suddenly) in Argentina and "parrillas" (cooking grills) in Mexico.

The Squatters Process Today
At first both programming and design activities were scheduled for the same squatters week because the projects were small and simple. As the projects grew bigger and more complex it became necessary to schedule two separate squatters—one for programming and the other for design. A period of time between the two squatters sessions is required by the client to test the validity of decisions made in programming and by the designer to provide the gestation time so necessary to the creative process.

To demonstrate the squatters process as it is used by CRS today, let's assume the average schematic design phase lasts twelve weeks. We devote the first six weeks to determining the feasibility of the project and analyzing the design problem. The final six weeks we devote to solving the problem and documenting the schematic design solution.

There are several critical periods during this twelve week schedule. The first is a kick-off meeting with key client decision-makers to establish the project goals and to gather basic data. This meeting occurs during the first week. During the next two weeks, the programming team works in-house to prepare the routine analysis of advanced information and the presentation material that is necessary for a successful squatters. The fourth week is for the intensive weekend-long work session—the programming squatters.

Following the squatters, we quickly assemble the program document, which is sent back to the client for review. After the client approves the report, the programmers present the program to the design team. During this meeting, the designer and the programmer summarize the problem statements.

Stating the problem is the last step in programming and the first step in design. We are in the seventh week now and the design team begins preparing for the design squatters. The five day design squatters takes place in the ninth week. After the squatters the design team prepares the final documentation and presentation. If everything proceeds as planned, the final presentation is ready at the end of the twelfth week.

A squatters follows a well thought out agenda. Moreover, the programming squatters has a different agenda than the design squatters. Both begin on Monday morning with setting up the work room. We have held squatters in board rooms, attics, basements, hotel rooms and classrooms. The most important feature of the work room is plenty of wall space for pinning up displays.

The Programming Squatters
An early kick-off meeting is held for all participants. This session entails an explanation of the purpose for the week's meeting, the schedule of activities and an overview of the status of the project at that time. A programming squatters proceeds through Wednesday with interviews of individual client user groups. Each group reviews their previously submitted requirements. We often refer to these requests as the client's "want list." On Thursday, the programming team consolidates all of the information reviewed over the past three days. We prepare a preliminary report balancing the area, quality level and cost budget requirements. A presentation is held at the end of the day to key client decision-makers. At this meeting we determine the project feasibility.
Often the user requests (the wants) are more than is possible within the budget. It’s important, therefore, to set priorities and to make decisions about the project scope.

After this session, often we meet again with individual user groups to adjust the requirements. We reserve Friday morning for this purpose and for preparing the final presentation. Early Friday afternoon we make a final presentation to all participants and ask for a preliminary approval of the program as it stands.

The Design Squatters
The first afternoon of a design squatters is often spent visiting the site, since prior to this time the designer has only seen the site analysis in the program. During Tuesday and Wednesday, the design team studies alternative solutions. At the end of the day on Wednesday the design/client team evaluates the alternatives and selects one to develop. On Thursday the design team prepares more detailed drawings and builds a model of the proposed building. Friday afternoon, we make a presentation of the schematic design solution along with an update of the delivery schedule and the cost estimate for tentative approval.

This is, of course, an ideal schematic design schedule and squatters agenda for programming and design. In practice, however, each schedule and each squatters session is different.

The real world of the CRS squatters includes projects such as a collegiate sports arena, a municipal zoo facility, a furniture factory in the Midwest, and an African university. The success of the squatters technique lies in its adaptability: to programming, design, or hybrids, and to the unique circumstances of each project.

University of Iowa Arena-Programming Squatters
Client participation in the process and interaction with the users are keys to a successful squatters. The programming squatters for the University of Iowa arena was a classic example of user participation.

Projects, coaches, athletes, professors—almost everyone with an interest participated and contributed during the course of our week of intensive work sessions in Iowa. Our format was the same as any squatters, with daily work sessions between the CRS team and the users, but the distinguishing characteristic was the clients’ superb organization of their people for involvement. They were aware of the squatters process, unfailingly available, and ready to make decisions on the spot.

Houston Zoo Large Cat Facility—Design Squatters
The squatters technique works with almost any building type, client, or user group—even if the user group is composed of 500-lb. Siberian tigers. The main point of this example is adaptability. We adapted our technique to a new building type and a new user group. It was demanding, challenging, enlightening, and a lot of fun.

The design squatters for the Houston Zoo Large Cat Facility took place in the zoo itself—in a glass walled party house surrounded by the animal inhabitants of the children’s zoo. The architects were, in fact, in a glass cage.

### SCHEMATIC DESIGN SCHEDULE

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The project involved both building design and landscaping. On-site research was carried out with tours through existing cage building and support areas. Inspiration was everywhere, as the practiced discipline of the design team gave way to frequent walks to view the animals.

The users (lions, tigers, pumas, leopards and jaguars) did not, of course, directly critique the design efforts. Their interests, however, were ably represented by a human advocate and animal expert.

Herman Miller Seating Plant-Hybrid Programming/Design Squatters
A few of our squatters have been neither pure programming nor pure design. A prime example of this type is the hybrid programming/design squatters in Michigan.

The hybrid situation is not ideal, but it does demonstrate an appropriate response to an operational problem: lack of the usual time for completion of programming and design. Accelerated delivery is possible with the squatters technique.

The Herman Miller Seating Plant was programmed and designed in a non-stop twelve day session. Construction began less than two months later. Programming sessions took the first four days. Programming and design then overlapped for one day, followed by a full week of schematic design. The usual separation of programming and design was barely maintained.

The squatters technique was streamlined and concentrated, with only the minimum time for reflection and review. It was a successful squatters because both the architect team and the client team were well organized, highly motivated, and geared for decision making.

University of Maiduguri, Nigeria-Programming Squatters/Design Squatters
Maiduguri is located in the extreme northeastern corner of Nigeria, on the southern edge of the Sahara Desert. The city is very old, remote, and unsophisticated. Com-
munication and transportation are difficult at best.

We have, nonetheless, held many programming and design squatters in Maiduguri during the four-year history of the University of Maiduguri project. The squatters technique is most appropriate for this type of long-distance project.

The technique works as long as people are willing to get involved. Client response to the squatters technique was excellent in this rural African city. Although faculty and client committee members were from all over the world, they all participated and worked toward a common goal.

Evaluation

The squatters technique is primarily a communication device intended to solve problems related to long-distance practice and/or to bring the client team groups into the programming/design process. The workrooms are always selected near the client and the site. There is a need to isolate the team away from our office—especially in our hometown.

Both types of squatters, programming and design, provide us with the opportunity to work with our clients, their consultants, the users, and local professional architects on the spot. It takes an interdisciplinary team to solve complex problems. However, such squatters need to be organized and scheduled to be effective, to bring the right people together at the right time. Most of these people have other projects, other functions which demand their attention; therefore, the need is for a concentrated, coordinated team effort to "live" with this particular task and make decisions. Timely decision making saves time and money for the client.

