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Buildings in Small Towns

Featuring buildings by North Carolina architects located in some of the state's smaller towns (selected from entries in the NCAIA Awards program).

Marcel Breuer, FAIA — 1902-1981

A look at the life, works and philosophies of the late designer.

A Personal View

Marvin R.A. Johnson, FAIA, formerly Consulting Architect for the Division of School Planning, North Carolina Department of Public Instruction, discusses the design of schools in the state.

Letters

Books


Chapter Notes

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North Carolina Architect
was formerly published as

Controlled circulation postage paid at Raleigh, NC 27611. U.S.P.S. No. 539-590.

Subscription rates: $10.00 a year for AIA members; $15.00 a year for non-members.

Opinions expressed by contributors are not necessarily those of the North Carolina Chapter of the American Institute of Architects.

North Carolina Architect is published six times a year on February 6, April 3, June 5, August 7, October 9, and December 4 by Spectator Publications, Inc., P.O. Box 870, Raleigh, North Carolina 27602 for the North Carolina Chapter of The American Institute of Architects, 115 West Morgan Street, Raleigh, North Carolina 27601. NCAIA telephone: (919) 833-6656. Publisher's telephone: (919) 828-7393.

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Buildings in Small Towns

All too frequently in the architectural press, we are made familiar only with the work of the large offices in the larger cities. In this issue, however, we are following one of the policies as outlined by the North Carolina Architect Editorial Committee — to use the materials from entries in the annual Awards for Excellence in Architecture program. Here we present a selection of work by North Carolina architects located in some of the state's smaller towns.

— The Editorial Committee
High School

Architect: Leslie N. Boney Architect
Wilmington, N.C.

Owner: Kinston City Schools
Kinston, N.C.

September-October 1981
The Board of Education of this small community wished to pursue unconventional answers to solve their high school needs. The Board members expressed a desire for a solution which would be both a stimulating learning environment for 1,400 students and a source of community pride. For funding purposes, the new facility was to be built in three phases: Phase I — Academic and Administration; Phase II — Cafeteria, Vocational Arts, and Physical Education; Phase III — Athletic Facilities for outdoor recreation.

The architects established a rigid geometric pattern in which interlocking triangles were juxtaposed along major pedestrian axes. The master plan was then developed from this triangular scheme. The result is a detached but composed grouping of four buildings that house separate but inter-related high school facilities.

Landscaping for the flat site (a former cornfield) was another major concern. A system of earthen berms was designed in response, enabling the architects to conceal parking lots, accent certain areas of interior courtyards, and form an amphitheatre.

**Project:** Kinston High School, Phases I, II & III
**Location:** Kinston, N.C.
**General Contractor:** Phases I & II — Hardy-Harvey, Inc., Kinston, N.C. Phase III — Gardner Construction Co., Inc., Kinston, N.C.
**Structural Engineering:** Henry von Oesen & Associates, Wilmington, N.C.
**Mechanical and Electrical Engineering:** Steuer-Cheatham Association, Wilmington, N.C.
**Photography:** Charles Buchannon, William J. Boney and Charles H. Boney, Wilmington, N.C.
Architect: Paul Braswell Architect PA
Charlotte, N.C.

Owner: First United Methodist Church
Belmont, N.C.
The architects were asked to design a church for an existing congregation that had decided to relocate because: the original 1912 facilities were deteriorated; the present site was too limiting; and the leaders of the church wanted more adequate facilities to serve the congregation and the community.

The size of the new facilities was influenced by the church’s desire to encourage and support individual growth, development and enrichment that, the members felt, could best be achieved with a relatively small congregation. Toward this end, and in the interest of long-term financial considerations, complete church facilities were required to be constructed at one time. Also, growth beyond planned facilities would encourage the establishment of another congregation and facilities elsewhere.

The architects planned the church facilities to accommodate the particular requirements of this Protestant congregation and, in so doing, introduced a religious building in a sparsely populated residential community in the perimeter area of a town. The siting and orientation of the building in relation to the nearby road and adjacent property, and the locating of parking on lower levels, provide a clear visual relationship to the neighborhood and the vehicular public. The triangular plan and building form delineate the essential functions of worship, fellowship, and education, and focus attention on the elements and order of worship in the sanctuary. The bell tower was designed to receive a proposed carillon.

**Project:** First United Methodist Church  
**Location:** Belmont, N.C.  
**General Contractor:** Beam Construction Company, Inc., Cherryville, N.C.  
**Structural Engineering:** Joseph E. Hunter Jr., Engineer, P.A., (principal deceased and firm dissolved)  
**Plumbing and Mechanical Engineering:** McKnight-Smith Engineers, Inc., Charlotte, N.C.  
**Electrical Engineering:** Stephen T. Hocsak & Associates, Charlotte, N.C.  
**Photography:** Gordon H. Schenck Jr., ASMP, APA, Charlotte, N.C.
Elementary School

Architect: Ballard, McKim & Sawyer, AIA
Wilmington, N.C.

