



A · I · A

August 1961—In Two Parts—Part I

Journal

OF THE AMERICAN INSTITUTE OF ARCHITECTS



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Journal

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How Armstrong Acoustical Fire Guard cut ceiling costs on this Ohio school by 53¢ a square foot. Saved: \$56,069

ON THE LEFT you see a Helmut Jacoby rendering of the new Valley Forge High School, Parma Heights, Ohio. To meet the specifications of Architects Fulton, Dela Motte, Larson, Nassau & Associates, of Cleveland, ceilings in the school had to perform two major functions—provide acoustical treatment and meet a two-hour fire code requirement.

Specifications called for Armstrong Acoustical Fire Guard or an alternative of acoustical tile cemented to plaster. The firm which was awarded the contract submitted a bid showing that Acoustical Fire Guard would cost \$56,069 less than the alternate. This represented a saving of 53¢ per square foot since 105,000 square feet of Acoustical Fire Guard ceilings were specified.

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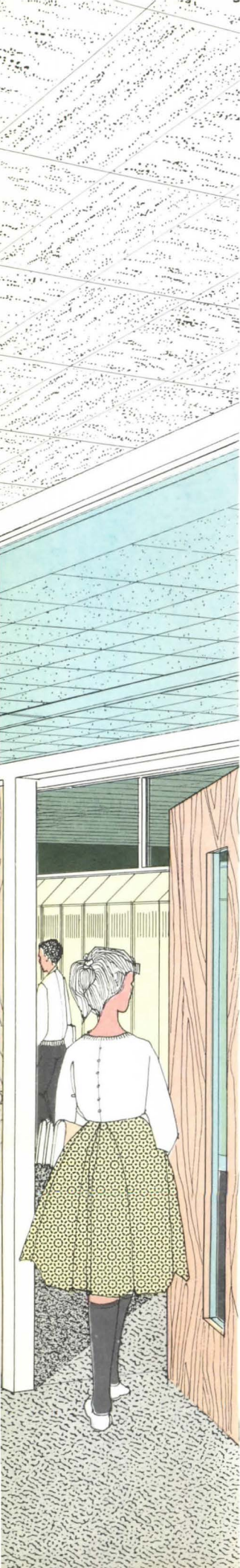
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| #13 | 2-hr. (Beam— 3-hr.) | #21 | 4-hr. |
| #21 | 2-hr. | #8 | 2-hr. |
| #8 | 1½-hr. | #7 | 1½-hr. |
| | | #9 | 1-hr. |

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Architects and Local Government

EDITOR, *Journal of the AIA*:

AIA President Philip Will and others, in various articles printed in the *Journal*, have been urging architects, and particularly AIA members, to take greater interest in urban design, where their training and experience could contribute so much to community improvement. They seem to think that the very limited participation by architects in this field is due chiefly to their lack of interest.

But is this a true picture of the situation? From all I can learn, architects are very much interested in these matters, but the political setup gives them little or no opportunity to take any active part.

Take for example what has been happening in our own home town of Huntington, L.I. Last year the town authorities decided that a comprehensive master plan for the town was urgently needed. The Chamber of Commerce advocated that the work be done by local men, among whom architects might well have been included. The administration ignored this suggestion, and selected, from a list given to them by the State Department of Commerce, a firm of so-called planners whose headquarters are in another state, a thousand miles away, and made a contract with them that will probably, for budgetary reasons, have to be spread over several years.

And where were the architects all this time? Out in the cold. They were given no opportunity to present their case, and were not consulted in any way. Incidentally, for many years no architect has been invited to serve on either the Town Planning Board or the Zoning Board of Appeals, the two local bodies chiefly concerned with administrative matters affecting the building industry. Most of the appointments to both of these boards seem to have been made, not on the basis of any kind of fitness, but on that of partisan political expediency.

Without casting any reflection on the competence of the firm that has been engaged, I am sure that there are local men who could do the job in half the time and at half the cost, because they are familiar with local conditions which any outsider would take a long time to grasp. We shall no doubt get a voluminous report, a large part of which will consist of what we already know. It will be well presented, but unduly expensive, and it is doubtful whether, once it is adopted, there will be anyone interested in following

through on its recommendations, as there would be if it was prepared locally.

So far as this may be typical of what is happening throughout the country, it would seem to indicate that architects who interest themselves in urban design have little to look forward to except disappointment and frustration. In a few cities, it is true, architects have won some recognition as competent large scale planners, but this seems to be exceptional. The fault, it seems to me, is not with the architects but with the political system. It is over-centralized, dominated by partisan politics, and run by persons who have little understanding of what architects have to offer. Its operations are so secretive that the public, including architects, cannot know what is going on until the final decisions have been made. At any rate, that is the case here, and I fear that it is a general condition. Here and there one finds a man with vision and energy in a position of authority—Mayor Richard C. Lee of New Haven is an outstanding example—but there are very few like him.

JOHN J. KLABER, AIA
Huntington, NY

Realistic Photography

EDITOR, *Journal of the AIA*:

"The camera doesn't lie" is an old adage which seems to be inconsistent with the purpose of photography if the method of judging in the AIA Fourth Exhibition of Architectural Photography (*AIA Journal*, February 1961) is to be considered true criteria for evaluation. I believe the objective of architectural photography is documentary; ie, to record as faithfully as possible in two dimensions, the substance and spirit of the subject, without creating effect or device that imparts characteristics not normally associated with the architecture. This has always been the essence of great photography and the masters of the past like Brady and Emerson and Weston never weakened their picture with anything that was not representative of the scene being portrayed. Their talent was large enough to rely on honesty alone.

This, and perhaps not unfortunately, is not the case with contemporary architectural photography. Every architect knows the disappointment of seeing a building which is considerably less than a skilled photographer has rendered it. This can sometimes be deception but more frequently it is the result of a better photographer than designer. On the other hand, few photographers have ever successfully captured in pictures, the personality and meaning of our great modern architecture. Le Corbusier's Chapel at Ronchamp is an example.

(Continued on page 10)



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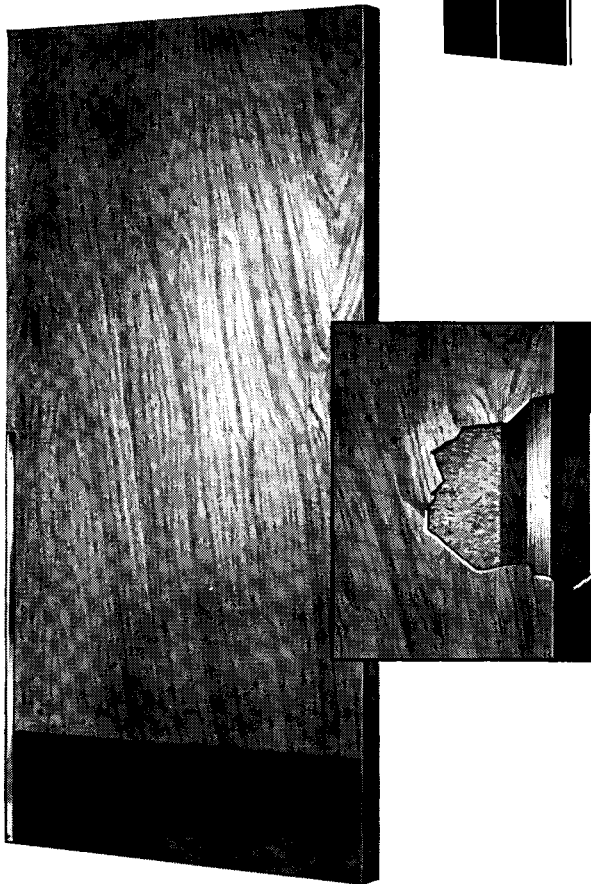


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Letters (Continued)

I am not endorsing a philosophy of photography limited to realism or an attitude that denies the abstract interpretation of architecture. I am questioning its motivation. The jury stated in its report that it was "... concerned with the skill and imagination employed by the photographers to present architecture in new and interesting ways." Unless the jury members visited all of the buildings pictured, I do not understand how this stated concern could have been intelligently exercised. I pose the question: "Was the architecture or the photography being judged?" Perhaps there should be standard views and times of the day and season established to photograph buildings so that there can be a uniform comparison, altogether, a depressing thought.

The problem must be faced squarely. Is the purpose of architectural photography for buildings to appear attractive or is it to furnish a natural impression approximating the actual experience of seeing it? To the architect the second alternative offers a true and useful description but it is without the tangible rewards that accrue to the first. The best answer is that if the architecture is good enough, it will not require cosmetics.