In programming squatters the intensive work involves user interviews for data gathering and client work sessions for decision making. The information makes up a wall display for all to see, in the form of analysis cards and brown paper sheets. The communication is frank and open, explicit. The emphasis is on client decision making, consensus, and approval. A successful programming squatters is a prerequisite to a successful design squatters, although it does not guarantee it.

In design squatters the intensive work involves bringing all the pertinent information to bear on the task of design and bringing the client team groups into the design team. The exposure of the wall display makes program information available to the team at a glance. The emphasis is on design decision making with the client team looking over our shoulders and participating in formulating the prime concepts.

The time period between the two squatters is critical. When programming and design squatters overlap, there is the possibility that the client had not enough time to reflect on his decisions and that the designer had no gestation time. When the two squatters are separated by a year, chances are the programming information is obsolete and has to be renewed. The optimal time between squatters is about four weeks.

Attitudes Determine Effectiveness

The effectiveness of the squatters technique depends on the attitudes of both the architect and the client. The client may be one person or a group of persons. The one-person client is likely to prefer a one-on-one relationship to avoid being overwhelmed by the architect team. Many architects would prefer this one-on-one relationship since it simplifies communication and decision making. The squatters technique would be inappropriate in this kind of situation, unless a long distance were a factor.

However, a large client group, such as an institutional, corporate, industrial, military, or commercial client, requires special communication devices. In this case the architect could well use the squatters technique. If the client is reluctant to participate in the programming/design process, there is little or no reason to use the squatters technique—unless the client's consultants or members of his staff would be involved. A client may be insulated by a large staff; yet the staff may easily misread his intentions. Timely decision making and open communications, two aims of the squatters technique, are hampered in this case.

Some architects are not good team members: they are not good listeners. Some prefer a less explicit process, even better if some of the information is missing. Some prefer client indecision—and prefer to procrastinate their own designs. All of these architects are not likely to use the squatters technique—but then it is not traditional.

The squatters technique will likely never be widely used for some kinds of projects: where the client is a single individual who participates in the process only indirectly; where the single client is not process oriented but product/solution oriented; where the architect does not work in a team, together with the large group client; or, where the architect believes he can program and design with very little input from the single client.

The future use of the squatters technique in our architectural practice is assured, however, for other projects: with large group clients who would involve the users in an open communication process; at a
long distance from the architect's office; re-
quiring a multi-disciplinary team of profes-
sionals who need to meet for a concentrated
effort; or, in which client decisions and
design decisions need to be accelerated to
meet a time schedule.
It is these kinds of projects that we are en-
countering more and more frequently. In
particular, the squatters technique responds
to the need for open communication; and
today, when there seems to be a whole
social movement toward consumerism,
toward worker satisfaction, toward public
scrutiny of government and corporate
spending, there is a very real benefit in the
client and user involvement which the
squatters technique provides. Especially in
projects involving large group clients, the
squatters technique is and will continue to
be an effective solution to the problems of
client/user architect communication.
Frank A. Stasiowski, AIA

Competition for Federal Government work becomes especially keen when the economy turns downward. This year is no different. Some recent Commerce Business Daily (CBD) announcements have produced over 1,000 responses.

Although government design work is statistically less profitable than private sector work, it is perceived by most design firms to be stable and consistent through recessionary fluctuations. Thus this year more design firms have begun the arduous task of filling out lengthy government selection forms SF254 and SF255 to begin procurement of Federal Government design work. Some believe that the best way to get work is to answer as many CBD ads as possible, but when we asked selection officials how they view these "respond to anything" firms, they candidly told us that firms who simply fill in the blanks to respond, consistently score well below average in obtaining work. They are known to be "shotgun" by government agencies and in many cases avoided because of their approach without regard for whatever real qualifications they may have. Then how does a firm get government work?

Procurement of Federal work requires a four stage process aimed at understanding how government agencies select, and designed to respond with rifle shot accuracy to a particular set of criteria which will identify your firm as the only possible firm able to do the work:

**Stage 1** - Successfully filling out and filing a SF254 A/E questionnaire for each discipline in which you wish to obtain work.

**Stage 2** - Learning exactly how each federal government agency works with regard to selection of design professionals by repeatedly visiting in person their office in the region in which you wish to obtain work.

**Stage 3** - Knowing enough about a particular agency's needs so that you can anticipate its upcoming building program, and knowing enough people at the agency to obtain vitally candid information about the functional needs of facilities under consideration.

**Stage 4** - Accurately completing a SF255 for a project that is announced which is sent at the right time to the right person at the selecting agency.

Each of the four stages is as important as the next but none are more crucial than Stage 1 and Stage 4. The easiest way to be eliminated from selection is to inappropriately complete SF254 or SF255.

**Filling Out A SF254 (General Questionnaire) and SF255 (Specific Project Questionnaire)**

When filling out SF254 it is good to remember how agencies handle the thousands they receive. A general rule is not to spiral bind your 254 since most are filed in file folders or 3-ring bound by the agency and may be lost or thrown out if they don't fit or can't be easily retrieved. For small projects many agencies assemble short lists directly from their 254 files, and thus a properly completed form can start you on the road to selection.

Also, even though you have a SF254 on file with an agency, it makes good sense for you to submit another more specific copy of SF254 with each submittal of SF255 just in case the agency has lost your original, or more importantly to provide you an opportunity to list more projects specifically applicable to the requirements of the one being offered.

All Federal agencies are under great political pressure to select firms close geographically to the project being offered. Therefore submittals should reflect your firm's proximity to the project, and if you can't, you should consider not submitting for the project. Also, when filling out Items 8, 9 and 10 be certain to highlight a branch office or regional office if closer to the project than the home office.

**The Selection Process**

Government selection committees examine three key points when beginning their process of design firm selection. Each is vital, and should be given tantamount attention if you are serious about getting a particular project:

1. Your cover letter. Use three paragraphs on one page to succinctly state the client why your firm is uniquely qualified for the project at hand. The first paragraph is most important, and it should specifically respond to the most important client need. If your letter doesn't prompt interest, your submittal may go no farther.

2. Item 10 on SF254. Most selection committees make their "first cut" from examination of item 10 on SF254. Therefore, it is extremely important that experience specifically relevant to the project be emphasized. This is an important reason for submitting another SF254 on each project allowing you to tailor your material to a particular situation. Most of your important project information contained on SF255 will not be read unless these first two items get you through the first cut. More than 60% of all applications don't make it.

3. Item 10 on SF255. Item 10 should exemplify item 10 from SF254 reinforcing your discipline by discipline capability to handle the project. Remember that you will not be there to explain things. Keep them simple, direct and specific to the project needs. Stay away from superlatives and long explanations.
If your submittal makes it to this point, you are still not in the clear. After the first cut (which may take a committee only a couple hours for up to 300 submittals), a specific examination of your proposed project organization and specific staff assignments is made. For this reason include a tailored project organization chart (not a firmwide one), and only the resumes of your actual project team. Many firms believe that resumes of the top management are important, but they are not unless your top man will be the day to day project manager. Government clients can read right through the old "partner-in-charge" approach, and generally don't like it; They want to know who specifically will do the work. Also, throw out your standard resumes in favor of resumes tailored to the specific project. Put no pictures on the resume. They can work against you but generally don't work for you.