Owner: Duplin County Board of Education
Kenansville, N.C.
The architects were asked to design a school that would emphasize the client’s teaching methods and the daily routine the teachers and students are encouraged to follow. Teachers would use a team-teaching approach with a relatively large number of children. Classes could come together as one whole or could be fragmented into groups. The daily activity would include outdoor teaching, weather permitting, and, as a minimum, a walk outside as a group to and from lunch.

The site selected for the new school was bordered on the north by a stand of mature pecan trees. Except for the trees, the site was flexible. The architects brought to the project their own concern for controlled natural light in the internal spaces, and an awareness of the geometry and building form implications of such a flat site — i.e., nothing is hidden.

The plan that evolved placed classroom pairs, coupled by a “wet area” and tutoring room, around a building core of the media center and indoor play areas. As a result, the classroom spaces are between an indoor core and an outdoor pattern of walks, plazas and play yards. The broken sloped roof provides clerestory lighting in the media center and corridors, and houses the mechanical system. The roof shape in this case unifies the building elements and presents a clean silhouette.

**Project:** Kenansville Elementary School  
**Location:** Kenansville, N.C.  
**General Contractor:** Hardy-Harvey, Inc., Kinston, N.C.  
**Structural Engineering:** Lasater-Hopkins, Raleigh, N.C.  
**Mechanical Engineering:** Fenner and Proffitt, Wilson, N.C.  
**Photography:** George McKim, Wilmington, N.C.
The project involved designing a basic facility to house several disciplines in the study of marine sciences: administration and maintenance; public education; extension and vocational education; research and development; and regulatory services. Each discipline within the facility had to be expandable as well as modifiable. The facility was to be located behind the secondary dune line, having as little impact as possible on the delicate estuary environment.

Each discipline of the facility is separate but joined to the others by common public exhibit areas. This allows individual functions to expand in small increments without looking “tacked on.” Natural materials were used throughout which will age and blend with the environment while remaining relatively maintenance free. The floor structure of the research area was elevated above grade, not only to get above flood stage but also to allow modifications to the extremely complex plumbing lines handling saline water, among others, required of a marine research facility. All other floors were concrete slab-on-fill against concrete retaining foundations, thus minimizing the building’s impact on the environment by leaving it undisturbed. The auditorium — contiguous with the exhibit area, allowing continuous slide shows as part of the exhibits — can be closed off by operable partitions for lectures.

**Project:** Marine Science Facility  
**Location:** Bogue Banks, Carteret County, N.C.  
**General Contractor:** J.M. Thompson Company, Raleigh, N.C.  
**Structural Engineering:** W.H. Gardner Jr. & Associates, Durham, N.C.  
**Mechanical and Electrical Engineering:** Buffalo, Morgan & Associates, Raleigh, N.C.  
Regional Education Center

Architect: Austin Associates, Architects
Southern Pines, N.C.

Owner: Moore County Schools
Carthage, N.C.
Located on the campus of an elementary school that has been converted to a county education center, the regional education center was created in what was once the school gymnasium. The function of the center is to furnish resource material and personnel for schools in an eleven-county area.

The architects' two-story design placed public areas, administration, a media center and meeting rooms on the first-floor level. Work spaces for resource personnel were then situated on the upper level.

To retain the light and airy sense of space of the former gymnasium as much as possible, the architects left the heavy timber second floor structure exposed. The warm and cool air duct system was also exposed and painted, and the visual field, for the most part, is only interrupted by partial work station partitions.

**Project:** Carthage Region 4 Regional Education Center  
**Location:** Carthage, N.C.  
**General Contractor:** Myrick Construction, Inc., Star, N.C.  
**Mechanical Engineering:** McKnight-Smith Engineers, Inc., Charlotte, N.C.  
**Electrical Engineering:** K.M. Armstrong Associates, Charlotte, N.C.  
**Photography:** Rick Alexander Photography, Charlotte, N.C.
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Marcel Breuer, FAIA 1902-1981

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Marcel Lajos Breuer, a major force in contemporary architecture, died July 1 at his home in New York City at the age of 79. In a brilliant career that spanned more than half a century, Breuer applied his inventive genius to the principle that architecture must reflect life and serve human needs. Breuer once compared his profession with a falling raindrop: "The front is broad while the back is tapered. If architects try to narrow architecture, they are already at the tail end. If they are broadening it, they are moving forward."

And broaden it he did, as a designer whose works range from the tubular chair to the monumental headquarters buildings of the departments of Housing and Urban Development and Health, Education and Welfare in Washington, D.C.

For four decades — from his arrival in the United States in 1937 until his retirement in 1976 — Breuer stood in the front rank of American architects, as this country moved to a position of world leadership in architecture. His diversified projects reflect his fascination with modern technology and new building materials, which he combined with his immense design talent into such rare achievements as New York's Whitney Museum of American Art; the St. John's Abbey Church in Collegeville, Minn.; the IBM Research Center in La Gaude, France; and the University of Massachusetts Campus Center in Amherst, Mass., among scores of others.