EDWARD L. FRIEDMAN, AIA
New York, NY

The March Issue Again

EDITOR, *Journal of the AIA*:

We wish to send this note of appreciation for the March, 1961 issue of the *Journal* which was dedicated to the topic "Urban Design." This is an extremely timely summary of the problems and approaches to aesthetic improvement of our communities across the land.

As you are no doubt aware, your reporting fits in with the activities of the AIP, who have a policy study committee devoted to design techniques. We know that the contributions given by your distinguished authors will be helpful to many who have a concern with the improvement of our city-scapes. We are taking the liberty to give special attention and announcement of your contribution to readers on the subject in this area.

EINAR H. HENDRICKSON

Bureau of Governmental Research and Services
Seattle, Washington

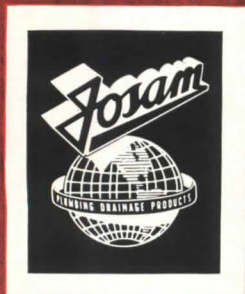
EDITOR, *Journal of the AIA*:

Hearty congratulations to you and your excellent staff, especially to your guest editor, Mr Carl Feiss, for the outstanding March edition on Urban
(Continued on page 12)

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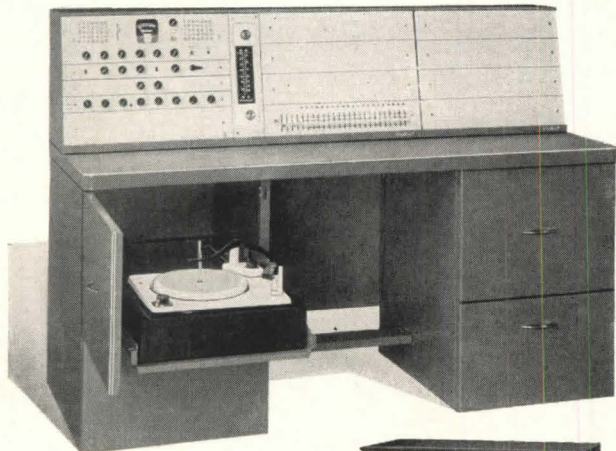
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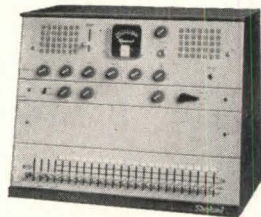
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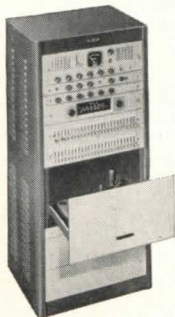


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Letters (Continued)

Design. I hope that good articles on planning will continue to appear in the *Journal*. Architects are interested in the planning and the re-planning of our cities just as much as the professional planners themselves.

The *AIA Journal* has indeed become one of the most outstanding professional journals in the country. Keep up your good work.

EDWARD Y. WING, AIA
Baltimore, Maryland

The Missing Link

EDITOR, *Journal of the AIA*:

Mind a suggestion? On page seventy-four in the January *Journal*, Frank Lloyd Wright's initials lacked one letter.

On all plans he signed: FLLW. In the third of the *Saturday Evening Post* story pieces, there they were: FLLW—on the end of his trunk in the baggage background.

Otherwise, always with profound obeisances,

KARL STALEY
East Cleveland, Ohio

We Take a Bow

EDITOR, *Journal of the AIA*:

My very heartiest congratulations on the convention issue of the *Journal*.

The format has, in a very high degree, that intangible requisite of any successful magazine—reader appeal. It's a beautiful piece of presentation, particularly, the article on "Architecture in Planning."

With my enthusiasm for the *Journal* I do not mean to ignore your elevation to Fellowship. After all they are part and parcel and I am sure the chicken will continue to lay high grade eggs even though he has received his richly deserved reward.

GRINNELL W. LOCKE, AIA
Baltimore, Md.

EDITOR, *Journal of the AIA*:

June 1961.

The content, heart and spirit of the Convention . . . captured, interpreted and documented.

Outstanding journalism!

HERBERT H. SWINBURNE, FAIA
Philadelphia, Pa.

Americans Place Third in Competition

A team of American architects has placed third in the international competition sponsored by the University of Dublin in Ireland for a new library building.

The team included Gene J. Festa, AIA, and William H. Gardner, AIA, associates of Eero Saarinen. Associated with the two men were John Mesick, Thomas Ovington and Lewis Zurlo. The first prize was awarded to Paul G. Koralek, ARIBA, of Great Britain, and the second award went to Alfred Mansfeld of Haifa, Israel.

Awards and Honors

Architects are receiving and giving awards in a summer burst of activity. So many announcements have come to our attention that we list them here and congratulate all of the winners.

The city Council of Quite, Ecuador, has awarded Gold Medals to the US Government and to Philadelphia architect Vincent G. Kling, FAIA, for his design of the new US Embassy office building in that city. The building was constructed as part of a State Department program under which forty-five US embassies were designed by American architects to represent American architecture abroad. The Quite Medal is the first such award ever presented to one of its embassies by a foreign city.



The Masonry Institute, Inc has presented six Washington architectural firms with awards for outstanding architectural applications of unit masonry-brick, concrete block, glass block and clay structural tile. The recipients include: Werner-Dyer and Associates, Hugh N. Jacobsen, Robert C. Smith, Duane and Lawrence, McLeod and Ferrara, and Donald J. Olivola.



Gordon Bunshaft, FAIA, a partner in the firm of Skidmore, Owings & Merrill and designer of Lever House, has received the Medal of Honor awarded annually by the New York Chapter AIA. The Medal, the Chapter's highest award, was presented to Mr Bunshaft by Frederick J. Woodbridge, Chapter President.



Seven scholarships totaling \$4,500 made possible by a grant of the National Board of Fire Underwriters, have been awarded by the Institute. The recipients, chosen by the AIA Committee on Awards and Scholarships, were nominated by

the Deans of accredited architectural schools. Schools from which winners came were: University of Kansas, University of Oklahoma, Pratt Institute, University of Washington, Arizona State University, and the University of Utah.



David J. Alstrom of Havertown, Pennsylvania, has been named the winner of a \$1,000 self-improvement educational award just established by the Education Committee of the General Building Contractors Association. The award was established by GBCA as a means of giving the top graduate of its apprentice training program an opportunity for further education that will benefit himself and the local general building construction industry.



The New Jersey Society of Architects and the New Jersey Chapter AIA, have named six New Jersey students of architecture recipients of awards for high excellence in scholarship, for special achievement in certain areas of scholarship, for promise of advanced development and for creative ability in writing in architecture. The six are: John Kelsey, Princeton; Russell Tremaine, Westfield; Edward Wronsky, Far Hills; Theodore Scott, Manville; Ronald Ryan, East Orange; and Patricia Graham, Pratt Institute.

Rensselaer Honors Yamasaki

Minoru Yamasaki, FAIA, Birmingham, Mich., has been cited by Rensselaer Polytechnic Institute, for his contribution to higher education and architectural design.

He was granted the honorary degree of Doctor of Fine Arts during Rensselaer's 155th commencement exercises. Dr Richard G. Folsom, President, conferred the degree.

President Folsom, in conferring the degree upon Mr Yamasaki, presented this citation:

"Minoru Yamasaki, American architecture in the Twentieth Century has been searching for an expression of contemporary civilization in terms of space, structure and esthetics. You have realized that the human spirit demands more warmth and character in its buildings than that resulting from the mere logic of structure and technology. The buildings which you have designed have demonstrated your own precept as a teacher that, 'when people go into good buildings, there should be serenity and delight.'

"In recognition of your achievements in architectural design, aesthetic theory and education, Rensselaer Polytechnic Institute hereby confers upon you the honorary degree of Doctor of Fine Arts and causes you to be vested with the hood signifying to this degree."

Last year Piccadilly Circus, that old incorrigible of London, became the scene of a famous victory of public opinion over commercial enterprise that shook the Empire practically to its Piccadilly-loving roots. This is an abbreviated account of that victory and its effects.