Be wary of cost reimbursement joint ventures with other A/E's when going after government work. Government clients have had more "bad" experience than you with poor joint ventures, and generally don't like them. If you must joint venture, establish a lead firm with others in a consulting role to it, and be prepared to defend your proposed sub contracts in an interview.

Submittal of SF255 with attachments may be the only shot your firm has to make a short list. Therefore use your words and submitted data wisely. For instance, government clients must spread the work around. Remember this when answering item 9 on SF255 which asks for work being done currently with government agencies. If there is any way to interpret a project as complete (i.e. one that is 98% complete is really finished) you should not list it. It is better to have had work with an agency than to have current work with them. This also means that you shouldn't go after a small project with the hope of getting next years big job with a particular agency. If your small project is dragged out or put on hold, it may work against you in the next selection.

Mailing Your Submittal
A firm once told us that when submitting to the Post Office Department, they decided to use the Postal Service for fear that the agency would look negatively on a submittal shipped via Federal Express. When the submittal arrived late, and they were notified by the agency of their rejection, the client officer asked why they hadn't submitted via UPS or Federal Express . . . The point is that negative or not, don't be late. Also remember that submittals are reviewed by architects and engineers who appreciate neat, clean, graphic presentations. Neat and clean doesn't mean leather bound with gold leaf lettering. It does mean showing care in assembly, packaging and mailing your submittal. All additional material sent such as marketing brochures should have an expressed purpose. Do not be redundant.

Client Tips
Several selection committee representatives offered us the following additional tips when making a government submittal.
1. If you have visited the site, indicate so in your cover letter.
2. Bind your cover letter into the submittal. Many are lost eliminating firms instantly.
3. Use tabs to separate different parts of the submittal.
4. Keep all items short and simple. Long, verbose submittals probably won't be read anyway.
5. Avoid the use of in house "buzz words". Wherever possible use the clients terminology not yours.
6. If important to the client, refer to supplemental material in your cover letter so that it will be found.
7. Tailor the list of experience codes on SF254 to the particular project for which you are submitting.

The Future
Government is growing and will grow according to all predictions. Thus the world's largest client will get bigger and probably more bureaucratic. Spreading the work fairly into all geographies will continue to be important. Therefore your firm can and will get government work if it follows a consistent, simple, and direct process of submitting SF254 and SF255. Although these forms are standard on the Federal level, don't expect states or municipalities to simply adopt them without significant change. Most of the change occurs because of varying criteria for selection as a result of differing regional and state political pressures.

Finally, if everything that I've stated here seems overburdening, unrealistic or just too much work for you, I strongly recommend that you concentrate your marketing effort in the more profitable private sector, and avoid being one of the 999 firms not selected for the next project announced in CBD.
James A. Patrick, Ph.D.

When future historians of architecture and of ideas seek to show, as they almost certainly must, that ours was a civilization unable to comprehend its own sources, they will probably suggest that our distinctively modern sensibilities were born from the collapse of tradition, from the failure of our past as living presence and its subsequent reemergence as history in the modern sense. We are usually taught in school to call the sixteenth-century crisis which signaled the failure of the tradition the dissolution of medieval Europe, the rise of science, the Renaissance, or the Reformation. Between these there are important and complicated relationships, but the common thread was the sudden failure of a civilization to comprehend its own past as useable and present. History in the modern sense consists of an attempt to rediscover, reengage, and reconstruct the past as past; and sixteenth-century historical writing, with its architectural revivals that comprised the Renaissance styles (themselves a kind of historical writing), began a series of near-heroic attempts on the part of post-medieval civilization to come to terms with the authority of a past which no longer lived in imagination but which would not let us go.

Architects might reconstruct this past with self-conscious precision (Alberti), appropriate it as grist for the mills of individual genius (Michaelsangelo), transform its solemn syntax with a radical new joy (Bernini), recreate it as a backdrop for a revivified golden age (Robert Adam, Strickland, and classicism; Pugin, Ruskin, and Gothic), treat it as the happy hunting ground of critical, historical fancy (late nineteenth-century eclecticism), employ it as the medium through which design could be reformed (Richardson), commandeer the universality of classicism as dress for the first essentially modern, abstractive theory of design (Beaux-Arts dessin), or attack history itself in the name of theory and progress (Mies and the other moderns). But the problem was always our history as past, our inability to recover or abandon it, and to this dialectic the streets of Somerville, Franklin, and Athens are sufficient witnesses.

Systematically, the architecture of the past century has consisted of three movements, each a critical attempt to deal successfully with the architectural past. The Queen Anne facades on Nashville's Russell Street and the Knox County Courthouse of 1884 are among the finest attempts of late nineteenth-century eclecticism to reintegrate history through design. For A.C. Bruce, Hugh C. Thompson, Mathias Baldwin, and E.C. Jones the new steam technology provided a transcendence over materials which was neatly analogous to their own surrealistic and impressionistic use of the styles of the architectural past. This trivialization of the historical, imaged in the Second Empire, Gothic, and Italianate designs of the postwar period, provided a definitive criticism of the historicism of Dakin, Upjohn, and Strickland, and paved the way for the modern movement. Born at Weimar and Spring Green, the modern movement was intellectual, highly self-conscious, replete with manifestoes and programs, disdainful of the architectural content of the western tradition, but as serious as Strickland or Alberti in its search for a theoretical basis for design. The great moderns, Mies, Le Corbusier, Wright, van Doesburg, never lacked a theory, though their agreement consisted chiefly in the judgement that history as a source was dead. But as their work came to a close, it was increasingly clear that the traditional sources of meaning in western architecture, history and theory, were exhausted. What followed is Post-Modernism, which is, among other things, a deliberate attempt to distance architecture from these failing sources by displaying the theoretical concerns of the modern movement in precisely that light which the fantasies of the eclectics cast upon the serious historicism of the 1850s.

The heart of Post-Modernism is irony, laced liberally with whimsy and delight. If we ask for geometry, the formality invoked by most of the moderns to give their designs a high seriousness, Post-Modernism will give us geometry to a surfeit: pyramids, steps, circles, indeterminate curves, and kits of parts. When we request a theory, Post-Modernism gives us configurations seemingly determined by whim and tempered by a good humor (the Sydney Opera house, Stanley Tigerman's Daisy house, Leo Krier's La Villette project). And as Peichlin and Reinhardt's Maison Tontini (Torricella, Switzerland, 1972-1974) shows, even Palladio can be employed with a gentle irony which mocks tradition through its unanticipated fulfillment. Post-Modern architects, Venturi for example, make observations, but if they have a theory it is an anti-theory, and its presentation as a system could only destroy their movement, if it is a movement.

