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Reminiscences by Neutra's Associate

Collaboration in Brick

Addition to the Minnesota State Capitol Building

NC Architects Honored

AIA Gold Medal, First in Five Years, Awarded to Neutra

Intaglio Brick Sculptures

Designing for an AIA Competition

Index to Advertisers

Harry C. Wolf, III
Henry L. Kamphoefner
Harwell
Hamilton Harris, FAIA
Patricia Turlington
Dellinger Lee Associates

NORTH CAROLINA CHAPTER
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Cover photo: Brick Sculpture in the Goldsboro School

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MAY/JUNE 1977
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NC ARCHITECTS HONORED

Harry C. Wolf III, FAIA

Henry L. Kamphoefner, FAIA

Henry L. Kamphoefner, founder and dean emeritus of the School of Design at North Carolina State University, has been selected for the ACSA/AIA Award for Lasting Achievement in Architecture Education.

He received the award during the Association of Collegiate Schools of Architecture meeting in Columbus, Ind., on April 23. Since it is a joint award, another presentation was made on June 5 at the American Institute of Architects meeting in San Diego.

Kamphoefner came to NCSU as the first dean of the School of Design in 1948 and developed it into one of the leading architectural schools in the country. Although he retired as dean in 1973, he has retained connections with the school by teaching a seminar and a lecture course.

Although Kamphoefner is well-known in architectural circles throughout the nation and the world, one of his greatest contributions has been the influence he has had on the thousands of students who attended the school during his 25 years as dean.

Numerous graduates have become successful architects, and a survey of design schools in 1974-75 revealed that nine top administrators were graduates of the NCSU School of Design.

A native of Iowa, Kamphoefner earned a B.S. in architecture at the University of Illinois and a Master of Architecture degree at Columbia University. He also received a Certificate in Design from the Beaux Arts Institute of Design.

Before joining the N. C. State faculty, he was in private practice in Iowa and was on the faculty at the University of Oklahoma. He served as associate architect in the Design Division of the Bureau of Yards and Docks in Washington, D. C. and was in charge of designing several million dollars worth of war-time Navy construction.

He has won a number of awards during his career, including three medals from the Beaux Arts Institute, First Alternate in the First Preliminary to the Paris Prize, and First Alternate in the Schererhorn Traveling Fellowship Competition.

One of the buildings he designed, the Grandview Music Pavilion in Sioux City, Iowa, was selected by the Royal Institute of British Architects as one of "America's Outstanding Buildings of the Post-War Period." The same building was selected by the American Institute of Architects for their exhibition, "Representative American Architecture of the Post-War Period."

He was named a Fellow of the AIA in 1957.

He is the author of 23 publications and is listed in "Who's Who in America" and "The National Register of Prominent Americans and International Notables."

Kamphoefner has been awarded two honorary degrees, the Doctor of Fine Arts from Morningside College and the Doctor of Laws from Ball State University.

Harry C. Wolf, President of Wolf Associates, Architects, Planners, of Charlotte has been honored by election to the College of Fellows of the American Institute of Architects. The Institute describes the award as "so distinctive an honor that its bestowal is a serious responsibility which cannot be maintained unless the Fellowship is bestowed only if the accomplishments are truly outstanding". Investiture took place on June 5, 1977 at the Annual Convention of the American Institute of Architects in San Diego, California.

Wolf Associates is distinguished as being the only firm in North Carolina to have twice been the recipient of "The Nation's Highest Professional Recognition for Architectural Excellence", the American Institute of Architects' Honor Award.

Charlotte's Uptown holds Mr. Wolf's special interest involving him in the Central Charlotte Association division of the Chamber of Commerce. The CCA retained the firm to develop an Implementation Strategy for the continued revitalization of Uptown.

The firm of Wolf Associates has a diversified practice involving architecture, planning and interior design. With offices in New York and Tulsa, the practice serves such clients as IBM, The Williams Companies, Equitable Life, NCB, The Bissell Companies and others.

In Charlotte, the firm is responsible for the new Mecklenburg County Courthouse which is scheduled to be completed in August of this year. The firm is also designing the new General Administration, Laboratory and Classroom Building for UNC—Charlotte and the new School of Design at N. C. State University at Raleigh.

Henry L. Kamphoefner has been awarded two honorary degrees, the Doctor of Fine Arts from Morningside College and the Doctor of Laws from Ball State University.
To receive the Gold Medal is to become a symbol for better or worse, of all architects. Because the A.I.A. awards it, it can't be otherwise. Recalling the names of past recipients starts speculation on what each symbolizes.

Bernard Maybeck was the symbol of the artist in architecture and received the Gold Medal not for the number or size of his buildings but because he stood for the everlasting supremacy of art. "Frank Lloyd Wright was not only the greatest living genius but also the incarnation of ideals which make being an architect worthwhile", said Bruno Zevi.

Louis Sullivan was a poet of democracy to whom each building was an act animating his materials with a subjective significance and value.

Other recipients symbolized wholly different qualities. This year Richard Neutra will receive the award—posthumously, as did Louis Sullivan. What does Neutra symbolize?