The Piccadilly Affair

by **N. Carl Barefoot, Jr**

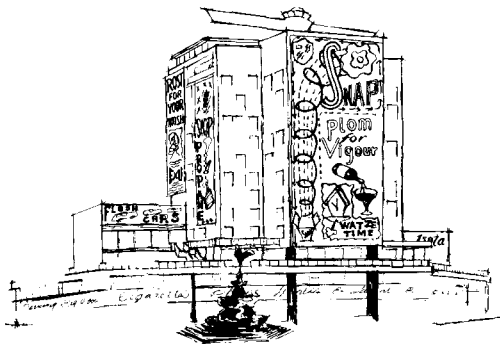
Assistant Editor, AIA Journal

► Sir William Holford, President of the Royal Institute of British Architects, in his address at the Philadelphia Convention, called the Piccadilly affair “one of the most curious episodes in the post-war development of London.” Perhaps the “affair” could only happen in London—but because its lesson is one that city planners and architects everywhere can mull over and reflect on, it becomes important.

The affair began on December 16, 1959, and though somewhat calmed down now, is still going on. It concerns what may well be the world’s most publicized spot of organized, lovable confusion—Piccadilly Circus.

The Circus, of course, is not a circus but that sprawling area deep inside London where seven streets converge. It was originally the termination point of John Nash’s Regent Street quadrant of the eighteen-twenties. He called it Regent Circus. Now, of course, the original Regent Circus, as Nash planned it, is gone. It disappeared many years ago with the advent of increasing traffic.

Giant neon signs, a massive amount of pedestrian and vehicular traffic and the Shaftesbury Fountain, known far and wide as Eros, make up the bulk of the tourist-eye view of Piccadilly Circus. Eros, by the way, was really the “Angel



of Christian Charity,” designed by Sir Alfred Gilbert as a memorial to Lord Shaftesbury.

Almost everyone knew that at some time or other old Piccadilly Circus would have to undergo some sort of redevelopment because of the pressing need for space and because much of the Circus had fallen into sleazy shops and offices that could only keep going down.

The London County Council, responsible for so much of London’s post-war improvements, drew up a tentative scheme for redeveloping the whole of the Circus area. Because of the lack of funds, however, it appeared to be just a dream. In late 1960, the Council granted planning permission to private developers to build a thirteen-story block of offices and shops on the north side of the Circus where the Cafe Monico stood. The firms given permission to invade Piccadilly were the Legal and General Assurance Company and City Center Properties. The Chairman of City Center Properties, it turned out, was Jack Cotton, who recently bought a half-interest in the scheme to put up a skyscraper on the site of the Grand Central Station annex in New York.

The published photograph of the model of the proposed new building in the Circus brought forth “Piccadilly protectors” by the hundreds and could rightfully go down in history as the “Monico disturbance.” The building proposed by Mr Cotton through the firm of Cotton, Ballard & Blow, consisted of a squat tower on a podium (as it was called by the *New Yorker*). The tower, which

the proposed building, the holders of the copyright, Cotton, Ballard & Blow, refused publication permission.

According to Sir William Holford, “If Jack Cotton had not advertised his design for a new building on the Monico site . . . I doubt if it would have caused more stir than the replacement of any other commercial building. But public opinion was, by now, very much on the *qui vive*; and Piccadilly has a literary as well as a visual mystique, not only in Britain but in the furthest reaches of the Commonwealth. There was a public outcry in Parliament and the press, and the Minister of Local Government held a public inquiry, in spite of the fact that the application had already received planning permission, and that half the site had already been demolished in expectation of immediate rebuilding.”

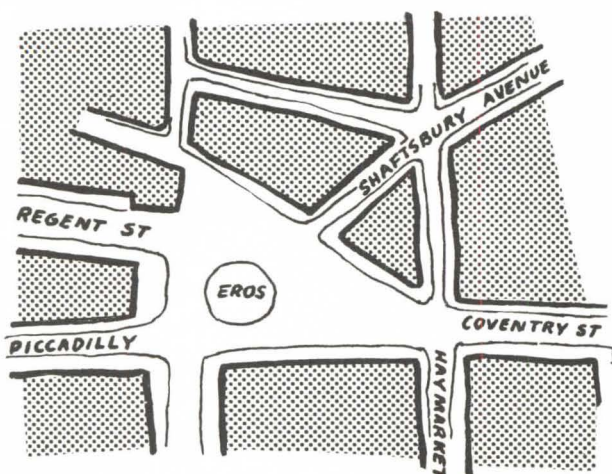
Everyone seemed to be against the proposed building, but an official prosecutor was needed. Londoners turned to the Civic Trust, a voluntary association devoted to urban amenities and founded in 1957 to encourage citizens to keep a sharp lookout for what could be done to improve their communities or to protect that which was about to be ruined.

Even the Royal Fine Art Commission joined the battle against the new London landmark. So great, indeed, were the public’s protestations that the Minister of Housing and Local Government arranged for a public inquiry and called in the application for the development of the Monico site.

The ministry, the developers and the Civic Trust appointed their counsels and each lined up their witnesses. The long parade began December 16. Colin Buchanan, an architect-engineer from the Ministry of Housing and Local Government, presided over the hearings and his report to the Minister at the end of the inquiry has been called by Sir William Holford “one of the significant documents in the history of British town planning.” A portion of his report appears at the conclusion of this article.

The developers took the floor for the first six days of the inquiry, calling up their principal witnesses (and imposing witnesses they were): Sir Howard Robertson, President of the Royal Institute of British Architects from 1952 to 1954; Hubert Bennett, architect to the London County Council; and Frank Booth, a Fellow of the RIBA, who acted as a consultant on the original design.

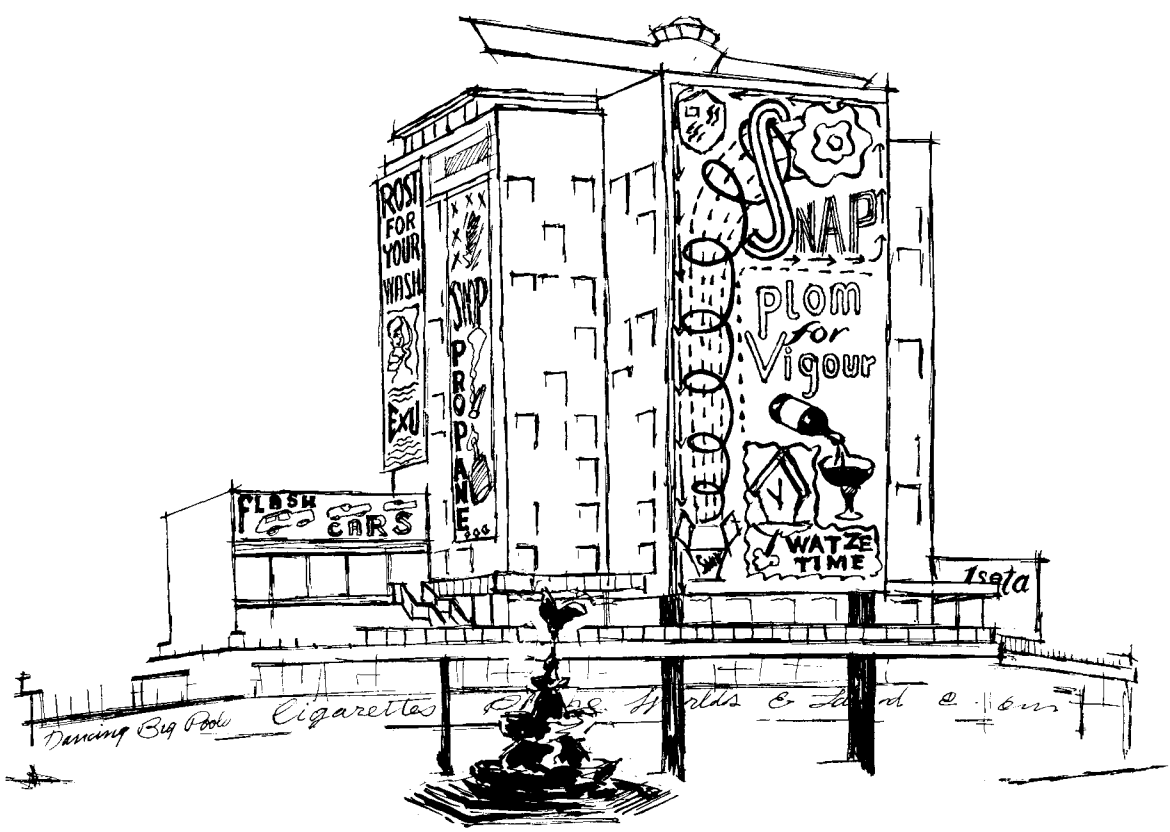
All of these witnesses agreed that the proposed building was not out of character with Piccadilly Circus and would not affect any development plans of the future. Neither of them, however, would say just who designed the building. Each, apparently, acted as a “consultant,” giving advice and suggestions and tinkering with the design.