Not that Post-Modernism itself is without intellectual content, power, interest, affect, and even (intermittently) beauty and utility. All these it has, or can have; but, at least on its surface, it offers no clues to hierarchy or progression, no relation to an ordered world, no insights into human experience beyond an eclectic delight. This is not of course to say that we who live and think and design as Post-Moderns do not have meanings, clues to order, values, happiness, virtues, and successes, to say nothing of our pains, sufferings, and moral and social failures. Yet it is the distinctive glory and in
giving limitation of architecture in its very character as the art which forms the shell between our privacy and our society, that architecture speaks not merely of private but of public ways of life, of a civilization. And architecture is, as Charles Jencks has observed, “in a bit of a fix” when our public way of life loses its credibility.

Architecture can go ironic, but irony has its limits. And at that limit Post-Modernism celebrates ambivalently the loss of a credible public order (and hence of a credible public image), even as its irony and whimsy affirm the possibility of life after civilization. But representing as it does a commentary on the theorizing of the modern movement which is strictly analogous to the commentary of the eclectics on the early nineteenth-century revivals, Post-Modernism cannot offer those positive clues to the significance of time and place which great architecture traditionally affords. The clues are there, but they are buried deep within Post-Modern design, just as the texture of order and meaning in a contemporary novel or painting is always discerned beyond a foreground characterized by dislocation and malaise. Because Post-Modernism does speak the mind of its civilization, it can be vindicated as high art.

We are all familiar with the world in which a hidden interior order struggles to express itself through an essentially disordered social surface and in a setting lacking access to a public past or public principle. But because Post-Modernism is still so much a commentary on the failure of its own past, it will probably remain a great, brilliant, but critical moment in western architectural history.

After Post-Modernism has blown history (as past) and theory (as solution) off our horizons, the essential nature of architecture as human phenomenon may emerge. Architecture is the transformation of place by imagination, giving to the ambiguous orders of space, time, and nature the distinctive stamp of human hope which perfects our three-dimensional knowledge of ourselves and of the world. Its secondary subjects are materials, functions, and space, but its primary subject is man as embodied, bound to time, to order, progression, and to meaning. As Post-Modernism fades, an opportunity for the rebirth of that direct engagement with the human realities from which the new and deep can grow will present itself. The erudite mistakes of early twentieth-century theory and practice may then appear as exercises prophetic of a new willingness to examine the sources of design. Perhaps none of it will finally be lost.

Theory is an important way of interpreting design, and certainly the Post-Modern fascination with play and delight is essentially humanizing. But if there is a single philosophical clue to the architectural future, I suspect is is phenomenology, a willingness to engage reality and to allow it to speak. The moderns of the 1920s were not good listeners, for they came to both design and criticism burdened with assumptions which seemed scientific and economically defensible, and therefore legitimate. Any significant insight about architecture is, however, more likely to grow from a renewed interest in the subject of architecture—man. And the aspects of human experience most essential for understanding are not quantifiable patterns or footages but the ability of mankind universally to inhabit place with a certain joy and satisfaction, and of every man to image his own vision of order and significance through design. Architects exist in order to serve those who can see what their time and place, indeed their lives, mean, but who cannot see clearly; and the work of architecture is to enter and clarify that vision. Nothing is as important to that task as a continuing reflection on the humane.
Building Strategies: Design/Bid vs CM vs Design/Build

Robert Seals, AIA

We are what we build. Through the ages, as we have built what we have been, the roles of principal parties to the building process, as well as the process itself, have continually evolved to reflect the cultural forces of the time. In recent times a primary force has been economic in nature, and the perennial concern of accountability has taken on added shades of meaning.

Because of the sums of money involved in construction, the element of risk looms overhead like a hungry demon. Only to the degree that risk is successfully dealt with and controlled can a building project emerge as a successful business transaction. The only tool for controlling risk in this context is the development of effective information, its communication and documentation. In the most familiar form of building process, an architect is engaged to translate the owner’s needs into a design, which becomes the basis for construction documents around which a contract for construction can be drawn; bids are taken and the successful bidder gets the contract, which is administered by the architect as the owner’s advocate. Simply stated, the architect and owner desires in detail what is wanted, and when the cost is known, it is built. A fundamental element of the process is accountability:

The architect is accountable for information, and the contractor for execution; the risk of cost is borne by the contractor.

The approach, which has come to be called Design/Bid for alliterative purposes, is compelling in its logic: In an orderly sequence of events, the role and responsibility of each party to the proceedings are clearly defined, cost is controlled through estimates and competitive bidding and/or the adjustments of re-bidding, negotiation, addenda and change orders, and there is a reasonable system of checks and balances calculated to minimize risk to all concerned. But the strength of the process, its linearity, requires time and becomes its greatest weakness in the face of galloping inflation and ballooning interest rates. Independent activities which could take place concurrently are performed sequentially; thousands of cubic yards of foundation construction await the refinement of a handrail detail.

As a response to this failing, the concept of Fast-Track evolved wherein design and construction are phased to allow the construction to be executed in a series of contracts, each commencing upon completion of the appropriate documents; thus the foundation may be in place long before the handrail problem is addressed. With the involvement of a series of general contractors and multiple subs, whose work must interface without gap or overlap, the complex demands of scheduling and orchestrating such diverse forces have created for Contract Management an independent role in the process. In effect, the construction manager becomes the owner’s agent in acquiring the building. In order to be most effective, the construction manager should be involved from the beginning of the process, bringing to the design phase expertise in construction technique, cost control, systems, scheduling, etc., in addition to contributing added...
discipline and professional cost analysis during the formative stages. Construction Management increases competition at the bidding level by dividing the construction into increments which can be executed by smaller contractors. Supplanting the prime contractor and performing for a negotiated fee, the construction manager passes general overhead expense directly to the owner; savings against the usual contractor profit and overhead contingency figure also pass to the owner.

While significant savings in time and money are possible in this approach, roles and responsibilities become redefined and formative errors become magnified and indelible. Because the construction manager assumes no liability, accountability for execution becomes more diffuse, and the risk of cost is borne by the owner. The architect is solely accountable for information co-authored with the construction manager. The architect administers the contract(s), but because the decision-making process extends throughout construction, the owner must continuously remain actively and directly involved.

While final cost is highly predictable, the bottom line is not in sight until the last bid is taken. If, to combat this failing, the construction manager performs for a guaranteed maximum construction price and becomes vendor of the building, his cost estimates necessarily will be based in large part upon partially developed information. The price will consequently reflect substantial contingency allowance, and some portion of the projected savings will be lost.

A second alternative to Design/Bid exists in the form of Design/Build. In this approach the architect and prime contractor combine to become the vendor to the owner, supplying complete design and construction services. The architect's professional responsibilities for design and documentation are the same as in the other strategies except that, because expectations of performance by the contractor are implicit in the Designer/Builder entity, the documents may be abbreviated accordingly. A pitfall here is that essential information may also become abbreviated.

A form of Fast-Track is possible in Design/Build, with a single prime contractor and competitively bid subcontracts. A more familiar form of the approach provides for a lump-sum price and moderately telescoped document and construction phases for a reduction in total project delivery time.