Breuer and the Bauhaus

Breuer was born in Pecs, Hungary, on May 21, 1902. His boyhood interest in painting and sculpture led him to enroll in the Art Academy at Vienna, Austria. He quit the Academy to go to work for a furniture designer, with the intention of learning a trade, but soon departed for a newly established school in Weimar, Germany — the Bauhaus, directed by architect Walter Gropius, which combined teaching of the pure arts with training in functional technology. He became a "Master" of the Bauhaus in 1924 and head of the school's carpentry shop and interiors department.

While at the Bauhaus, which moved to Dessau, Germany, in 1925, he applied his talents to furniture design. He also bought his first bicycle, an event that has had a profound influence on interior furnishings to this day. If, he reasoned, a steel tube could be bent to form handlebars, why could it not be bent to construct furniture? The fact that it could, indeed, resulted in the prototypes for nearly all the tubular steel furniture now in use, including the famed "Wassily Chair," named for Breuer's friend, artist Wassily Kandinsky, who acquired two of them.

Breuer left the Bauhaus in 1928 to set up a private architecture practice in Berlin. He eventually moved to England, where he entered into partnership with architect F.R.S. Yorke. There he designed his "Civic Center for the Future," a work that was prophetic of many of his later endeavors, ranging from the double Y-shaped design of the HUD headquarters in Washington to the stepped facade of the Whitney Museum.

In the United States

Gropius, meanwhile, had moved to the United States to be head of Harvard's Graduate School of Design. He urged Breuer to join him, and in 1937, at the age of 35, Breuer accepted appointment as associate professor in the school's department of architecture, and, at the same time, he entered a partnership with Gropius, engaging mainly in the design of private homes.

He did not, however, go to Harvard to impart the Bauhaus gospel or any formal design doctrine. Speaking of his teaching days, he once said: "Everybody realizes that a younger man is somewhat influenced by his teacher. Yet, I impressed my students with the importance of making their own decisions. I wanted to encourage individual search and research by my teaching. My philosophy was not, and is not, to develop a definitive style. If you do, you have killed it. The development is the significant thing as it becomes the style of that moment."

His Harvard period ended and the period of his greatest productivity and achievement began in 1946, when Breuer resigned to establish his own office in New York City. His houses, which were to establish a permanent standard for residential design, continued to proliferate, principally in the New England area. And it was Breuer who introduced the "bi-nuclear," or two-center home, planned to meet the living requirements of modern families by creating functional areas for separate activities: living versus sleeping; children versus adults, activity versus quiet.

Breuer's career took a quantum leap in 1953 when he was commissioned to design, in collaboration with Pier Luigi Nervi and Bernhard Zehrfuss, the UNESCO World Headquarters in Paris. And as his activities burgeoned and major commissions increased, Breuer worked with many associates and collaborators, ultimately during the 1950s and early '60s crystallizing his firm into partnership with four of those associates — Herbert Beckhard, Robert F. Gatje, Tician Papachristou and Hamilton Smith. Since Breuer's retirement for reasons of health in 1976, the firm has continued under the leadership of those partners, as well as a fifth, Mario Jossa, who heads its Paris office.

Breuer did it first

Breuer's friend, the architect and critic Peter Blake, once wrote of him: "It is entirely possible that somebody, sooner or later, would have invented furniture constructed of continuous tubes of chromium-plated steel; but the fact is that it was Breuer who did it first.... It is also probable that somebody, sooner or later, would have designed bent and molded laminated plywood chairs, or translated the American traditions of wood-and-stone building into an entirely modern idiom, or made modular, precast concrete into a building unit as flexible as brick. But the fact is that Breuer was really the first one to do it, and that his prototypes have often been copied but rarely improved upon over the decades."

Breuer was awarded the Gold Medal of the American Institute of Architects in 1968 and the Gold Medal of the Academy of Architecture of France in 1976. He held honorary doctoral degrees from Harvard University, the University of Notre Dame, Pratt Institute in New York and the government of Hungary. He was a Fellow of the American Institute of Architects and the American Academy of Arts and Sciences and a member of the National Institute of Arts and Letters.

Breuer, who most recently made his home in New York City, leaves his widow, Constance; a son, Tomas; a daughter, Francesca Burns, of Flaine, France; and a sister in Vienna, Austria.
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“I don’t know where North is, but I can tell you which way is East,” the school superintendent replied. He was submitting some plans to the Division of School Planning for review. The site plan did not include a direction arrow to show which way was north. In those days we cared which way a building faced. We relied on daylight for some of the lighting in the classrooms. We also counted on winds and breezes to relieve discomfort of students on warm days. But that was long ago. In later years school planners tended to disregard the orientation of buildings. Electric lights, heating-ventilating-air conditioning were counted on to give light and comfort. This eventually led to the unseemly, unwise and inappropriate practice of building schools with almost no windows.