Seven streets converging into mass confusion

faced the Circus, would contain a large advertising panel about 170 feet high, while the side elevations would also have space for electric signs. On top of it all would be a permanently revolving crane, illuminated at night, used to remove old signs and pull new ones into place.

It is interesting to note that in reply to a *Journal* request for a copy of the photograph of



Artist's conception of the building that started the "Piccadilly Affair." Giant advertising signs on the front and sides were to be raised into place by the gigantic revolving crane, illuminated at night. *Journal* drawing by Ronald Housell

In a report of the proceedings published in *The Architects' Journal* of January 7, 1960, and titled, "Is the Day of Creative Design by a Single Mind Over?" the presiding officer, Mr Buchanan, is questioning the developer's witness, Mr Bennett:

"Buchanan: I dare say a lot of people — perhaps some people at this Inquiry — always had the idea that a fine building was the creation of a single mind. Anyone having that view I dare say has had a bit of a shock in the last few days, because we have seen in this case that the design which is now before the Minister started off with a submission to the Council which was totally unacceptable to the Council. A. Bennett: That is correct.

"Q. Architecturally and in daylighting and in every way it was unacceptable? A. That is correct.

"Q. It has reached its present shape by a complicated process of consultation, discussion and suggestion, and at a late stage another architect was brought in for the treatment of the elevation? A. That is correct.

"Q. This process was rather aptly described yesterday as the 'have a go' system. The developer has a go, not in any great detail because he knows what he is going to submit is going to be amended? A. Yes.

"Q. It then goes to the planning authority, they have a go? A. Yes.

"Q. It goes back to the developer. He has a go. It may go to somebody else? A. Yes.

"Q. I think what is bothering people is this:

What is the chance of a really fine design emerging from that kind of process? Is that sort of process absolutely inescapable today in this large-scale development? We are beyond the time when one single mind could exercise decisive influence over a design?"

And so, throughout the first six days, through all the discussions about comprehensive development and upper-level circulation, one thing remained indisputably clear: No one knew, or admitted, who held the pencil that designed the building that started the furor in Piccadilly.

The inquiry recessed for the Christmas holidays and on January 6, 1960, the Civic Trust began round two of the inquiry by the presentation of its case against the design proposed for the Monico site.

Conducted in much the same manner as the Institute conducts its discussions during convention business sessions, the counsel called a witness and read his professional qualifications. The witness, in turn, read from a prepared statement his feelings on the proposed building.

As the witnesses appeared, spoke their minds and took their seats, counsel for the developers began their implications that the speakers were oftentimes not architects or planners, had never designed a large building or were esthetics who were more concerned with appearances than the fact that a developer had to expect a return on his investment.

The first witness for the Civic Trust was J. M.



British Information Services

Eros looks out over the flower vendor and the confusion that became one of the most controversial redevelopment projects London has ever witnessed

Richards, editor of the *Architectural Review*, who called the proposed building “a second rate piece of architecture and [it] stood in the way of the execution of a satisfactory plan for the Circus as a whole . . . The present proposal, being a piecemeal development, could not be regarded as part of a future long-term unified scheme.”

Another witness argued that Piccadilly Circus was still a vital and focal point in Nash’s plan and that to create a rival focal point, an aggressive architectural counter-attraction, would be fatal to the design of the Circus as a whole. “The unresolved duality of these two conflicting verticals,” he said, “might possibly be capable of solution in the hands of a very great, perceptive and sensitive architect.” He concluded that he saw no such evidence of this sensitivity in the Monico proposal.

As the days and witnesses went on, the chief agreement among the witnesses seemed to be that a vertical building on the site would do away with the sense of enclosure. Witness Thomas Sharp, Past President of the British Town Planning Institute and the Institute of Landscape Architects, submitted that the application should be refused for two reasons: “First, because the redevelopment of Piccadilly should be subject to a comprehensive

plan, and second, because the building contravened the principles of good planning even when considered as an individual structure.”

One of the biggest guns for the Civic Trust, Sir William Holford, confined himself to two questions: First, the problem of securing positive and constructive public development, and second, the attitude of the Royal Fine Art Commission of which he is a member.

In his statement he said, “Now that the days of the great landowners in London have passed, it is obvious the public authorities have the responsibility to take their place and to produce not only the control of day-to-day building in the Metropolis but also sometimes to rise to the occasion when the occasion, as at Piccadilly, seems to demand it.

“The developer could not be blamed for securing the maximum floor space and the maximum advertising space which the site allows . . .

“Public authorities, where they are not in fact owning the buildings, can act only under the Planning and Building Acts, and therefore their control, however collaborative and helpful to the developer, is a negative control. The process becomes one of negotiating between the private and the public developer to secure some compromise between the public and private interests.”

One witness went so far as to say that the building “showed impoverishment of both heart and mind, and that it was a greedy, tasteless, lumpy, clumping squat tower on an amorphous podium.” He said that if he were asked to criticize it in detail he would ask “Can I criticize the wart on a hag’s face?”

British dander was really up.

John Grace, professor of architecture at Tulane University, and a former practicing architect in England, took the stand and said, “What we have witnessed is the most bare-faced piece of design-by-default within decades. To date it would appear that no single person is capable of assuming responsibility for the whole building. We can leave this matter by saying that this building was designed by ghosts, with ghosts, for ghosts.” He suggested that the developers offer a competition for architects to design a worthwhile building.

Finally there began the legal summing up and the presiding officer, Colin Buchanan, presented his comprehensive report. After covering every phase of the proposal that was brought out during the testimony, Mr. Buchanan ended his report by saying: “So many questions of taste and policy are involved in this case that I have considered it inadvisable to tender a formal recommendation. My comments, however, will have made my own views clear on the architectural and planning matters within my professional scope. I think I can sum these up by one question and answer. The



Piccadilly Circus at night

question I have repeatedly asked myself is whether the present project, and the planning proposals with which it is associated, make the best of the opportunity which is now unfolding for Piccadilly Circus. I have not found it possible to give an affirmative answer.”

After the Buchanan report the Minister of Housing and Local Government rejected the proposed design on the grounds that: The appearance would fall below the high standard public opinion is entitled to expect on the site; that the advertising panels would be too dominant in the Circus and too visible over a distance; that the car parking proposals were not satisfactory; that it would fail to give a sense of enclosure and that it might prejudice the best solution of the problems of vehicular and pedestrian circulation.

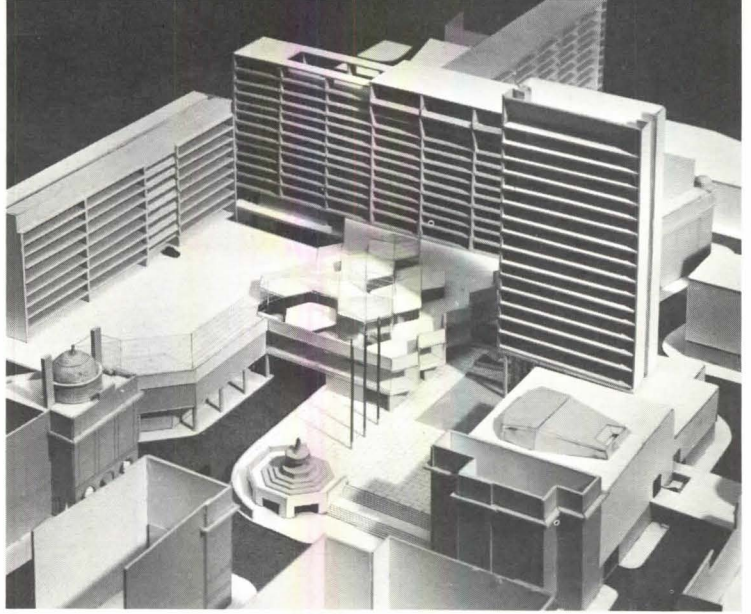
Thus, what seemed to be powerful forces entrenched and determined were forced to retreat by the simple expedient of a public up-in-arms. Many observers and participants in the inquiry now seem to feel that a precedent has been established that will bode good for future planning in central London.

But there is a sequel to the story, still not yet complete.