Significant savings are again possible, and the owner enjoys the advantage of direct and single accountability for all phases of the project. However, the architect does not function as his contractual advocate, and it is incumbent upon the owner's best interest to become extensively involved in the process to assure that his own body of information is complete. In the latter of the forms mentioned in the previous paragraph, the owner may retain the option to revert to Design/Bid if he finds the price or the process unacceptable. In this option the architect would change hats and assume the advocate role. The original prime contractor could not then ethically bid for the work; however, because a modified version of CM is also possible at this point, the role of construction manager would then logically be his.

Thus, our changing times have produced a variety of approaches to the building process, and they have only been lightly brushed here. The available options become amplified both by their potential for being combined, and by the possibility of such concepts as Life Cycle Costing and Value Engineering. The selection of the most appropriate strategy for a given project must come only after the most ardent study. Factors to be weighed include the scope and complexity of the project, financing, target delivery time, internal program demands, climate, labor market, construction technique, and, most significantly, the personnel available to comprise the team.

If the construction process is compacted, the number of contingencies increases, and there is a corollary rise in the element of risk and the need to devise ways to manage it. Where risk is assigned, the seed for adversary relationship is planted. Adversary relationships and teamwork are generally mutually exclusive. The parties to such a strategy, then, must be expert, conscientious, reasonable people who will work diligently toward a mutual goal, minimizing risk to all.

We build what we are.
Masonry Institute Design Awards Announced

Six Memphis architectural firms recently received design awards from the Masonry Institute of Memphis in accord with Memphis Chapter, AIA.

Top honors, "excellence in masonry" were awarded to Walk Jones and Francis Mah, Inc. for Baptist Memorial Hospital East; to McGehee, Nicholson, Burke, Architects, Inc. for the Germantown Municipal Center; and to Thorne Howe Stratton Strong Architects, Inc., for the Pink Palace Museum Addition. Masonry contractor for these projects was Everett W. Cook and Sons.

Two projects won merit awards: Germantown Post Office, Madewell Masonry Inc., masonry contractor; and the Winfield Dunn Dental Clinic Building, masonry contractor, F.A. Norris and Son; both designed by Gassner Nathan and Partners, Architects/Planners, Inc. A special award was given to Twelve Oaks Condominiums, designed by Taylor and Crump Architects, Inc.; masonry contractor, John Stepney.

"The purpose of the program is to recognize the outstanding design and use of masonry by Memphis architects. Masonry is a very traditional building material, and it is used with understanding by several local architects," said Morgan Fields, executive director of the Masonry Institute of Memphis.

The jury was composed of John Macsai, FAIA; C. William Brubaker, FAIA; and John I. Scholssman, FAIA.
Masonry Institute Design Awards Announced

Baptist Memorial Hospital East

Germantown Post Office Building

Photo by Nick Wheeler

Photo by Alan Kawczner
James R. Franklin, AIA

This is a war story. A story to report what has happened to our firm since going from a computer service bureau to mini computer, to micro computer—a report to other firms our own size of the problems which occurred in that process. In a sense, it's a report from the front lines, at least in our view, believing as we do that the future in computer applications for small architectural firms lies with the micros.

It started in the mid-sixties. As a 12-person firm we subscribed to a bookkeeping computer service. At year-end we realized that no one was reading the reports. There was a credibility gap; and by the time the printouts were back from the service bureau, they seemed about as timely as last year's newspaper, fit for use by rear-vision CPA's only.

By the mid-seventies, approaching our present size of 30 architectural employees and handling about 40 jobs a year, the manual process was becoming so cumbersome that when a big new hospital job came along we seemed to face a choice between computerization or hiring two more administrative personnel. We determined we wouldn't save money either way, but with the computer we should gain a lot more useful information.

We also felt the computer had capabilities beyond bookkeeping—as a design tool. If we were smart enough to use it properly. We had seen or knew about some million-dollar operations in the big firms, and we were familiar with Harper & Schulman; but our previous lag time experience with the local service bureau convinced us we would not make proper use of the output we'd get back. It seems incredible now that as recently as four or five years ago there didn't seem to be much else available except an expensive mini-computer geared strictly to business, but that was all we could find.

So in 1978 we first forayed into the adventure of hardware/software with our own programmer and experienced bookkeeper. We leased a $36,000 IBM System 32 and developed our own software modifications to alter an essentially retail bean-counter into a think-tank capable of yielding the kind of job records and cashflow projections architects need to make rational fee proposals, salary determinations, and loans at the bank. It worked. Our turn-around time on billings alone paid for the lease and our clients, bankers, and tax accountants were all impressed by our detail, thoroughness and knowledge.

In three weeks we evaluated over 150 sight-line comparisons on an arena project that might have taken a man-year to do graphically. Life cycle, cost analysis graphs for some 120 energy retrofit proposals were produced in a matter of days, but we felt we were lease-purchasing a dinosaur.

The computer industry by 1979 was moving so fast that our room of clicking gadgets could now be replaced for the price of an automobile by a disk size, off-the-shelf micro with three times the capacity. The problem, we felt, would be the software. The industry has such a ready "horizontal" market (see "Taming Little Giants", PA, July of '80), that is, mammoth numbers of identical applications, that it really wasn't much interested in a lot of prickly and unique problems in one minor and relatively low-paid profession—a vertical market.

But, despite the problems, we bought a Radio Shack TRS-80 Model 11 figuring we could trade hardware like automobiles every two years, still beat the price of the old mini-computer, and maybe approach keeping abreast of the industry's phenomenal advances. The Radio Shack machine was delivered in March. Firm principal and systems man, Jim Scott, encountered more obstacles than expected in making the transition from mini to micro computers. What he was discovering was that conversion is always five times as difficult as anticipated, and that three years of previous work cannot be duplicated in three months.

The weeks stretched to months and the rest of us realized belatedly the dimensions of the struggle. Fiscal year-end was two weeks past when we panicked, and in response, Jim picked up his machine components (they're that small) and hid out in a hotel for a week, thinking it over. His solution was to use three times the capacity of the Shack machine, and maybe approach cost analysis graphs for some 120 energy retrofit proposals. It worked. Our

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basement room to be able to concentrate better on ironing out the difficulties. Meanwhile, upstairs, we called the tax accountants, went into a crash program of compiling the year-end figures, withstanding a GSA audit, and computing taxes by hand. Project managers rushed to the breach, calculating invoices and job status records. Nightmare. Disruption of job schedules and staff temperaments.

We’re weathering the storm now. The Radio Shack is back in its accustomed central location and working industriously. Taxes are done. It’s all going to work and at this point we’re surveying the experience to see what we learned:

1. Don’t vest all your information or access to it in the head of one operator. Never have we felt so helpless as when we watched the stress cracks in the normal equanimity of Jim Scott.

2. The micro is truly still a good buy and getting better, provided you can get the software. And at this writing, PSME promises master spec available for micro computers later this year and architects all over the country are breaking common ground in programming.