Energy use influences design

Solar energy including daylighting is getting attention again. Building exposure is becoming important again. We can predict the direction from which the sun will shine at any moment in time anywhere on earth. We can’t predict when clouds will obscure or filter the sunlight but facts are being accumulated for many areas of the country about the amount of sunshine that can be expected. Using such information in designing buildings affects noticeably what buildings will look like. But it does not mean that you can never have any windows facing west.

In the design of their new headquarters, some governmental and large business enterprises are setting examples in building design which depend on daylight as the major source of light. Designing and building such buildings can cost more than simpler and more conventional buildings, but these increases in initial cost can readily result in reduced long term expenses for energy.

Do we know what school buildings cost?

Building costs are hardly ever viewed rationally. Cheap buildings don’t make sense for long term public use. They will probably leak energy and rainwater too. They will need repairs more often.
Cheap means low quality materials and construction, also small inadequate rooms and other spaces. A good school building doesn’t cost all that much more than a cheap one.

The costs of building schools aren’t all that important anyway. They often seem that way because construction costs are not viewed in relation to other educational costs. Consider long term costs. Think not only about what it costs to “buy” the school plant — the costs for planning, designing and building it. That is the minor part.

The big costs are in the using — the cost for heating, ventilating, lighting, utilities, cleaning, restoring, repairing, maintaining the plant for all the years it is in use. But the biggest costs are for using the school for what it is intended — the education of the students. That includes the salaries and benefits for teachers, staff and support persons, for the continuing costs of books, supplies, new equipment, transportation. The sum of all these costs is the cost of education. The cost of constructing the buildings is a minor part of that, probably less then fifteen percent.

Design costs — compensation for architects, engineers, landscape architects and other consultants — are only a very small percentage of the building costs, which amount to only a little fraction of the cost of educating the students. The one-time costs of designing the buildings is an insignificant item in the long term cost of education. But remember that a building ill planned and poorly sited can add to the continuing cost.

Budget practices obscure total building costs

The budgeting methods for schools are part of the problem in assessing correctly the costs of schools and their buildings. Customarily, school budgets are divided under two headings, “capital outlay” and “current expense.” Capital outlay, as the term implies, is used for acquiring items of long term use and value, such as busses, books and buildings. Almost all other costs are identified as current expense items. So the cost of buying land, designing and building a school is in the capital outlay category; all other costs for using the school facilities are in the current expense budget. As a result, almost no one has an objective view of what the facilities of a specific school do cost over the long term. For new school plants, accounting records can be set up to relate the capital costs of a school with all the continuing running costs and use costs of that school.

Designing is more than planning

“The architect built himself a monument.” That has been said many times, especially in criticism of a building that is out of the ordinary. It is not wrong for an architect to be rightfully proud of what had been designed. As for monuments — how many people know which architects designed which buildings — especially those which bear the name of an active, fired or retired superintendent, a venerable teacher, a long-forgotten principal, a now-obscure past board member, a publicity-conscious politician, or tax-conscious benefactor?

Architects are chided for wanting some “aesthetics” in their buildings. Why shouldn’t school buildings be designed with a real concern for good appearance, attractiveness, grace, pleasantness and delight, even stateliness? That is lacking in too many school facilities already. There is no need intentionally to build schools which are dull, bland and boring.

Architecture is for people. People first, dollars second. That doesn’t render cost unimportant but does put it in its place. Schools are people places, primarily for young people but also for adults who serve them and for the public, places where people can grow and thrive and be comfortable with each other.

Well-designed buildings are not necessarily more costly than those of poor design. Since good design may also include better materials and equipment and high craftsmanship, the cost may increase on that account. But a low budget is not in itself an automatic excuse for mediocre design. A well-built building of high quality materials that does not serve its purpose is not kind to people; it’s an eyesore on the landscape and a bad investment. We are stuck with it for a long time until we have the courage to get rid of it.

Space, light, form and purpose are basic ingredients of architecture. Planning is not design. Architectural design is more than planning. Building design is more than determining a floor plan that works and then putting walls in and around it with a roof on top. Designing, like planning, requires some information, some understanding of relationships, some training and education. Design goes beyond planning. Design involves matters of the human soul and spirit. Designing requires imagination, inventiveness, a sense of rightness and appropriateness.

Look at the drawings of floor plans, cross sections also, and elevations of notable works of architecture. They are visually interesting, good abstract design. In good architecture, the plans and sections make fitting, pleasing patterns. Proportions are right. There is balance, rhythm, emphasis and character.