By birth, Neutra was a foreigner. Unlike most foreigners awarded the Gold Medal, Neutra received the award for work done mostly in the United States. Neutra was drawn to the United States by his perception of certain native American forces and their power and promise for the entire world. He arrived in America before native American architects saw any connection between those forces and architecture. So he became the interpreter of America to America as much as the interpreter of America to Europe.

What Neutra saw in America and what he admired most in it was not what Le Corbusier saw and admired—the sculptural forms of our giant grain elevators and the shapes and surfaces of our machines. What Neutra saw was the coming shape of man's organized life. He anticipated technology's effect on society and he proclaimed architecture's role in enabling man to survive technology. What he saw, he said—both in buildings and in words. His vocabulary was technical but his expression was romantic. How his expression affected the mind and work of a youthful discoverer—this writer, I—in the late nineteen twenties and early thirties when I was discovering the world, is the subject of the following reminiscence.

My discovery in 1926 of a building by Frank Lloyd Wright had turned my mind toward architecture. My discovery a year later of a building by Richard Neutra turned my footsteps toward Richard Neutra. After five days work on a drawing board resting on a trunk in the corner of Neutra's and Schindler's drafting room, the working drawings for the Lovell house were finished. So were Neutra's immediate prospects for any additional jobs, and back to work he went on projects for his ideal city—Rush City Reformed—and with him went Greg Ain and I.

In 1929 the Lehigh Portland Cement Company announced a national competition for the design of an ideal airport and we decided to enter it. Of all the lessons I learned from Neutra, integration is the most important, and I learned it working on our entry in this competition. How one thing calls for another, how one thing excludes another, how two things produce another—it was all there. The fact we knew practically nothing about something—nobody else knew anything—about-either had something to do in making this my great learning experience. We had to plan for what we didn't know, what we could only imagine, surmise, project by analogy.

What Neutra already knew was that airports would become parts of a world wide system of transportation. Of course airports would be shaped by the size and nature of planes. They would be shaped also by cities and cities' systems of transportation.

Richard Neutra, FAIA
1977 AIA Gold Medal Winner

What would be needed would be not air ports nor air terminals but air transfers—places where one kind of transportation, or one leg of transportation, stopped and another took over. It is amazing how far this was from the shot of the time! Using Neutra's own Rush City Reformed as prototype of the city of the air age, we (Neutra, Ain and I) proceeded to link its transportation systems—rail (surface, sub-surface, elevated) and tire (private car, taxi, motor bus)—to our still-to-be-designed air transfer. Rail delivery of a passenger was to a plane's own waiting room directly above its loading bay,—not to a grand concourse or an immense waiting room as in the railroads' union station. (Our grand concourse was for shops and restaurants and occupied a different level in the deep concrete...
trusses that spanned the loading bays.) Tire delivery of a passenger was close to his departure point, even if not as close as if he had arrived by rail.

The design of the air-transfer was part of the design of the city and region. So, the number of factors affecting its design was now a thousand time greater than it was when we looked at the project alone and considered only what could be learned from reading, from flying and from talking to the airport manager at the infant Mines Field.

How a design becomes real, alive and unique once it is part of a real world; how as part of a real world it grows and develops, becoming a natural instead of an arbitrary thing;—this is what I discovered in working on this project. Altho Ain and I were devoting ourselves wholly to it, it was Neutra who was directing it. The marvelous thing was that Neutra was doing his thinking, his musing, his proposing, his adopting, his rejecting with Ain and me as ringside watchers. As Neutra weighed his moves, we weighed them too. Neutra’s decisions were then our decisions. In this Neutra was the perfect teacher. In watching him work we learned in a few weeks what would have taken years had we been left to fumble our way to it. This the only quick way to learn and, I believe, the only effective way to teach. First, we must have seen a building that makes being an architect seem worthwhile. Then, if we have an architect with ideas to implement, we have a teacher.

Work on the airport competition over, Neutra still had no clients,—and probably would not have had even if there had been no depression. Great books have been written in prisons where their authors had time to think and compose. Some important thinking and planning has been done in times when an architect’s only clients were imaginary.

Neutra now proposed we form an American Chapter of C.I.A.M. (Congres Internationaux d’Architecture Moderne) and work on the same housing and planning projects as his European counterparts—Gropius, Oud, Mies, Haesler, May, etc.—and so have the stimulation of comparing our work with theirs. He appointed me secretary of our group and I sent our dues to Sigfried Giedion, the international secretary, in Zurich. The first year we worked on low cost housing schemes and at Neutra’s suggestion I developed what he called a “minimum existence correlation chart” with which to judge the efficiency of our designs and compare their efficiency with that of the Europeans. Bases for comparison were family size, area, cube, cost and rent. The following year each national group re-planned one of its cities in accordance with its most advanced thinking. Accordingly we re-planned Los Angeles as we imagined it might be in 1950. In 1930 the year 1950 was so remote and shrouded in mists one could imagine anything possible.