3. The profession needs a clearinghouse of information. PSMJ has begun to provide this. Frank Stasioski has a good new book out entitled Design Computdata. But there is still a real need for continuing dialogue among practicing architects. In trying to write this article we contacted such people as Scott Ferebee in Charlotte, Jim Hillhouse in Birmingham, and Don Emerson in Texas. We’re all looking at or working with micro computers. There’s got to be a lot of duplication of effort.

4. The small firm that waits for micros to evolve is making a mistake. This report started out to be a survey of the micro computer segment of the industry, but over a period of two months of research and calling, we found we couldn’t keep up with the industry fast enough to put a timely article together.

5. The computer industry is disorganized and fragmented. The technology is developing so quickly that we feel the micro is the largest piece of hardware the small firm should try to afford. With an investment of only $8,000-$12,000 in hardware, we plan to be in a position to trade or sell reasonably frequently in the future, in order to maintain and have a moderately up-to-date computer operation. So in spite of our experience, our advice is to look hard at the micros and be prepared for a major expenditure in software. Don’t spend the year of research that many advise is necessary to make the proper selection. Just make sure that the programs you buy do what you want them to do, and are supported by the vendor. If no one on your staff is knowledgeable in processing, consider hiring a consultant instead of trying to sort through all the vendor claims on your own. Make a defensible judgement, get a computer, and anticipate a periodic struggle in the future to convert to new equipment as it becomes available. When the conversion time comes, learn from our experience and plan well or get help.

Would we do it again? Yes. We feel it’s a matter of survival. We believe in the micro computer, not as a future promise, but as a tool chest of capabilities available now. We don’t regard the micro as a bookkeeping device or as a word processor or any other single support or administrative machine. When the right components are put together it’s an added design capability, a complex information processor to extend our abilities as designers and architects. And the small firm of the future needs this kind of detail.
Mud Island Park
At Downtown Memphis On The Mississippi

Roy P. Harrover, AIA

Mud Island is a peninsula of land formed by the Mississippi River at its confluence with the Wolf River. Its southern point contains fifty acres, stretching ten city blocks opposite the central business district of Memphis. In its natural state it was a flat sandbar, undeveloped because it frequently flooded, inaccessible, but having excellent views, west across the Mississippi to the green fields and woods of Arkansas, and east across the Wolf to the Memphis skyline.

In 1974, the City employed my firm to design a fifty acre public park on the southern portion of Mud Island, to support the residential and commercial revitalization of the downtown area. We are to provide, through consultants as necessary, a complete range of professional services, from programming and concept to museum exhibits, landscaping and graphics.

Since Mud Island is in and of the Mississippi River, which bore and nurtured Memphis, I decided to dedicate the park to the lower Mississippi and its valley; to seeing it in a variety of ways, riding its boats, seeing its plants, fish and wildlife, eating its food, hearing its music, and learning of its history, natural history and folklore. This is to be a theme park, not in the gaudy commercial vernacular, but in a more subdued and permanent form.

The park will contain a museum of the Mississippi River, a 4000 seat outdoor amphitheater, restaurants, an outdoor cafe, concession stands, shops, a public marina and yacht club, plazas and viewing platforms, picnic areas, an excursion boat dock, wooded areas and playgrounds and fields, all tied together by a riverwalk, which contains a topographic hydraulic model, 1800 feet long, at a scale of 30 inches to the mile, of the Mississippi, its flood plain and cities, from above Cairo, Illinois to the Gulf of Mexico.

To preserve natural space and a calm environment, no private vehicles will be allowed in the park. Access will be through a 1700 foot long, steel truss, roofed pedestrian bridge, leading from the access terminal on the bluff in downtown Memphis, across the Wolf River, to the viewing tower above the museum building on Mud Island. A cable-driven transit train system, suspended on rails below the bridge, will carry 3,800 passengers per hour, each way.

I realized early that this project was broad beyond the normal limits of architecture. It required the making of a world apart, seen as a total composition against the power and scale of the River, the City, and a massive highway bridge. It required the extension of the urban fabric in a way that would encourage future growth. It required the creation of a sequence of masses and spaces, of concrete and brick and steel, and of earth and rock and woods and fields and flowers; of very large and very small, of open and closed, and of simple and complex. It involved the accurate transmission of history and of the reality of the River itself, through sight and sound and song and story. It required unique creative engineering in the design of the earth fill, dug from the River, which raised the entire park fifteen feet above flood, and in the design of the transit system, unlike any now existing. It required an architecture which was simple and direct like the River, rather than transient.

The park will cost the people of Memphis approximately sixty million dollars, almost all of which is under construction contract. Approximately half of the work is complete. The park will open in 1982. If the public enjoys it, I will be completely happy.
Do Cold Calls Give You Cold Feet?

Patricia Stepp

"We don't have an appointment. It must have been a lack of communication. I'll call you when we have a building program."

This can be a familiar and frustrating scene if you're not prepared—and it's one reason why so many architects avoid this gorgon—the cold call.

But cold calls have become a necessary part of today's marketing of design services and can be one of the most productive marketing research tools. Cold calls can not only help develop a good list of potential clients, but can also provide insight into the types of projects to be built in the next few years—demand for project types because of growth in a given area or a lack of present facilities. And, it can provide information of the availability of monies. Even with a "we don't have an appointment" reaction you've learned two things: he has no building program and this is not the right approach for him. In a typical trip of five cold calls to school superintendents, you might find one school addition two to three years away, get the information that a particular county is developing in the northern area because of a new plant, and find out that another school district anticipates no growth, but wants to do something about a $9,000 a month electric bill in the junior high. Information gleaned from some well placed cold calls can direct a firm several years in advance to develop expertise in another building type or market. The first step is always the same whether for a project, a proposal or a cold call—do your homework. To plan a cold call you need to know what kind of information you want. If you're after the school market, you'll want the names of the school superintendents and board members, their addresses, phone numbers, and some information about the schools in their district. Watching local newspapers will tell you if a school is overcrowded or if repair work is necessary. It will also tell you what other firms are working in the area. You need all of this information to make a good cold call.

If you think you're selling the firm with a cold call, you're wrong. A cold call is for marketing research. You are finding out what the school board's plans are for the next five years. Will they need additional classrooms? Have they completed energy audits? And casually, but carefully, who makes decisions—who selects the architects?

Once you've identified the person you want to see (through clippings, professional associations or phone calls), make an appointment. Allow yourself plenty of time. Sometimes school superintendents get lonely and it can take you longer to get the information you want. Have a secondary list so that if the appointment goes quickly, you can see another individual.

But you don't know what to say or ask? It's really a "blind date," and you're trying to discover as much as you can about that person or company. What are they doing now? What is their projected growth? Who are their customers? What are their products? Find out as much as you can about the area too—are there others in the community who would be helpful. Taking notes sometimes distracts people, but if you need to—just ask if they mind. Try to find out some of their personal likes and dislikes—do they fish or play tennis—find a common ground. A most invaluable friend is the secretary. Cultivate her. She can give you information others would not, schedule appointments or give you the background information to make the cold call easier and more productive.