Good design benefits the public

Architectural design is the special competence of architects. This places on architects the responsibility to provide to the public buildings of fine architecture. Architects sometimes appear too eager to please a client. A school board and its administrators do not always know what they want nor what is needed. They rely on their architect and the consultants for serious counsel. Under pressures to hurry and build cheaply, the school officials may appreciate the efforts of their designers to be more deliberate and demanding.
A Personal View

Many architects perceive that our school instructional programs do not deal with the built environment in which most of us spend most of our time. Students do not learn about our buildings, our towns and cities, about architecture and building design. This leaves our citizens throughout their lives deficient in observing and otherwise consciously and critically sensing their surroundings. Our people thereupon become inadequate in their concerns and efforts to challenge those who build and to demand a more agreeable, harmonious, healthful and safe environment for living.

Those architects who design schools are fortunate because they have the opportunity to encourage and to design such salubrious places for young people during their formative years as students in these schools. This is a constant challenge to architects — not to be too strongly swayed by building owners who are overly pragmatic, and somewhat unaware or insensitive. Architects must make the effort to persuade school officials and other building owners to build buildings appropriate to human occupancy.

Public architecture is for everybody

The big decisions about how our cities grow, how they are built, what our roadsides look like, how many billboards we have and where, how our highways appear, what buildings are built and where — these decisions are made by people with economic and political power. It is not easy for architects to influence and affect the judgments of these movers and shakers.

There is a noticeable improvement in our state in how our towns, cities and countryside look. We can thank any or all who conscientiously and honestly want to take credit for this. Architects from all over this country, and from other lands as well, earlier this year attended a convention in Minneapolis and St. Paul in Minnesota. They were impressed with what that part of our country looks like. Well-tended landscape in the cities and in the countryside, fine buildings, well designed and carefully kept, streets clean and in excellent condition: it is apparent that the people care. The standards and values of the people who settled there in the Nineteenth century, added to the persisting attitudes of the leadership from commerce and politics, are big reasons for this happy situation.

Public awareness of what can be and how that can be achieved, responsive and responsible leadership, and competent and courageous designers and planners can combine in any region to accomplish similar results in producing surroundings which are most agreeable to people.

Letters

Mentor

I knew there were many reasons for me to enjoy Henry Kamphoefner; but there is one I wasn’t keeping a good handle on...that is...until your “A Current Appraisal” (May-June, 1981) showed up on my toilet reading shelf.

You are still one-hell-of-a-Mentor!!! ...even for a long-suffering jaded, feist-dog like me.

One other little note... I’m sorry (for numerous reasons) that your needful effort is carried in a publication that is currently reminding me of the Roofer’s Monthly.

— Mason S. Hicks

Are we expendable?

I read the remarks of Mr. Nicholson in “Backbone” (July-August, 1981) with interest. In our office, he would find general agreement and a similar dismay.

There are some additional thoughts which I believe are important to the discussion of professionalism and I enclose them here.

There is a temptation among architects to liken themselves to doctors and lawyers. There may have been some corresponding traits in our respective roles at one time, but any comparison in modern times is, in my view, a disheartening misconception.

It is disheartening because we get caught up in a self-image (with high expectations about what we deserve and how we should behave) that does not fit the situation we are really in. The result of comparing ourselves to doctors and lawyers is always disappointing because we never seem to make the grade.

Doctors and lawyers have broad public involvement, broad public exposure. They are instantaneously identified in the public mind, their roles clearly impressed upon us both by community reinforcement and universal experience. People feel the need for them; it is a visceral response — get sick or sued, forcibly detained or cardiac-arrested — the need is felt. It is in your guts, your sweaty palms, your ever anxious mind. More than once in every person’s life is this connection reinforced.

Architects suffer in the comparison. We generate little of the broad, gut-level identity of doctors and lawyers. Ours is a more peculiar clientele, a comparatively thin population of folks: Those who have an appalling anxiety about their inability to conceive space or draw a line. Those who are so self-conscious that they actually pay for styling a building, fashionable or otherwise. Those who actually know nothing about construction.

(about as common as those who
Letters

actually know nothing about their automobiles). Those who do not trust contractors and realtors and need an authority figure to reassure them about design and building ideas. Those who actually know what an architect is. Those who obey N.C. General Statutes which specify the circumstances requiring a licensed design professional.

If architects strike a visceral chord in anyone, it is from a population such as this. There is, of course, another condition upon each group mentioned if they are to be counted among “natural” architectural patrons: they must not regard us as a luxury item. The burden is on us to convince them we are not expendable.

Convince? Absolutely. I am willing to concede our role-ids have very little convincing to do.

The general impression is that they are vital to civilized existence everywhere. Were that true for architects!

The AIA — perhaps the best known of architectural organizations — reflects the rather unconvinced position of architecture among the professional organizations. While it is a fine clearinghouse of architectural information, it is strictly “bush-league” when placed alongside the AIA and the AMA. The AMA has long been regarded as second only to American Rifle Association in lobbying power on Capitol Hill. It is the ABA that provided extremely well publicized and respected recommendations on selection of Supreme Court Justices.