A few years earlier Neutra had devised his Ring-Plan School, and this was another project he developed in 1931 and on which I collaborated. It was his contribution to the exhibition with which New York’s Museum of Modern Art inaugurated its department of architecture in the Spring of 1932. Each of the nine architects selected by the Museum for this exhibition contributed a project in model form together with photographs of some of his earlier work. The other architects and their projects were: Frank Lloyd Wright and his House on the Mesa, Walter Gropius and his Bauhaus, Le Corbusier and his Savoye House, J. J. P. Oud and a house for Pinehurst, N. C., Mies van der Rohe and his Tugendhat House, Raymond Hood and an apartment tower in the country, Howe and Lescaze and a housing project for New York City, Bowman Brothers and their Lux
Apartment Building for Evanston, Illinois.

The ring in Neutra's Ring-Plan School was formed by the classrooms. It distinguished the overall form of the design. But what distinguished the individual classrooms, and in turn the educational process, was the fact that each classroom opened into an individual garden on the outside of the ring. Classroom and garden were in effect parts of the same room. A wall of disappearing glass doors, the full width of the room, divided the indoor half from the outdoor half. The furniture was not fixed and could be easily moved from indoors to outdoors and back. Such flexibility exceeded that of most living-rooms of that time. Its home-like atmosphere encouraged the informal activities of "learning through doing" that teachers of the very young were about to try. One-story construction made possible not only garden classrooms but also non-fireproof construction. It eliminated stairways and fire escapes and—in California, at least—it eliminated the hall, substituting the covered outside passage.

I don't know which division of the California State Board of Education disliked the design the most—the school house division or the teaching division. Anyway, Neutra received no schoolhouse commissions. Then, in 1933, a wonderful thing happened. About six o'clock in the evening there was a severe earthquake centered in nearby Long Beach. No one was hurt because the buildings were empty at that hour. Almost every school building in Los Angeles was of brick and two or more stories high. They all dumped their entrance cornices on the steps, shed their chimneys, and some shed large sections of their roofs and walls. All were so damaged they could not remain in use. After closing for a week, classes re-opened in canvas tents with wood floors erected on lawns and playgrounds. Each tent was in effect a Neutra class-room, prefabricated in canvas, floor at ground level, half-open to the out-of-doors, without halls, without expensive fire-proof construction, fully proof against earthquakes.

Thanks to the quake, Neutra now received a school commission. The school's design was the Ring-Plan without the ring. It was erected in Bell, a small suburb of Los Angeles, that became nationally known as a consequence. The building's low cost and resistance to earthquake damage is probably all that appealed to the State Board of Education. However, the school's pattern became overnight the pattern of all new schools (by other architects, of course) in the region and, eventually, elsewhere,—with various re-arrangements of wings ("finger plan", etc.) and short-changes in such features as the half-outdoor classroom, bilateral lighting and outdoor halls.

The Ring-Plan School became part of Rush City Reformed as had the Air-Transfer, the low-cost housing, the Planetarium (for Griffith Park, 1932), and various features of the C.I.A.M. plan for Los Angeles. Some of the central business district features of the Los Angeles plan should be noted even if not described. The 12-story buildings were elevated to leave the ground free for vehicles. They were long, thin slabs, oriented to catch the sun and spaced to insure their getting it. Shops were at second and third story levels and bordered by elevated pedestrian walks. Walks became bridges at cross streets. Streets carrying thru traffic became tunnels under other streets. Radial and circumferential boulevards, together with surface and sub-surface rails, linked together the central and the outer city and the air-transfers linking them with other cities. These and other projects of these early years became part of Rush City Reformed.

Neutra's passionate affair with total design led him to make prototypes of
his designs,—even the smallest. His 1928-29 house for Dr. Lovell was always the “Demonstration Health House” and his names for others of his buildings often prompted a smile. Neutra, too, could smile but he never allowed humor to weaken either his pursuit of the constituent and constant or his propaganda for the technology he hoped to make the servant of every man. Rush City was his exhibit of technology put to rational use in behalf of man. In it each design is part of a larger design. As context it gives additional meaning to each project and a clue to Neutra’s philosophy and talents.

It is not far-fetched to think Neutra came to America because America was the home of Henry Ford. Ford was more amazing to Europeans than to us who saw in him our own features. In our minds, standardization of design and interchangability of parts did not lead inevitably to a machine dominated civilization. Americans were already at home with machines and machines did not overly impress them. But Europeans were inclined to fear machines. Recently defeated and feeling the old order had let them down, they were looking for a new order. Machines, as a wave of the future, promised that new order. Europeans were prepared to worship the machine.

Neutra lived in America where, in the nineteen twenties and thirties, the materials and products of machinery were most present and a machine civilization most likely, yet he could not interest Americans in a modern, machine-influenced architecture. He found his audience—for his extensive writing, at least—in Europe and Japan rather than America. His building commissions came very slowly and at enormous cost to him in energy, intensity and perseverence.

In his early years in America, Neutra struggled to convince whomever would listen of the rightness of the machine process, its beauty and the promise it held for the future. Gradually the struggle to get the client, and then to get the building built, ceased to take all his time and energy. Concern with technology gave way to concern with technology’s effect on man’s chances for survival. Biology became a highly conscious part of his architectural thought and was expressed in writing as well as design. The early books told Europeans how America builds. A later one explored the mysteries of the site. They were followed by “Survival Through Design” and still others. The later buildings are less marked in their design by the limitations of the machine and the struggle for economy. They lack the necessary insistence of the earlier demonstrations. They are confident and serene, expressed in a technology now lyric.