Regent Street on the right and Piccadilly Street on the left. Originally called Regent Circus, the area—under the watchful eyes of Eros—has become Piccadilly Circus

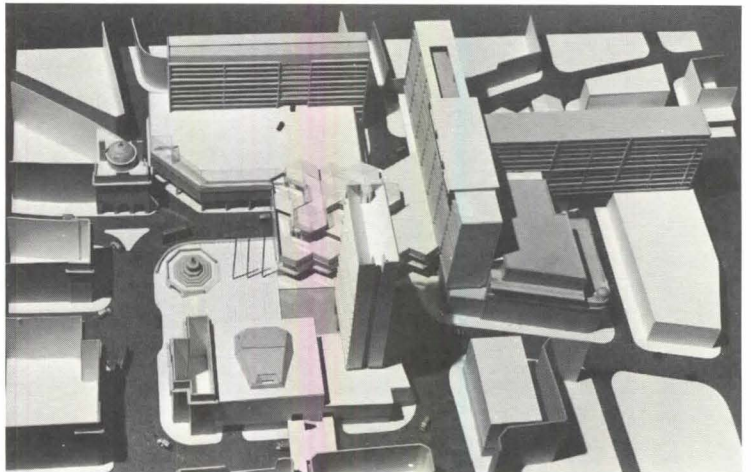


Model of Sir William Holford's plan for Piccadilly showing a low and horizontal design for the new London Pavilion raised above the traffic flow. According to Holford, the building lends itself to "much more amusing illuminations than the conventional ones," set at angles to each other so that different facets are revealed as one moves on and around



London County Council

Sir William Holford's plan—designed to create a sense of enclosure and to fill that enclosure with the gaiety and bustle of a great city center. Sir William sees his building as "a sort of Crystal Palace"



London County Council

The London County Council subsequently asked Sir William Holford to prepare a comprehensive scheme to improve traffic circulation, segregate pedestrians, reduce the height of the illuminated advertising panels, and define reasonable and attractive sites for rebuilding. As reported in his Philadelphia speech, the proposals are now being considered by the chief developers concerned.

In his address to the Convention, Sir William said, "What I have proposed is to retain the ground-level sidewalks—where the buses stop and the Regent Street and Piccadilly shop-windows remain—as a sort of arrival and departure platform. A few feet above street level is a pedestrian piazza from which the whole setting can be viewed—both the formality and the 'honky-tonk.' Two new levels of circulation are then provided; one underground, as an extension of the existing concourse, and with entrances under cover to all the stores and restaurants around; the other, about twenty-two feet above street level, containing a public gallery, with coffee shops and arcades facing onto it—in the style of the *Galleria* at Milan or the Burlington Arcade. The gallery penetrates the building blocks on three sides north, east and

south, and will later connect with a number of subsidiary parking garages, a winter garden and a series of upper-level shopping streets in Soho and along Shaftesbury Avenue.

"The formal elements of the Circus, including the quadrant of Regent Street, are kept unchanged . . .

"These proposals have had a good reception from the public, and if they go through to execution, the building on the Monico site will be designed by Walter Gropius and my university colleague, Richard Llewelyn Davies, working together."

According to Sir William, the moral of the Piccadilly affair is "that civic design has to be recognized and fought for. Otherwise, it can easily drop out of the redevelopment process altogether. Client and architect both have to care profoundly what the citizen and the visitor experience when they come to the center of a city."

Perhaps the "Angel of Christian Charity," alias Eros, was watching over Piccadilly Circus after all. ◀

Appreciation and acknowledgment of source material and photos is gratefully made to Sir William Holford, the London County Council, *The Architectural Review*, *The Architect's Journal*, *The Evening News and Star*, *The New Yorker* and The Civic Trust..

Architecture and the People

by **George Grant Elmslie, FAIA**

With an Introductory Note

by **David Gebhard, AIA, Director,**

Roswell Museum and Art Center, Roswell, N.M.

NOTE: At the turn of the century American architecture experienced one of the greatest bursts of creative activity that it has yet experienced. For a decade or more, American architecture through the Prairie School of the Midwest and through the progressive movement on the West Coast asserted its supremacy over the rest of the world. One of the foremost exponents of this Renaissance was George Grant Elmslie, FAIA (1871-1952). Elmslie had come from his native Scotland to Chicago in the early 1880's with his parents. During this decade he worked first with Silsbee, one of Chicago's leading Queen Anne architects, and later joined the Adler and Sullivan office. From the mid-1890's until 1909 he was Sullivan's chief draftsman, and many of the later works from this office (such as the ornament and other details of the Carson, Pirie, Scott store (1899), the Babson and Bradley houses (1907, 1909) and the well-known Bank at Owatonna (1907-08) were actually designed by him.) In 1909 he joined with William Gray Purcell, and during more than a decade the firm of Purcell and Elmslie produced some of the most original and creative work then being accomplished in America. Several of their buildings, such as the Bank at Winona (1911), and at LeRoy (1914), their house for Harold Bradley, Woods Hole (1911), and Purcell's own house in Minneapolis (1913) are considered today as major monuments of the modern movement in architecture. During the 1920's and thirties Elmslie continued in independent practice. In 1946 The American Institute of Architects' Gold Medal, awarded posthumously to Louis Sullivan, was logically presented to Elmslie. Before his death in 1952, he was made a Fellow of The American Institute of Architects. Among his unpublished papers left at the time of his death was the following essay written in late 1943 which rather pointedly sums up his view of architecture and its relation to the world at large. A limited number of editorial changes have been made in the paper, since it was not in complete form for publication. A conscientious attempt however, has been made to preserve the original form of the essay and only an absolute minimal number of changes have been introduced. DAVID GEBHARD

► It is truly a kaleidoscopic world in which we live, and it difficult to focus one's mind on any particular scene, for the minute we stop to contemplate it, lo, the scene changes as in a cinema and another takes its place. The world, it seems, was never so full of evidence of the old platitude that nothing in it is as permanent as change itself.

The truth of this statement has followed the path of the centuries with inexorable persistence. It was Marcus Aurelius who said: "First the green grape, then the ripened cluster, then the dried raisin; all things change not into that which is not, but into that which is not yet."

Yet, back of all this ceaseless rhythm, in all of its inflowing and outflowing manifestations, there exist now, as ever, certain values which never change. The same greed, cruelty and selfishness continue to cast a film on human life, a film which has never been more rampant and terrible than now. But there is a divine saving grace which the forward-looking man and woman believe one day will provide the needed solvent or catalyst for our gross inhumanities. This solvent may be summed up in three terms with which we are all too familiar: Faith, Hope and Love. In all of their imperative and appealing beauty, these word symbols exist as vital essence of the heart of mankind. Without them there is no hope for the better life of which we all dream; a life in which there is no fear in all its dire phases, a life in which the arts may bloom in full freedom of expression as the supreme glory of life. For we must learn to realize that the chief fruit of the tree of life is embodied in the arts, and this has ever been so.

Faith in the capacity of the human mind and heart to produce the finest work untrammelled by inhibitive tradition; *Hope* in the future of the greatness of life in all its manifestations, as embraced in the democratic vista; *Love* as the great unifying function of the other two imperatives. The latter is the summation of life and the spiritual exponent of all the exercises of our daily journey. There can be little meaning for life and the arts themselves unless this triad of symbols is kept closely in mind, and is related to the idea that all things change not into that which is not but into that which is not yet.

We who are interested in the process and the progress of life and the arts, in this particular case in architecture, should continually pause and reflect during these disturbing days. In judging the work of architects here and elsewhere in relation to native and creative genius, we tend to be too specific in our analysis when much more could be accomplished and understood by seeing these buildings within the broader values of our fore-mentioned triad.

We must continually remain alert to the defects of our own work, otherwise we will pass a similar brand of eulogy as did these of our former proponents of empty academic scholasticism. Unless

we begin to think more deeply and intimately of our problems of plan and design and celebrate our freedom from academies and schools of thought and stand on our own individual feet, our freedom will avail us but little. If democracy is merely a catchword to us and devoid of deep spiritual meaning, we may feel that we are progressing when such is not always the case. As architects it would be much better for us to listen to the unconscious voice of our people in its mass form, for it is ever audible, rather than responding to the frenetic eloquence of these self-appointed masters of our architectural fate—practitioners, critics and sycophants alike. These latter men desire nothing more than to enslave our people and force them to accept a preconceived architecture as something they should have, regardless of how it may appose a human and profoundly deep-seated democratic way of life.