The final rule is never, but never, forget to follow-up. Let your resource know you listened. When you send that brochure, make sure it's tailored to him. Answer his questions or concerns, or tell him where he can go for information. One city administrator might show special concern for cost control and mention change orders. This type of letter takes longer to write and sometimes you must research the information, but this city official would know you had listened to him.

Even a simple "thank you for your time" can show your special concern by rephrasing some of the things you talked about: "I enjoyed discussing solar energy design with you and how it can be used in an elementary school to save on heating cost." And, even if this person appears to be a deadend, keep him in your contact file. You never know when you'll need a different kind of information.

Cold calls are still one of the most difficult aspects of marketing, but with the right approach and a little preparation they can become your most productive marketing tool.
Relations City, Nashville

Registration Board is increasingly cooperative, and TSA has acted as complainant this year. Members are encouraged to report violations. Industrial exemption not pursued; this is a more complicated issue than originally thought.

NOTE: TSA lobbied decisively for bill allowing architectural graduates to take portions of the licensing exam early, which passed; it was introduced by the Registration Board.

TAPAC Liaison—Ed Street, Nashville

In its first year, TAPAC has organized, recruited 25 members, collected $500, bought tickets to several fund raisers, supported one candidate for office, held its annual meeting, adopted bylaws, and elected officers, all at state level. The candidate supported was successful.

Relations With Building Industry—Dick Beeson, Johnson City

TSA office maintains close contact with TPSE in Nashville; other associations were contacted as occasion demanded. Committee has communicated with East Tennessee AGC and discussed several of their complaints against state procedures. TSA is working with Chattanooga Contractors' Association on the possibility of developing a legislative coalition in certain areas.

NOTE: This committee was required by bylaws; except for legislatures and other state government related matters, its area of responsibility seems to be more of a local chapter function.

New Membership—Ron Gobbell, Nashville

14% membership increase achieved; associate growth is still slow.

Chapters have been encouraged to use TSA form letter clarifying new member status and another to expedite membership processing. Several ideas have been generated on associate programs; TSA needs chapters' help. Fresh start on this anticipated in 1981.

PR/Newsletter—Connie Hoffman, Defunct Chairman

TENNESSEE ARCHITECT published quarterly; TSA News Update published monthly, including announcement of state work; public service announcement on radio in Watauga, East Tennessee and Chattanooga; committee reports published; advertising increased in TENNESSEE ARCHITECT (brilliantly); all chapters except Watauga and West Tennessee
Prose From 'Brose
TSA Goals For 1980 Evaluated

work in TSA publications.)

Energy Committee—Bill Wilkerson, Chattanooga

No progress on goals of promoting use of TVA computer analysis, review of DOE code or Tennessee Energy Code.

Personnel and Facilities—Larry Binkley, Knoxville

To expand bookstore operation, bookmobiles have been brought to all chapters; steady increase in business for last three months after sharp decrease caused by loss of old lease and subsequent move; will exceed last year's sales. Temporary quarters were secured, May-November; and we've signed a five year lease with option to renew on Sixth Avenue. Outside computer subscription service has increased staff efficiency.

Bylaws Committee—Charles Coleman, Memphis

Bylaws were redrafted and adopted, reflecting AIA model.

NOTE: Perhaps our brightest spot in terms of sheer diligence.

Past Presidents Council—Granville Taylor, Memphis

Task is to search for a permanent TSA office location.

NOTE: This goal was added subsequent to loss of lease in April.

ExCom

Associate member and student member attended meetings in ex officio capacity as advisors.

President

Announced goals at beginning of year; herewith report on end of year progress; marginal success in increasing Watauga participation (December seminar will push this goal over the top); convention successful, but not as profitable as 1976; seminars, conventions and planning sessions have been most successful in stimulating fellowship.

NOTE: Perhaps our brightest spot in terms of sheer diligence.

Post Presidents Council—Granville Taylor, Memphis

Task is to search for a permanent TSA office location.

NOTE: This goal was added subsequent to loss of lease in April.

ExCom

Associate member and student member attended meetings in ex officio capacity as advisors.

President

Announced goals at beginning of year; herewith report on end of year progress; marginal success in increasing Watauga participation (December seminar will push this goal over the top); convention successful, but not as profitable as 1976; seminars, conventions and planning sessions have been most successful in stimulating fellowship.

NOTE: Perhaps our brightest spot in terms of sheer diligence.

Staff

Bookstore has been opened in three successive locations! Moving prevented growth that would have required assistant before 1981. Salary increase (we're recommending food stamps). Subscription to accountant's computer system has increased business efficiency.

Professional Liability Insurance—Tom Nathan, Memphis

Investigated PLI program by INAX and recommended to TSA Board that it be commended to membership.

NOTE: This goal was added subject to our February Board meeting.

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William L. Ambrose, III, AIA

If your professional liability insuror has reduced its premium rates since your last anniversary or renewal date (typically, but not always, January first), you may be paying more than you need to for your coverage. One way to take advantage of the new rates is to change your renewal date to a date as much prior to the original renewal date as possible. This step can save hundreds, and conceivably thousands, of dollars; it may be as simple as notifying your insuror which date you want for your new renewal date (your next quarterly payment date, for example, if it is imminent) and providing the same exposure information that you provide annually for the revised 12 month cycle. Before stating in writing that you do want to make the change, however, it would be prudent to check with your agent to assure that your payment will be decreased.

An encouraging trend this year has been the increasing frequency of reports from our members that the cost of their professional liability insurance has decreased. The cause seems to be a mixture of factors such as a more competitive market subsequent to TSA’s endorsement of the INAX program, a decrease in the reserve premium requirement and perhaps other factors such as loss prevention programs and a more open comparison of rate experience between architects.

TSA does not have on retainer, on its staff nor on its Board, a liability insurance expert with whom to consult. However, the more information TSA has concerning its members' rate and coverage experience, the better equipped it will be to represent the members’ interest in this area. You are therefore encouraged to share your experience with TSA’s Professional Liability Insurance committee by mailing your comments to the TSA office.
Clients I Have Known

Robert E. Holsaple, AIA

"Son," he said. "Ah really ain't shore what an architect does but the Baptist Sunny School Board says we need one an' I reckon yore hit." At that stage in my life I didn't work with many highly sophisticated clients, and this gentleman in bib overhauls was about the most unsophisticated of my unsophisticated clients.

There are a whole bunch of ways to classify clients. One that quickly comes to mind is those with money and those without. (There is a subgroup of the money with/without class: the client with or without money who prefers to use yours). There are government clients and private clients. There are residential clients and non-residential. There are cooperative, friendly, quick paying clients; and there are those whose lineage and parentage are questionable. One classification that I like to use is the above mentioned "sophisticated vs. unsophisticated." Under this classification, "sophisticated" refers to the client who has gone through the design and construction process several times and who has come to understand the process. My Baptist buddy had built two log barns, but they don't count.