I do not suggest that the AIA make recommendations for the selection of Capitol Architect. (Who cares?) And I do applaud the seemingly endless number of task forces appointed to respond to this-or-that issue (albeit belatedly). It is wonderful that we have periodicals fairly brimming with clever photography and “roundtable discussions” with “leaders of the profession” — entertaining and about as useful as the jury comments of the PA design-awards issue.

We cannot make any headway in defining ourselves to the public-at-large by talking to ourselves. We do not create a bigger image in their minds by buying a larger mirror.

It seems to me a fundamental link should be forged in the public mind between the N.C. General Statutes and the prescriptions for licensed design professionals. It is a respectable link and one that deserves vigorous, collective policing. That will never happen, of course, because we are running scared of the public whose health, safety and welfare is our sacred concern. We are acting like we are expendable — even when we are not supposed to be. We do indeed lack “backbone.”

— Gen Tashiro
BA Psychology/M Arch

Congratulations

Congratulations on your new format. I found the contents and articles very informative, positive, and worthwhile reading.

It was pleasing to see the architecture of the state. North Carolina has always had excellent examples of good architecture, for which the region can be proud. I hope your magazine is going to libraries so that the public will be made aware of architecture and how good design affects their lives.

“A Personal View” by Henry Kamphoefner, FAIA (May-June, 1981) was a pleasure to read. It gave perspective to my thoughts and I’m delighted that another Master with a vision of history has put “post-modernism” in its proper place. It is time that we all should begin to abbreviate our commentary and philosophical criticism and recognize that “ugly” is a four letter word which means displeasing to the eye.

I look forward to your future editions.

— John A. Busby, FAIA
Director, South Atlantic Region
American Institute of Architects

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by Kim Johnson Devins

Conceptual feedback


The IAUS's unprecedented exhibition that preceded this catalogue was the result of one of Peter Eisenman's intuitions — "that a model of a building could be something other than a narrative record of a project or building. It seemed that models," he writes in the preface, "like architectural drawings, could well have an artistic or conceptual existence of their own, one which was relatively independent of the project that they represented."

Consequently, the IAUS mounted an exhibition in 1976 to test this hypothesis of the "self-referential" model. Twenty-two architects were asked to contribute models and, as Richard Pommer explains in his introduction, they were told: "We do not seek to assemble models of buildings as propaganda for persuading clients, but rather as studies of a hypothesis, a problem, or an idea of architecture."

This unusual concept — its successes and admitted shortcomings — is examined in Pommer's introduction and, further, in his "Post-script to a Post-mortem." Later, in "The Ruins of Representation," Christian Hubert addresses "the theoretical underpinnings of the working of the model as a form of representation."

The project did not end, however, with the 1976 exhibition, and neither does the book. Eisenman observes that the 1976 show "tended to reveal rather explicitly those architects who were and were not using models to such ends (his hypothesis), and it also indicated the variety of representational modes which were being employed at the time." But the publication of the catalogue was delayed for four years; therefore, "we (the Institute) thought it might be interesting to ask the same participants to submit new models which were made in the four-year period." And both sets of models — presented by photographs and the architects' explanations — are presented in the catalogue.

Among the participants in the project were: Michael Graves, Robert A.M. Stern, Charles Gwathemey, Rodolfo Machado and Jorge Silvetti, Richard Meier, Charles Moore, Amancio Guedes, and more. Their attitudes and thoughts toward models and towards Eisenman's hypothesis are also included.

The catalogue concludes with an excerpt from a heated interview with Peter Eisenman by David Shapiro and Lindsay Stamm entitled "A Poetics of the Model: Eisenman's Doubt."

Development and analysis


In rough sketches and detailed drawings, multiple models and written documentations, this fourteenth
IAUS exhibition catalogue follows Le Corbusier’s Firminy Church project from his querulous acceptance of the commission to the building’s impeded construction.

According to Peter Eisenman’s “Acknowledgements,” the Spring, 1981 IAUS exhibition on which the book is based owed its inception to the College of Architecture at the University of Kentucky at Lexington. However, he notes that the final credit must go to Eugene Claudius-Petit, the mayor of Firminy from 1953-72 and a close friend of the great architect, “without whose enthusiastic support Le Corbusier’s post-war career would not have prospered and the Firminy Church would not have been commissioned.” The book opens with a short essay by Claudius-Petit in which he describes his friendship with the architect and explains why, after Chandigarh, Firminy is “the place that contains the greatest number of buildings by this architect.”

In the introduction that follows, entitled “Grandeur is in the Intention,” Anthony Eardley tells us why Le Corbusier was reluctant to accept the project: he was growing old and his health was failing; therefore, he was initially unwilling to devote so much time and energy in his remaining period of creativity to a project that “would confront Le Corbusier — a self-proclaimed prophet whose parallel crusade was in competition with Christ — with problems of interpretation and even of conscience...” The architect himself wrote (which appears in the book), “I for one have devoted fifty years of my life to the study of the dwelling. I have restored the temple to the family, to the domestic hearth... I want to build dwellings, not turn into a church builder. This one at Firminy is the last, and I’ll do it because it is for workers, for working people and their families.”