There are germinal seeds afloat in the world now as always, and it is the privilege of the architect with the preceptive eye to enable those seeds to become part and parcel of his useful life. It is for him to enable them to fulfill their destiny through the work he accomplishes for his fellow men. These seeds seem to appear as anticipations and intimations of an approach to a new era in the arts of expression. They have shone as little fires in the foothills, at critical times in various ages. Faint as they were most of the time, they were nevertheless premonitions of things to come. When sensitive and prescient figures like Brahms, Beethoven, Cézanne, Angelo, Giotto and Shelley appear among us there is indubitably a deeply rooted reason. These men through the magnetic power of their genius, gathered together the significant perturbations arising from the circle of the commonplace, resolved and amplified them into great and timeless organic productions. These forms were not recognized in the fullness of their nature when they were first disclosed; the people and their dreams took, at times, a while to catch up; and so it goes with the architecture of our day.

The architect today does not stand alone. There are presently in our midst a few men who understand. These men are true disciples of our Triad. The architect who isolates himself from his fellow men is out of touch with the stream of life and is in no position to interpret the manifold and complex problems of living, in home or in market place. He may indeed endeavor to do so through his pride and vanity, influenced by false training, but the result, as we see day by day, is barren indeed.

An architect should remember that the work he does represents an exhibit of himself as a person and as a citizen, and that he must stand behind everything he does as an elemental part

of it and there is no way for him to escape this vital relationship. In regard to a building we may say, "A man alive to the spirit of his undertaking in all its phases paused here and placed his imprint on four walls and a roof"; or that, "A man paused here dead to all the issues concerning his project and did likewise." This is not a very encouraging thought for the time-server to entertain in his shallow mind, and it is he to whom we are speaking in our era of inarticulate architecture.

When one looks at and thinks of the new Supreme Court Building in Washington, as an example, and of the man who stands behind it, one greatly wonders at the nature of this architect's spirit as exhibited in the building. He may have been forced by external circumstances to follow the fatal academic manner, this we do not know. But whatever the reasons, this building is not a monument to the great spirit of democratic justice. It is a monument to the abdication of the human, creative and responsive spirit, at a most critical moment in our architectural life. Alas, there are altogether too many such buildings and but few of genuine and eloquent understanding. The vast bulk of what is called modern architecture is vapid and unimaginative. It is full of seemingly innocent clichés such as exist in other architectures of our empurpled past. These curious reminiscences are fatal to progress and specifically inhibitive to creative work.

Do these architects of our fate ever walk in a garden in the cool of a summer morning and really witness the growth of organic life in flower, shrub and tree? We fear not. Yet there is a complete and inspiring architectural synthesis in a flower. The man of the democratic way of architectural life, consciously or unconsciously, is aware of nature's processes and, therefore, has no stereotyped system to apply to the various ways in which people may live, do business and assemble in their various ways of life.

Dean Hole, the noted Anglican, said in general effect, that unless one has a rose in his heart he could not *really see* a rose in bloom. Thus architecture is infinitely more than function. Regretably though, this is all we can see in a majority of present-day works that pretend to be modern architecture. Let it be said that the term modern architecture means, in itself, nothing whatsoever. Why is the modern architecture of our day progressive in a fashion and at the same time retrogressive in another? It is doubtless due to the architect's lack of genuine connective rapport with the social organism of which he is a member, and assumed to be a contributing factor to its welfare. His lack of understanding of the vital nature of architecture as an element of life in democracy, and the presence in his mind of a negative attitude

toward architecture in assuming it to be merely a way to make a living instead of a way of life has led to his being separated from the realities of his world.

There can be little doubt that his preoccupations and preconceptions relating to the problems themselves have brought forth untold tragedies in the art of building. A little touch of what he calls Old Colonial, a little touch of Tudor, of Georgian, of Elizabethan, of Gothic, of Norman, a crude and illiterate dose of eclecticism, and a full quiver of streamlined pessimism, answers all questions and is about the size of his folio of expression. Alas, for the problem itself, for its seed awaits its destiny and is denied it by falling into the barren field of the architect's mind. By his lack of faith shall he be known; by his lack of sympathy, by his lack of a sense of fitness, by his lack of understanding of the real nature of his opportunities to serve his people, by his lack of idealism will he reveal his lack of any heart-felt approach to his problems. There is indubitably some lucent, engaging and spiring work arising in our land, and therein lies our hope which in time will bring forth many flowers to blossom in our grand and sweeping panorama. These examples are not "modern architecture" for they are something far better. They are "good" architecture, some of which is superb indeed.

When recently a distinguished architect said that construction is the ornament of modern architecture, he fell into a pit of his own making—or perhaps it might be better said he fell into a dry well; very dry indeed, for he betrayed a lack of understanding of the significance of a completely organic architectural integration. If architects would only commune with their problems, mull and muse over them, and then experience their environment for a day or two before rushing to their drawing tables and designing something, how much better it would be. Creative designing is, and always was, a mental and spiritual process and has fundamentally nothing to do with paper and pencil. An architect may say, "I have so many ideas for this job I don't know what to do or which to adopt." This obviously spells chaos, and this

is generally what we see about us in much of our contemporary buildings. The mental process sifts and sifts, considers and evaluates, and finally the clear-cut form appears, and then, and only then, does our architect draw it up. He does not need an eraser.

Communing with a problem is not a relative matter, it is a single, serious, subjective affair and concerns the flower of the mind and its imagination in regard to the problems to the exclusion of all extraneous thoughts that inhibit and paralyze creative effort. Vital conceptions may seem to arise spontaneously, as they do, but in reality they arise from the deep wells of the human spirit in contemplation. Dean Hole was right, and the implication of his homily about the rose is well illustrated in the negative by much of what we see. Where are the full-blown flowers and blossoms? Where is the human touch so insistently sought for and expected of us by the great mass of people, inarticulate in themselves, but whom we serve? Indeed, they are not abundant.

The absence in what is called modern architecture of decoration as the integral enrichment of a structure is painful at times, and especially so when one considers how far a modicum of genuine enrichment would go to vitalize a structure, to humanize it, and at such trivial expenditure in relation to the cost of the whole work. By decoration is meant organic ornament, not the meaningless assemblages of polygons, squares and circles so banal in all their invertebrate senility. There are but few designers of structure-related ornament in the country, which is regrettable, for the field is generously wide. Dry and witless prose seems to be preferred to a touch of genuine lyricism. Perhaps this touch is the perfume of the architectural flower. This perfume comes from the heart of the serious architect. Let us take the heart as an integral part of our architectural life and add some grace and beauty to our gray world. To say that today the psyche of our democracy is expressed in our architecture is simply not true. But we can surely look forward to the day when it will be so expressed, and we will then rejoice in it as a living, vivid and joyous art. ◀

Subscription Price Increase

Beginning January 1, 1962, the following yearly subscription prices for the *Journal* will become effective: Subscription in the United States, its possessions and Canada, \$5.00; elsewhere, \$6.50 per year. Chapter Associate members, \$2.50; Students, \$2.50; Members of art museums, associations, etc, \$2.50 (by special

group arrangement). Single copies, 75¢ except in quantity lots.

The price increase, made necessary by rising production costs will not affect subscriptions for Corporate Members since the price of the *Journal* is included in annual dues.

All subscriptions received before December 31, 1961, will be honored at current *Journal* rates.

A Collaborative Undertaking

by **John F. Harbeson, FAIA**, *Consulting Architect, American Battle Monuments Commission*

► In the second World War over fifteen million Americans were under arms. Some were in the Army and Army Air Force, some in the Navy and the Marines, still others in the Coast Guard. Irrespective of this division they worked as a team in Europe, Asia, Africa and on the high seas. The amphibious operations in the East and in the West were striking examples of effective collaboration. Furthermore, these Americans cooperated with the forces of our Allies. And back of them were countless others in industry, in farming, in transportation. It was because of the collaboration of all of these that the great war effort was successful.

The cost was heavy. More than three hundred and fifty thousand died; many of these were buried at what are now the American Memorials overseas. How should a democracy show its appreciation of the efforts of those who served, especially of those who died for their country?

A democracy needs monuments. "There must be occasional buildings which raise to a higher and more ceremonial plane the everyday casualness of living; structures which give dignified and coherent form to that interdependence of the individual and the social group which is of the very nature of democracy" — memorials not for the exaltation of a tyrant in the labor of his slaves, but for the pride of a free people, the true meaning of America.