I suggest that Neutra symbolizes the architect as tool-maker and life-shaper in the age of technology’s greatest advance. Today’s architects are his debtors to a greater degree than any of us yet realize. The Gold Medal is a significant step in that realization.
INTAGLIO BRICK SCULPTURES

by Patricia Turlington

A story of the collaboration of an artist and a sculptor using brick as an art form.

Photos by Malcolm Shearin

INITIAL CONCEPT

As a painter, this commission offered me a challenge beyond my previous experience. I had always had tremendous respect for architects and for big, beautiful buildings that utilized form and space artistically and functionally. Griffin-Flynn Architects, Ltd., of Goldsboro, had hired me to do what they called GRAPHICS for the interior of the new school they had designed: North Drive Elementary School in Goldsboro.

At the initial meeting in February 1975, the architects did most of the talking. Starting at the very beginning of their design concept, they took me through its various developmental stages: pages of drawings and blueprints. They allowed me to get into their heads and also to absorb some of their enthusiasm.

I floated off into mental pictures in response to their talk and to the idea of “graphics.” I kept struggling with the word GRAPHICS . . . . . . what did it mean artistically, to the architects, to me? But most importantly, to the children they were to be done for?

Skinny lines changing into fat lines, circles floating, packed together . . . .
The ideas floated through my head as I nodded and tried desperately to appear cognizant of the intimidating blueprints. (I who could only read the big numbers on a ruler!)

Facts kept pouring in from the architects: open plan school, lots of visual distance, plus and minus levels, solar heat, and a major portion of the interior was to be brick. I struggled with the word “graphics,” again. One of the architects, Hank Flynn, sensing my blank response, suggested that I do the “designs.” Then we’d have a sign painter transfer them to the walls.

Instantly my fantasies projected on the walls. But how could a sign painter understand that funny, skinny line? The designs would be just a job for him to do; the “art” would be lost in translation.

They showed me graphics they liked in various architectural magazines. Well, at least, we were finding out what graphics meant to them. In the stack of large, slick magazines was a small Brick Association magazine that had several photographs of an abstract form carved into part of a large brick wall in a bank. The brick sculpture idea made sense to me. No danger of someone else translating my designs or the paint flaking off in a year. “Touchable,” the ultimate experience for children. This art form easily could adapt to my ideas.

Beginning that day, everyday I thought about my art interwoven in a beautiful modern building, my mind would float off on an ego trip. But then, thinking about dealing with blueprints, architects, a building, the totally unknown amount of work, I would become terrified and my breathing would threaten to stop.

The architects gave me three weeks to work out my initial ideas for the graphics. When I left with a complete set of blueprints under my arm, I did not have the slightest idea that I could do the graphics, but I knew that it was the greatest artistic challenge of my life, and I was damn well going to give it a “college” try.

Renoir said, “You should wander about and daydream a bit; it’s when you are not doing much of anything that you are accomplishing the most. Before you can have a roaring fire, you’ve got to have a good supply of wood.”

So I spent the next three weeks under Renoir’s tutelage. To keep things from being too simple, I was not only doing my usual undefinable job as Director of the Goldsboro Art Center, but also teaching a group of high school Humanities students a daily two-hour “Art Modules” class. The night before the presentation, after an evening of cocktails, dinner and dancing, I was ready to put down my thoughts.

At this point, I decided definitely on “graphics” through brick. I relied very heavily that night on my three years of teaching creative drawing at Wayne Community College and my insight into children’s minds through my own two sons and the “child” in my own mind. At this time I had no conception of the size of a brick, how they are laid in a wall, the role mortar joints had to play, or any idea of how I was going to cut the brick. In my naive manner I just went along, taking it one step at a time, trusting life’s natural flow and my common sense.

My first drawing was a fish with beautiful small scales, but as I realized that I would have to carve each scale, I began to draw them larger and larger! Then a landscape, the kind the viewer projects into, seeing his own rivers, sea of grass, trees, mountains, rock formations, aesthetically a vast expanse of space. I tried out several other ideas before going to bed, realizing I had only scratched the surface.

Never having given a presentation to architects, I was scared to death. My designs were very unpolished. But I showed a clear head (faked with a masterful gaze) and I understood the direction in which I wanted to take the graphics. The architects said they liked the brick carving idea and the
The Partnership:

Now for the brick. I had never even carved a soap duck! In an attempt to compensate for this "handicap", I hashed through several plans, including the idea of other artists carving under my supervision.

Finally I came up with the idea of Jane Westbrook. I didn't need an assistant; I needed a partner!

A sculpture graduate from East Carolina University, Jane was headed in the fall to the Art Center School of Design in Los Angeles. She quit her job early and moved to Goldsboro for our project.

Jane is technically oriented as I am intuitive. She is not intimidated by machinery. She had worked as an engineer's aid—She could read rulers and blueprints!

At first the architects were reluctant to deal with Jane. She looked sixteen: youthful face, innocent smile and manner, long straight hair down her back. The problem was solved when she cut her hair in a sophisticated style to emphasize her twenty-five years.