Having previously built a structure doesn't necessarily sophisticate you. I remember one church building committee which wished to add a sanctuary to a two story educational building. They had designed and built the educational building some years earlier. It had eight inch block walls on the exterior and six inch block bearing walls on the interior. The floors were supported on wood joists. At some point steel rods had been threaded from exterior wall to exterior wall to correct several bulges which had begun to appear. They were nice folks—kept insisting that we hold meetings in the existing building. At that point I only had my G.T. insurance; but my wife was working and could support herself, so I attended the meetings. The addition had two novel features. It was designed to withstand lateral load which might be imposed by the old building. Its only contact with the old building was the caulking. The committee was intrigued with our 12 inch stair treads. These were judged to be much more comfortable than the 8 inch treads to which they were accustomed.

My overhauled friend (when I grew up in Iowa they were overhauls, although Sears Roebuck kept misspelling the word in their catalog, and when you were overhauled you were fashionably clothed, not reconditioned) really didn't know what an architect was or did. He had been told that an architect was essential to building a new church building; and, since the information came from an unimpeachable source, hired an architect. Once I explained my role, he was aghast at my ability. Dang! You actually draw the buildin' before they start building?! This brief period of awe ended as soon as we started talking about fees. If prior experience breeds sophistication, he was as sophisticated with regard to money as any banker that I've met. For one thing, I wasn't going to furnish any materials or do any sawing or nailing, so why did I need to be paid so much money? We did reach agreement, however; I designed the building; it got built and we became good friends. He still claims I got paid too much just for drawing a few pictures.

The large corporations usually have built many buildings, have developed certain prejudices and hire a staff to express these prejudices. A representative of IBM once inquired of me in hushed, confidential tones "How big do you make your elevator?" My elevator? "Well, uh, mmm. Just large enough so the cab doesn't rattle in the shaft." That must have been an acceptable answer. The next question was "Do you prefer friction or hydraulic?" It turned out that they were interested in a one story building.

At one time we worked with a large corporation whose leaders had decided to get into single family housing. They were to develop a new mass produced house. While they engineered new miracle panelized, insulated, self-supporting, self-flashing construction systems, they decided to increase staff experience by developing a housing project. The staff had arisen from within the corporate family. They all had construction backgrounds. One had worked in his basement shop for many years and had recently added a wood deck to his house. One had a carpenter father. The others were experienced but didn't have such close building industry connections. We developed a number of designs for the houses. Each presentation to the corporate staff resulted in a decision (theirs, not ours) to simplify the design (decrease the amount of glass), simplify the construction (decrease the roof overhang) and make the plan more compact (decrease the size of the bedrooms). The high point of the project, in my opinion, was the day that my partner lost all the tracings while changing trains in Grand Central Station.

Most residential clients belong in the unsophisticated class. I'd guess that about eighty percent of the clients have never had a house designed or built for them before. Ninety-eight percent have a large collection of clippings from house magazines showing exactly what they want to build. No two of the clippings illustrate the same character, or materials. At least twenty-five percent of the couples don't agree about what they want to build and want the architect to decide which ideas are best. Usually, at some point, the wife will burst into tears. My observation is that maiden lady clients also often sob with frustration, sometimes with joy, and occasionally not at all.

I guess that one of my favorite clients is one that I didn't accept. He showed up in my office one afternoon and announced that he was going to build a large beautiful motel and that he had chosen me to design this wonderfully large beautiful motel. This beautiful, wonderful large motel was to be built on a select handsome site which, as soon as possible, he was to option and have cut down twenty-five feet to the level of the highway. He was commissioning me to design a large simple beautiful motel for this splendid lot. He would not haggle about the fee, he knew that I was honest and reasonable. As soon as I had finished the drawings he would take them and arrange the financing, begin construction and then pay me. "The architectural work is so simple, that," he said, "if I knew how, I could do it myself."

How could I argue with reasoning like that?
The Lyndhurst Foundation of Chattanooga has funded a remote design studio whereby architecture students and area architects from Chattanooga will investigate concepts germane to the development and revitalization of Chattanooga. The design studio is staffed by ten students under the direction of Professor Andrew Wharton, James Franklin and Robert Seals of Chattanooga are serving as adjunct professors. Planning is underway for the establishment of a similar design studio in Memphis. Project focus deals with the abandoned right of way for Interstate 40 West of Overton Park. The studio is to be conducted by Memphis area architects with coordination from the School of Architecture faculty. Director for the remote studio is Professor Ron Childress.

The following new faculty members have joined the School of Architecture: Ronald Barstow, Design, UT; Jon Coddington, Design, Earlham College, UT; Mark Honeycutt, Design, UT; Paul Pettie, Design, Howard University, University of Wisconsin; David Roberts, Physical Systems, Ball State University; Gary Sorenson, Design, Texas A & M University; David Wooley, Design, Mississippi State University.

General Shale scholarships were awarded to Jenny Carter, Jasper Cornett, Keith Seabolt, Randy Stout, Randy Reynolds.

AIA scholarships have been awarded to Larry Arney, Bob Riddell, Linda Warren, Mike Murphy, and Keith Seabolt.

Brian Hammond received the Henry Adams Award; and Mike Carpenter was elected to Alpha Rho Chi.

Joel Haden received the Student Service Award from Student Chapter, AIA.

Randy Stout was awarded a National ASC/AIA Design Award from the Energy House of the 80's Competition.

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Book Review: Experiencing Architecture

By Steen Eiler Rasmussen
Reviewed by Frank Orr, AIA

EXPERIENCING ARCHITECTURE makes no pretenses. Its purpose is to awaken laymen and professional alike to the possibilities for joy and enriched life through excellence of design in architecture. Rasmussen himself states, “My objective is in all modesty to endeavor to explain the instrument the architect plays on, to show what a great range it has and thereby awaken the senses to its music.” The tone and rhythm of the language of this quotation is typical of the entire book and serves well his declared hope that it will be as easily understood by the teenager as by the mature adult.

Rasmussen has spent his life teaching and writing about architecture, principally at the Royal Academy of Fine Arts in Copenhagen, with extensive guest lectureships in the U.S. and elsewhere. Out of the content of his lecture courses the book was distilled.

At the 1979 AIA Convention in Kansas City, at which he was presented a medal, he presented an illustrated condensation of some of the principal ideas in the book. It showed not only the great worth and beauty of the basically simple concepts he shared, but also the charm, simplicity and great worth of the man himself.

Originally published in 1959, the book is timeless, the bed-rock stuff we architects learned, or should have, in architectural school. Unfortunately, too many of us appear to have forgotten it in the intervening years, allowing ourselves to become slaves to the technical and mechanical aspects of practice. The book has no hyped-up, glitzy language so in vogue in the “media” today, just everyday, straightforward English, even if originally written in Danish. It is architectural “back-to-basics,” and every American, lay and professional, ought to read it now. Every architect ought to be required to reread it every five years, every two years for editors of architectural magazines.
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