It is in this spirit the American Battle Monuments Commission undertook the trust given it. Created after World War I it set up certain principles as to the nature of memorials that should be built. It required durability, dignity and beauty—beauty of aspect, of prospect, of design, of fine craftsmanship; and the appropriateness and beauty of inscriptions.

Collaboration among architects, artists, sculptors and the American Battle Monuments Commission has resulted in places of dignity and beauty for our war dead.

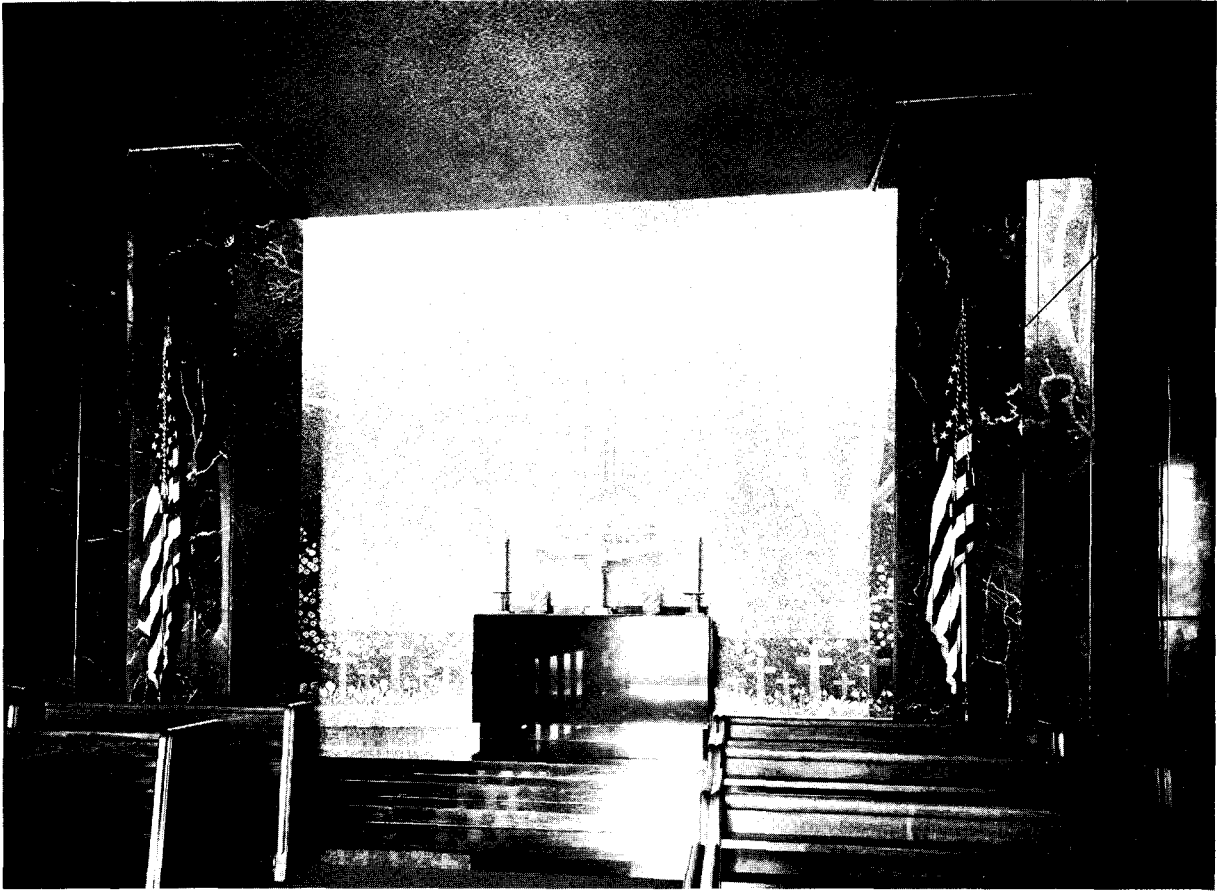
This article points out once again that where there is a combined effort on the part of those engaged in the arts, high standards and perfection of detail will result

Today's citizens would question a glorifying of military exploits. But there is no wish to lessen the expression of thankfulness to fellow citizens who did their duty for their country and sacrificed life itself in doing so. There is no division of opinion as to the appropriateness of making a shrine where the nation's soldiers lie buried.

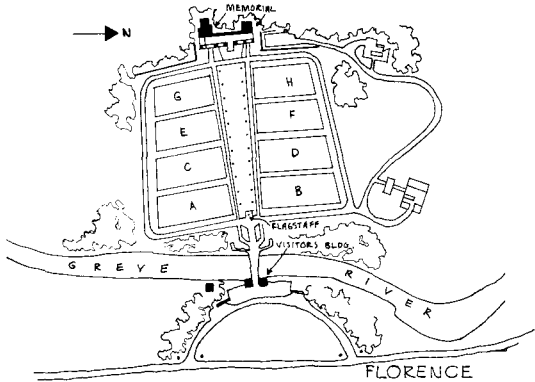
In choosing architects and artists—and designs—the Commission had the advice of the National Fine Arts Commission. But ABMC assumed full responsibility for the direction of the program and the manner of treatment. For in this endeavor there was collaboration not only of the different arts, but also of the artists and the client.

The army was a citizen army. Its members came from every hamlet in all of the States, a large proportion from places far removed from the centers of population and modern art movements. The Commission asked that all design be such as would be understood by and have meaning for the relatives of the dead in these little communities, for it is to these relatives that an expression of appreciation is most poignant.

The Commission appointed an architect for each project from a list provided by the Fine Arts Commission, after a study of the character of his



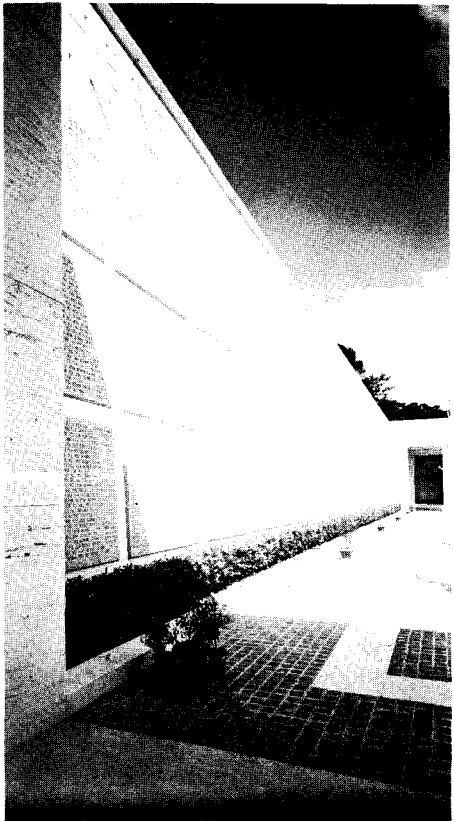
Interior of Chapel, Florence Memorial. Aspe Mosaic designed by Barry Faulkner. James Kellum Smith, architect



General view

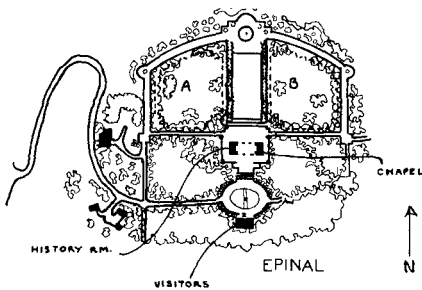


The wall of the missing

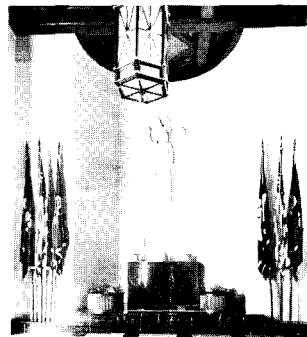




Mosaic map, Epinal Memorial, France. Designed and executed by Eugene Savage, painter. Delano and Aldrich, architects. Homer Fry, landscape architect



Chapel



Interior of Chapel

executed works. Each architect proposed a collaborating team consisting of a sculptor, a painter and a landscape architect. These names were then submitted for the approval of the Fine Arts Commission. Sometimes there were two sculptors engaged on a project, but no architect or artist worked on more than one project.

The Commission required these men to agree to collaborate with the architect and with the Commission in carrying out the purposes of the Commission and in consonance with its ideals.