I asked Jane to bring anything that would cut brick, forgetting to tell her that it was soft, unfired brick courtesy of Borden Brick Co. She arrived with everything from a carbon drill to a hairpin!

We stacked 24 green bricks in a wooden frame using plaster board in place of mortar. Initially we were both very timid about cutting into the brick, and then Jane said, "What are we so scared of?", and we attacked it with gusto. So the little duck in brick was born, and we felt confident that we could handle the brick sculpture idea.

Our initial problem was getting two artists who approached working very differently to try to work together—not only on designs but on techniques of working. Jane handles technical problems with skill and cunning, never moving in until she has it all figured out, whereas I simply jump in and swim around until something starts working.

We researched all the libraries within a 60-mile radius, as well as borrowed from several friends' (and their children's) libraries all the books related to carving, pottery, children's art, anything that anywhere near pertained to our project. My studio began to look more like a library than a work room.

We reiterated the differences between executing the sculptures in fired or unfired brick. Fired brick would be carved with power tools directly into the school walls.

The unfired brick technique would require dismantling and reassembling the sculptures but we could use hand carving tools and stamps. The unfired brick carving process would be more laborious but it would give the sculptures a hand-carved, natural look that we felt was so advantageous to a child's environment.

The architects furnished us with the specific locations in the school where they wanted the carvings, and the visual range and lighting each carving would have.

I had given Jane complete freedom to see what she could do. Now there was feedback and discord. We dissected, put back together all kinds of "themes" for the sculptures. We went down many blind alleys. There were nights of debates, failures, and frustrations as we tried to communicate our artistic thoughts to each other. Would we ever arrive at a set of designs?

For two months we struggled, fought each other and filled the floor with discarded designs. So far the partnership had been a disaster. You can solve a problem if you can define the problem and so far I could not.

I went to a lawyer friend in a large firm and asked him how he dealt with working with the Senior Partner on a case. He said that when the Senior Partner asked him to come in on a case, the Senior Partner was the BOSS; though he was free to disagree and advise. But when the Subordinate Partner asked the Senior Partner to join him in a case, the Subordinate was the BOSS with all the privileges that went with it.

What Jane and I lacked was a Boss, or in more polite terms, a leader. So I took the reins, figuring I would be the Design Boss and she could be the Sculpture Boss when it came time to carve the designs. This was not so hard for me, since I could not have been the boss in the execution of the designs with my "handicap." But this solution proved extremely hard for Jane, who was used to being her own boss, designing and executing her own work.

Jane bucked and bucked, but I held tight. Since she was technically oriented and could draw to scale, I gave her all those "nasty" jobs. One night, for example, poor Jane sat fussing...
as she drew a full sheet of 350 bricks to scale, while I, sweating but happy, refined a design.

How to keep her from killing me? Well, I told her, God intended that she do all the scale drawings because HE had her sit on a stool for a year and a half as an engineer's aide to prepare her for this! (She was to get even later by always carving above me as I carved below her in a torrential rain of particles of clay!)

Jane and I conferred constantly on how to carve everything we were designing. It wasn't a valid idea, line or form unless we could translate it successfully into sculpture. Most of the carving techniques were resolved at this stage of the project, so that when we actually did the sculptures we were able to spend our creative energies refining and embellishing the carvings.

After much painful labor, each acceptable design was tucked up above our 14-foot drawing table. Then Jane suggested that we make a plaster maquette to show the architects and the school board a design translated into a brick model.

Weighing, mixing and pouring the plaster was straight out of the Keystone Cops: Jane, holding to hard and fast rules, and me, yelling "it's not working; let's try adding . . . .", as we were up to our elbows in hardening plaster.

Between us the plaster got mixed, poured and, with God's help, set up. We decided to use my "responsive" abstract drawings as the design we would transfer to the maquette. World War III ensued when Jane wanted to have me spend what I thought would amount to 50 hours redrawing my design to the scale of the maquette. We compromised, with her doing a partial scale of my design and my ad-libbing the design when necessary.

Twelve hours later the carving emerged: a living visual symbol of one of our designs translated into a plaster brick model, and I had my first taste of carving: tired muscles, an aching back, numb fingers, a floor and body covered with plaster dust, and a smile of success you could see a mile. We were now 24 hours before the deadline for the formal design presentation to the architects.

THE DESIGNS:

From around 150 drawings, we had selected 11 drawings/designs for the sculptures. From my initial concept of art for the school, I wanted the art Jane and I created to be an integral part of the building, not something set apart, competing with the building.

We did not intentionally go after animal figures, it just happened that these particular designs met our artistic criteria. Each design had to be dynamic enough to be visually stronger than the brick walls it would be carved into; so that the viewer initially saw the carving, not the brick. If the brick "competed" with the carvings, the effect would be poor.

We were after designs which, when carved, would hold a child's interest, encourage his creativity and emotional response. The totem pole suits the child's interest in monsters and the absurd; the spider, his interest in insects, and something scary; the dog, shaggy, nondescript, that big playful toy; the eagle emanates strength, aloof beauty: the lion, which peers with crossed eyes and a goofy expression on his face behind the bars of a zoo cage, is fun. Is there a child who hasn't felt absurdly "caged" some days in school?