Eardley then studies Le Corbusier’s vision, once he’d accepted the task, of building “a gleaming contribution to the great white churches of France.” He delves into the lessons Le Corbusier wanted to teach through the Church design — namely, “mass, surface, plan.” And, through the drawings and photographs of models presented, the book diagrams the complex intentions and rationales the architect employed in the extraordinary design, closely scrutinizing the evolution of the project from Le Corbusier’s original concept to the modifications at construction.

The book is divided into two primary parts: “Early Drawings, 1961-62,” and “Late Drawings,” which include, besides Le Corbusier’s own sketches, drawings from 1970-79 by the architect-of-record after Le Corbusier’s death, Jose Oubrerie.

One architect’s odyssey


While the IAUS was mounting exhibits dealing with the complexities and intensity of a great concept, “obscure and almost totally unknown author” Beemer Harell was building his own out-of-the-ordinary greenhouse/storage center/well house. And to document the construction "trip," he wrote a how-to book on building your own geodesic dome out of tomato stakes (hence the title: Tomato Stake Dome Trip). He found his inspiration, he writes, in a playground play structure. But instead of investing in expensive steel, he decided to "recycle last year's tomato stakes into structural members and scrap metal into connectors." Thus began "the odyssey of the T.S.D."

The book is meant to be as much fun as it is seriously instructional. Besides the helpful (and some just-for-fun) photographs, the book is peppered with the architect’s valuable advice to would-be dome builders, such as: “You really should not try to do it by yourself. You’ll have no one to talk to, no one to hear your cries of anguish...”

Harell concludes his little book with a “Semi-serious Sequel to the T.S.D. Trip,” featuring a series of his photographic endeavors (the dome as the primary subject, of course). The T.S.D. Trip is available from the author for $8 (including sales tax). Write to: Beemer Harell, 743 Fifth St., S.W. Hickory, N.C. 28601.

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**Chapter Notes**

**Fall convention**

The beautiful Grove Park Inn, Asheville, N.C., was the setting on September 10, 11 and 12 for the convening of AIA members from North Carolina and South Carolina. In keeping with the national AIA's thrust on designing for energy conservation, the professional program addressed several factors involved in the broad spectrum of this subject.

Keynote speaker Thomas V. Vonier, AIA, of Washington, D.C., gave a comprehensive overview of "The Architects' View of Energy," followed by a preview of the many professional development programs available through AIA. Specific development of a project utilizing passive energy standards was presented by Jerry Stacy, AIA and Gary Morgan, ASLA, of J.N. Pease Associates, Charlotte. They were the project architects for the Mount Airy, N.C. Public Library which received a federal grant to demonstrate passive solar and daylighting use for energy conservation.

A third presentation on "Daylighting for Energy Conservation" was given by Ben H. Evans, AIA, Professor of Architecture, Virginia Polytechnic Institute, Blacksburg, Va. Mr. Evans has thoroughly researched this subject, has recently published a book, Daylighting for Architecture, and has served as lighting consultant on many projects.

During the convention, NCAIA members enjoyed a number of social activities. On Thursday evening, a steak cookout at the Country Club adjacent to the Grove Park Inn set a festival tone for the weekend. Deepark Restaurant, recipient of an NCAIA design award, located on Biltmore Estate grounds, was the scene for cocktails, dinner and a delightful clogging exhibition on Friday night. Afternoon activities included golf and tennis tournaments on Friday, plus tours of Biltmore Estate for the less athletically inclined. A myriad of prizes was presented to the golf and tennis tournament winners during the Friday evening dinner. A raft trip on the French Broad River provided a popular adventure for some 60 hardy souls on Saturday afternoon. Saturday evening's cocktails, dinner and dancing delightfully climaxed a weekend of learning, fellowship and fun!

---Betty Silver, Hon. AIA Executive Director, NCAIA

**Durham**

Nicholson Associates of Durham announces the addition of architectural designer Ted Szostak to the firm's staff. Szostak graduated from North Carolina State University's School of Design in 1976 with a degree in environmental design in architecture.

**Raleigh**

The completion of the Salvation Army Center in Raleigh marked a first for the building's Georgia owner when the decision was made to accept the recommendation of the architects, Shawcroft-Taylor Architects of Raleigh, to incorporate

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*The new Salvation Army Center in Raleigh, designed by Shawcroft-Taylor Architects of Raleigh, incorporates active solar collection via roof-mounted collector panels.*

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Photography by Brian Shawcroft, AIA
active solar collection in the project. The system of roof-mounted collector panels heats, or assists in heating, the large quantity of water used by the residents.