Much of an artistic statement simply "happens" . . . . and the artist flows with it. The dinosaur skeleton which goes around a corner fit none of the space specifications the architects had given us, but the design was too good to throw out. In a moment of unconscious thinking, I said, "Ok, we'll move it to that staircase, wrap it around the corner, and the curve of its back will be dynamic enough to make the corner of the wall disappear; a kind of visual magic."

So many months of frustrating hard work suddenly clicked the night before the formal presentation to the architects; Renoir's tutelage again—we had our roaring fire!

Jack LeSueur, a classical guitarist, came over and spent several hours playing and singing in my studio. He provided that extra spark which kept our energy at an intense pitch.

Throughout the many months in which we worked on the designs, and until we made our final selection of designs that night, the design aspect had held top priority. We made only vague mental notes about the techniques and procedures we'd use to execute the designs.

So at 2 in the morning, we wrote up a general outline straight off the top of our heads of the total technical procedure necessary to transfer the designs into sculptures. The exhausted guitarist had to drive back to Raleigh; so we sent him off with a goodie bag containing a jar of water, some cheese, an apple and a No-Doz pill! We went to bed at 4; the presentation was at 9 that morning.
THE PRESENTATION:
We had chosen the order with the care and cunning of a fox. We started with the Lion. The architects' response was immediate: laughter. They were totally captivated with our designs, having no major criticisms or reservations.

The presentation to the School Board did not go as well. One of the architects presented the designs at random as I sat on the side lines. The Board questioned the permanence and durability of the sculptures and their lack of color.

I realized that we were in trouble and took the ball. I carefully explained the durability: a child would have to swing a 100-pound hammer to break down a sculpture; touching them would only increase the depth of the cuts; and the sculptures could be cleaned by scrubbing. I defended their lack of color; the Board was programmed to think that "art" meant color (such as mosaic tile). I explained that the special lighting would provide depth and movement. I gave them all my enthusiasm, and they accepted the designs and the idea of brick sculptures. It was now the end of May, 1975.

CARVING:
The next months Jane and I spent with the technical aspects of the work while Gary Partin, the architect in charge, shifted several carvings to better locations and put them in the blueprint specifications.

We found that we could "stamp" much of the pattern work in some of the carvings (i.e., the fish scales) and Jane set to work scrounging junk heaps in metal yards, or making the stamps out of wood. She also designed and made several cutting tools while I stood in awe and fanned her brow and felt awfully glad I had her.

Jane built one 6' x 8' frame with adjustable bars to bring it down to all the other carving sizes and an L shape frame for the dinosaur skeleton since it went around the corner. Every technical problem was resolved with several alternate plans, in case the first approach didn't work, such as choosing several methods for transferring the designs into cartoons (drawings the actual size of the sculptures that would be traced onto the unfired brick walls).

The most practical technique was tried first. If it didn't give us the results we wanted, we'd go to Plan B, and so on. Working out these technical solutions was very stimulating because we met so many people who wanted to help us in any way that they could. Lyn Thompson of Borden Brick and Tile Co. and Marion Cockrane, a consulting engineer with the N. C. Brick Association were two of our biggest supporters.

Our biggest problem was the material to substitute for the mortar between the bricks. We tried everything, consulted with sculptors and college department heads. Nothing we tried worked. At zero hour we settled on common stoneware clay that potters use, as it would easily separate from the bricks when they were disassembled for firing.

We were carving solid bricks and could only cut 1¾" deep. We had sheets of plywood the proper thickness of mortar joints cut to lay behind the clay mortar joints and if in carving, we hit the wooden slat, we knew we'd carved as deep as the structural engineers would allow.

Each sculpture would have alphabetical coding and the brick coded and numbered consecutively. Each sculpture had a matching coded and numbered blueprint to make reassembling the sculptures as simple and clear as possible. They would range in size from 3' x 4' to 6' x 8'.

In the lull between solving technical problems, Jane and I continued to disagree. Jane was uneasy because we hadn't done a "polished" test carving (the duck was very rough) and I refused to do one because I felt we'd done enough homework and that our experience and talents (innate and otherwise) would pull us through.

Meanwhile I was working full time at the Art Center: hanging exhibits, handling correspondence, dealing with artists, the public, a Board of Directors, a staff of art teachers . . . .

In August, 1975, the contracts were let and we could start carving. We were to have fifteen days to do the 11 carvings.

The brick company told us that we could not work past 5 p.m. because they did not have a night watchman and could not guarantee our safety in such a secluded, open plant.

So we solved that problem ourselves. We went to Sanford and looked over Borden's plant facilities several days before we were to begin our work and found only one building that offered air conditioning (to keep the unfired bricks from drying out), adequate lights, a woman's bathroom, a telephone, and doors that could be locked: the plant's small office building! So we told them that we
would need (primarily) the manager's personal office.
The morning we began our work, Jane strolled in the office carrying a 22 rifle (she's an excellent shot) and I brought up the rear in my Mickey Mouse shirt.

The subject of protection never came up again. They did not greet us (two women about to execute the first brick sculptures ever carved in North Carolina) with a brass band. In fact, they treated us with something less than enthusiasm. They obviously did not know how to handle our being there (we came with the brick contract), and could not comprehend what we were going to do.

They passed 2,000 unfired bricks through the window and then closed the door. There we sat, in a 10' x 12' room with 2,000 bricks; it was like the story of Rumpelstiltskin; we could not leave until all the bricks had been carved!

At 5 p.m. a couple of men poked their heads in the door and saw nothing but a 4-foot brick wall in a wooden frame. They nodded in dismay and left.

Then the elves set to work. We transferred the spider from the design cartoon and carved well into the night. The next morning they arrived before we did and opened the door and peeked inside the wrappings and found a four foot spider carved into the bricks.

From that moment on, they loved us. By 5 p.m. the boss, Boyce Price, was buying us refreshments and taking us to dinner. From then on, no one minded our belongings scattered throughout their offices; in fact, they seemed to enjoy the constant flow of visitors (newspaper reporters, brick people and artists) who came down to see the work in progress.

After spending six to eight hours stacking a wall, we'd be exhausted and depressed from the grueling manual work and the realization that we had ten to twelve hours of carving work ahead of us. At that point, if you were to ask us who came up with the idea of doing the brick sculptures, we would have blamed the architects. But after we'd finished a sculpture, absolutely dead on our feet but happy, we would have exclaimed that the whole idea had been ours!

We had done our homework well in the months preceding carving the sculptures, and the carving process went smoothly. Jane was so happy playing the Boss and making the majority of cutting decisions. In fact, she was so happy to be carving! Her body was much more conditioned to the grueling work than mine; she could carve rings around me. I was delighted to play the assistant sculptor, janitor, errand boy, business manager, brick and blueprint numberer, entertainer and, when the going got rough and I had long before quit in exhaustion, Jane's trainer. Rubbing her aching back and neck, massaging her numb arm, saying, "Come on, Champ, I know you can do it!" Two crazy ladies. We laughed as often as possible and never fought once.

When a sculpture was finished, we took it down brick by brick, passed the brick out the window and stacked the brick on a pallet. A fork lift then took them to the firing room and they were hand loaded onto the tops of specially marked kiln cars. The firing process for each sculpture took seven days. Each unfired brick weighed five pounds; in the course of stacking the walls and then dismantling them, Jane and I each picked up over 18,000 pounds in those two weeks.

THE INSTALLATION:
Seven months after Jane and I finished carving the unfired sculptures, the architects said that it was time to install them in the load bearing walls of the school. I had been watching the school site, trying to relate the blueprints with holes in the ground and concrete pillars reaching almost to the sky.

Jane was in Los Angeles; the installation was totally my "baby". Would I remember how to use the tools? Were any of the bricks broken in shipping them to the site? Would the bricks fit back together?

I arrived on the site with a good case of "rigormortis" (unable to bend my elbows) and was introduced to the brick mason, Frank Pierce, who would work with me in the installation. The site was like the great plains of Kansas: 30 degrees, no shelter, grey open sky and wind—a far cry from the "studio" Jane and I had worked in at the brick factory!

I uncrated the first carving to go up: the Frog. The bricks had been beautifully packed in a wooden crate with cardboard and straw; the Frog was in perfect condition when I laid it out on the ground. I spent seven hours in the open air, my hands burning with cold, as Frank laid the rows of brick in the wall and I tooled out the mortar joints so that the sculpture would flow as a solid unit. By the end of the day I was flying; the theory worked from design through installation! And I had not forgotten my fifteen day sculpture lesson!
The men on the site were polite but distant during the first installations. Only the construction superintendent and the head electrician spoke my name as they nodded "hello". I found myself extremely uncomfortable as the only female among 50 men on the site. With time, we all got used to my being there, and they obviously began to take great pride in having the sculptures in the school.

Frank was a real craftsman, never hurrying, always willing to move a brick a fraction to suit my eye. So many people came to the site to see the work in progress and their curiosity helped my motivation. I found that when I got tired, and frustrated with the tedious work of tooling out the mortar joints, Frank acted as my trainer and would encourage me!

There were no surprises in the installation; only small problems, such as a light switch where the dog's tail belonged. But always everyone cooperated and the problems were solved.

Between uncrating and laying out the sculptures, waiting as the bricks were laid and the mortar set up to the right degree, and dealing with small problems, it took a full day to install each carving. Working within the school's construction schedule, the installations spanned a three-month period.

I loved the open air, the blue skies, the grey skies, the freedom of being an artist—working intensely—watching the sun set on a sculpture, even working under a sheet of plastic in the pouring rain . . .

A kindergarten class came—the first children to see the carvings. They laughed and squealed and touched them. What more could Jane and I ask?

Jane flew home for summer break from school, and together we installed the abstract mural (which was three times larger than any other sculpture) in "our" style. Eight straight working hours. A few rum and cokes and peanuts at six with company. Then working until nine p.m. with Frank totally locked into our work style: "You only quit when you can't stand up."

In looking back over the project, the only mistakes that we made were business mistakes. I would much rather make those kinds of mistakes, which are reparable, than artistic ones, which are permanent. I miss it all.