The new two-story, 13,000-square-foot facility replaces a 3,500-square-foot facility on the same downtown site, and is used as housing for transients, women and children, and people undergoing rehabilitation programs. The $700,000 building also includes a sizeable commercially-fitted kitchen, dining rooms, apartments for the resident professional staff, lounges, and offices for the main Raleigh staff.

The structure is constructed of precast concrete exterior elements and fireproofed steel interior columns and beams with precast concrete second floor and roof decking. Interior partitions are gypboard on metal stud. Daylighting with skylights was used, where practical, on the second floor dormitory level. The glass on the west exposure entrance side is shaded by overhangs of the first floor and permanent, aluminum eyebrow awnings on the second floor.

Cherokee Brick Company of North Carolina has designed and constructed a traditional-style efficient direct-gain solar home. “We consider it a first in the area,” said Tom Coxe of Cherokee Brick. “It can yield up to 70 percent energy efficiency if used as specified.” The home is constructed of “Williamsburg Brick,” a member of the company’s Antique Collection.

Cherokee’s “Sun Catcher Home” is a direct gain system in which the collection, absorption and storage of solar energy occur directly within the living space; there is no specialized machinery. And in this case, the system is a result of careful solar design with brick, according to Coxe.

The Cherokee home was open during the Wake County “Parade of Homes,” September 19-27, and will remain open throughout the year by special appointment. For more information contact Coxe in Raleigh at 919-828-0541; elsewhere in the state call 1-800-662-7087.

A very special exhibit
A major exhibition of drawings by the great Sixteenth century Italian architect Andrea Palladio opened at The Ackland Art Museum at the University of North Carolina at Chapel Hill on Sunday, September 13 and will remain on view through November 1, 1981.

“The Drawings of Andrea Palladio” comes to the Ackland as part of a nationwide tour which began at the National Gallery of Art in Washington, D.C. in May. The exhibition was organized by the International Exhibition Foundation in commemoration of the four hundredth anniversary of Palladio’s death, August 19, 1580.

“Few masters in the history of European architecture have had as great an impact upon successive generations as Andrea Palladio,” says Dr. Evan Turner, Director of The Ackland Art Museum. “Given the importance of his work to architecture in the Southeast in the Eighteenth and early Nineteenth centuries, it seems particularly appropriate that the first major exhibition presenting his own original drawings and sketches should be shown in North Carolina.”

The 130 drawings in the exhibition illustrate the range and beauty of Palladio’s graphic style. They include designs for domestic projects purchased by Inigo Jones in Vicenza (1613–1615), reconstructions of antique bath buildings bought en bloc by Lord Burlington at the Villa Maser (1719), and later drawings done in
Top: From "The Drawings of Andrea Palladio," now on exhibit at The Ackland Art Museum (UNC-Chapel Hill) — Bramante Follower: Details of Palazzo Caprini, ca. 1510-1540.
Bottom: Facade project for the Ducal Palace, Venice, 1578.
Chapter Notes

Poster announcing the “Visiting Lecturer Series ’81-’82” at NCSU’s School of Design. Poster design: Ron Rozelle; photographic processing, printing and technical assistance: Bill Bayley.

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NCSU lecture series

The School of Design at North Carolina State University in Raleigh began its 1981-82 Visiting Lecturer Series on September 17 with Oscar Newman, architect, author and president of the Institute for Community Design Analysis in New York. The remaining schedule of lecturers is as follows:


February 5 — Ervin H. Zube, Landscape Architect, Geographer, Director of the School of Renewable Resources, University of Arizona. Topic: “Landscape Beauty in Time and Space.”
Chapter Notes


All lectures begin at 8 p.m. in the School of Design Auditorium, Brooks Hall, NCSU.

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If you have ever seen painted or stamped woven wire screens of this type, or have heard reference to their existence, use, location, or painters in America or abroad, please contact Eff at: The Baltimore Museum of Art, Art Museum Drive, Baltimore, Maryland 21218.

Barrier free environments update

Architects or anyone with a problem concerning accessibility for the handicapped can find answers to their questions by calling the National Center for a Barrier Free Environment's toll-free Access Information Number: 1-800-424-2809.

The toll-free WATS line enables callers to discuss their information needs directly with design and information professionals. This person-to-person contact assists the National Center's staff to understand better the callers' needs, thereby providing more specific and thorough responses.

The Center is also seeking individuals who are interested in being included in its nationwide network of consultants on barrier free design and physical accessibility. This "Technical Assistance Network" is composed of individuals with a wide variety of experience in the field of accessibility, including architects, designers, disabled persons, service providers, code officials, manufacturers, and contractors. If you are interested in becoming a participant in the network, send your name and address to: Network, National Center for a Barrier Free Environment, Suite 1006, 1140 Connecticut Ave., NW, Washington, D.C. 20036; or call Yvonne Matheney at 1-800-424-2809.
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