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**PATRICIA R. TURLINGTON**

Pat Turlington is the Executive Director of the Goldsboro Art Center.

Born in Washington, D. C., she studied art at Washburn University in Topeka, Kansas, the Academy of Art in San Francisco, California and the North Carolina State School of Design in Raleigh, North Carolina.


Her latest work is the Intaglio Brick Sculptures for the interior of the solar-heated North Drive Elementary School in Goldsboro, North Carolina.

She lives in the country near Goldsboro with her two sons.

**JANE WESTBROOK**

Jane Westbrook, a native of Burgaw, North Carolina, graduated in Sculpture from East Carolina University in 1971.

She has exhibited in the prestigious North Carolina Artists' Annual Exhibition at the North Carolina Museum of Art. She was a professional sculptor and jewelry designer before undertaking the Intaglio Brick Sculpture Commission for the innovative North Drive Elementary School in Goldsboro, North Carolina.

Currently she is earning a degree in Product Design from the Los Angeles Art Center School of Design under a full scholarship from Ford Motor Company.
Early in 1976, the Minnesota State Capitol Building Authority offered an AIA-approved design competition for a "terrarectural" office building annex to the State Capitol Building in St. Paul. The competition was open to all architectural firms in the U. S. and was widely publicized. Of the 256 entries, the firm of Dellinger/Lee Associates, Charlotte, N. C., was selected as one of five finalists. Presented here is a capsule of their solution.

Our first concern was for a direct response to the program as stated:

1. Preservation of the dignity, beauty, and architectural integrity of the Capitol, the buildings immediately adjacent to it and the Capitol grounds.

2. Protection, enhancement and increase in the open spaces within the Capitol area for public enjoyment.

3. Development of proper approaches to the Capitol area for pedestrian movement, the highway system, and mass transit system so that the area achieves its maximum importance and accessibility.

4. Establishment of a flexible framework for growth of the Capitol buildings which will be in keeping with the spirit of the original design.

The site plan shows a formal double row of linden trees lining a promenade which borders the front lawn. Historically the front lawn of a capitol building is significant and should be maximized to achieve proper proportion and scale with the focal point the building itself.

The program also dictated a view for visitors of the Capitol from the new Annex and a major gathering
space in front of the Capitol for ceremonial functions. This led us to the development of the Forum, a joint between the old and new, which became a sunken piazza of sorts, and which was consistent with the neo-Italian Renaissance character of the Capitol. A memorial, perhaps that which was proposed by Cass Gilbert in 1934, was to be placed at the other end of the mall, metaphorically the obelisk in St. Peter's Square. The secondary axis between the State Office Building and the Historic Society Building is reinforced with existing statues on the site, and minor entrances to the Annex are created here.

The "terratectural" building is developed around a linear scheme that connects the two buildings around which its programmatic functions revolve, the State Office Building and Historic Society Building. The building form is then curved around the Forum to encompass it and to project southwardly to meet the incoming traffic. Although the main building spaces do not require natural light, functions such as the cafeteria and dining room are located off the Forum to provide an exciting view and to accommodate outdoor eating by state employees and visitors. The lobby serves as a joint between the two functional areas of the building and also as a "frame" for viewing the Capitol.

Earthtone materials such as oak, travertine and warm colored concrete give warmth to interior spaces and contrast between the old, whose white Georgian marble is very cold and austere, and the new, whose potentially cavernous feeling must be circumvented. In every area, the Annex is seen as a subordinate yet complementary structure; the Capitol remains the major visual element, enhanced by new formal planting and landscape elements.

Construction of the winning entry, designed by C. F. Murphy Associates of Chicago, has been delayed until the next session of the Minnesota Legislature. As finalists, the Dellinger/Lee firm received a $25,000 prize.
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<thead>
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<th>Price</th>
</tr>
</thead>
<tbody>
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<td>$12.50</td>
</tr>
<tr>
<td>Vol. 21</td>
<td>$3.00</td>
</tr>
<tr>
<td>Vol. 22</td>
<td>$3.00</td>
</tr>
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<thead>
<tr>
<th>Company</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acoustics, Inc.</td>
<td>21</td>
</tr>
<tr>
<td>Andco Industries</td>
<td>22</td>
</tr>
<tr>
<td>Borden Brick Co.</td>
<td>23</td>
</tr>
<tr>
<td>Brick Association of NC</td>
<td>4</td>
</tr>
<tr>
<td>Carolina Asphalt &amp; Pavement Assn.</td>
<td>2</td>
</tr>
<tr>
<td>Carolina Builders Corp.</td>
<td>22</td>
</tr>
<tr>
<td>Duncan-Parnell</td>
<td>20</td>
</tr>
<tr>
<td>Giant Portland Cement Co.</td>
<td>22</td>
</tr>
<tr>
<td>Martin Marietta Aggregates</td>
<td>21</td>
</tr>
<tr>
<td>Ezra Meir</td>
<td>22</td>
</tr>
<tr>
<td>Mid-State Tile Co.</td>
<td>3</td>
</tr>
<tr>
<td>National Trust</td>
<td>6</td>
</tr>
<tr>
<td>Professional Directory</td>
<td>20</td>
</tr>
</tbody>
</table>

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