This is the situation which prevailed when the Parthenon was built under the administration of Pericles, and Chartres and the other great medieval cathedrals under the active direction of the Archbishops and Bishops, and St Peter's at Rome under the eyes of the Popes—and the Capitol at Washington under the interested care of Washington and Jefferson and Madison and Monroe. All these structures were accomplished by collaboration among the arts and with the client.

The artists achieved a satisfactory balance between the tradition they inherited and the originality of their own minds. They were as original as the artists and architects of the Parthenon, or of any of the great monuments of the past.

Each project required a site plan including the pattern of the marble markers distinguishing the graves, the flagstaff, a small non-denominational chapel, the engraving of the names of those whose bodies were never recovered or identified, or who were lost or buried at sea, and a record in permanent graphic form of the achievements of the armed forces in the adjacent region. Sculpture and other works of art serve the functional purpose of engaging the thoughts of relatives of the buried, taking them away from their own particular tragedy. And with these there must be a landscape setting of surpassing beauty, with plant material so chosen as to ensure some flowering on trees and shrubs during June, July, August and Septem-

ber, the months when most Americans travel abroad.

The cemeteries vary greatly in size, the smallest holding eight hundred and sixty-one, the largest just over seventeen thousand. The size was related to the number in the combat forces engaged in the region.

There were difficult problems for the architects. Due to what was called "Repatriation," the sending home of a number of bodies at the wish of next-of-kin, great flexibility was an essential in the graves pattern. For instance at St Avold cemetery a layout was required which would look well if there were seventeen thousand burials—the maximum—or only six thousand—the minimum—or any number between. The final count was over ten thousand.

The number of names to be engraved frequently influenced the parti. At Manila, for instance, there were more than thirty-six thousand, at Hawaii over twenty-six thousand, yet at Draguignan only two hundred ninety-three.

The problems set the sculptors were even more demanding. To produce designs that will have meaning to the bereaved, calls for a response of consolation and hope, yet to acknowledge death with honor is a challenging task.

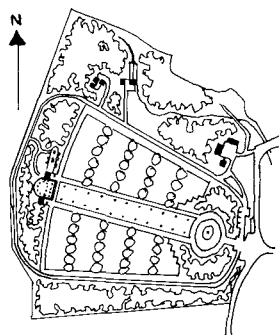
The problems set the painter were in some cases decorative ceilings, but in most were the design of the war maps. The expression is as various as the character of the individual artists. The technique of execution is different at each project. At the site in southern Italy the maps are painted in fresco; at another further north they are mosaic, at still another there is incising in limestone with inserted ceramic elements and appliques of enamelled metal. Appropriately at Florence the maps are of *intarsia* marble; at another they are completely in ceramic; at one project cast aggregates of glass and marble chips are used, with inset elements of metal and plastic letters. At Draguignan the map is in relief in bronze, with enamel markings in heraldic colors. Always the design and the colors are as dramatic as the war story that is told.

Artists are normally thought of as prima donnas, seeking to satisfy a personal ego. In this work there was a cumulative collaborative effort—it is the same spirit in which the great medieval Cathedrals were built. These works will not grow dated as will the manifestations of passing fashion. They have been designed as was all great art in the past—on a program, by concerted effort, to the approval of a client, whether archon, emperor, bishop—or Commission.

The high standards and perfection of detail attained in the successful completion of the work are due in great measure to the untiring efforts of General Thomas North, Secretary of the Commis-



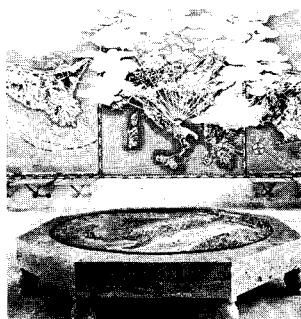
Sculpture "Remembrance" by Paul Manship. Sicily—Rome American Memorial at Anzio, Italy. Gugler Kimball & Husted, architects. Carlo Ciampaglia, painter. Ralph Griswold, landscape architect



ANZIO

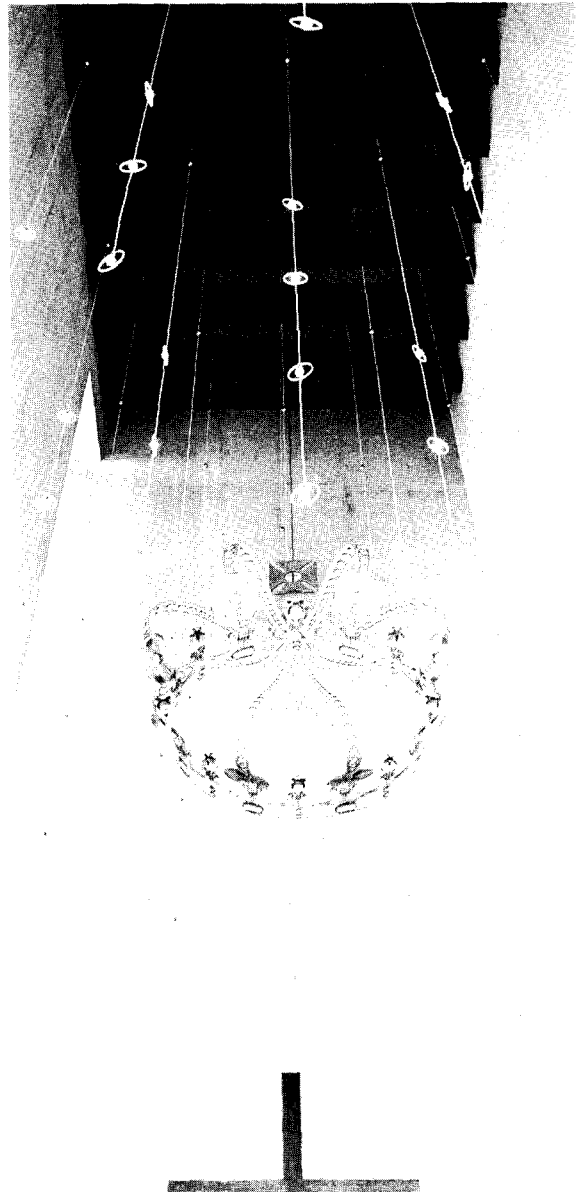
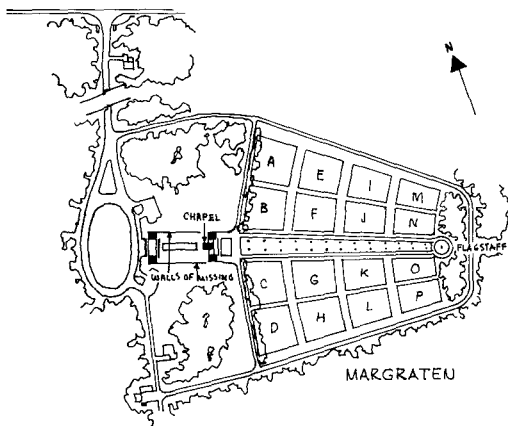


Elevation of Memorial

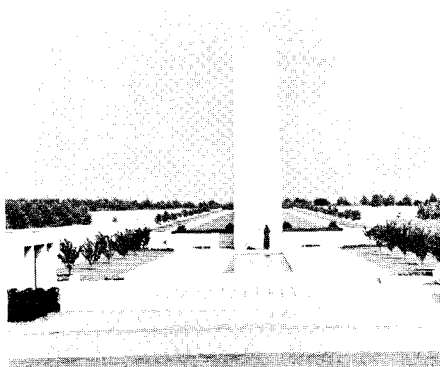


War maps

Memorial at Margraten, Holland. Shepley, Bulfinch, Richardson and Abbott, architects. Michael Rapuano, landscape architect. Joseph Kiselewski, sculptor. Lewis York, painter



Light fixture presented to the chapel by the Dutch Government and Limburg Province administration



The Memorial with graves area beyond

sion, who has been in active charge of the work since its inception in 1946, and, as a Lieutenant, had served as an assistant executive on the World War I program.

As a new nation the American people used their greatest talents in overcoming physical obstacles, in scientific and utilitarian pursuits rather than in contemplation or artistic creation. The forces that made America great can be set forth also in the arts, expressing what this nation stands for—a belief in the freedom of mankind and a willingness to die for it.

What these collaborating artists have tried to manifest was well stated long ago by Pericles, “the spirit of these warriors is not buried with their mortal clay, but lives on, far away, woven into the fabric of other men’s lives.” ◀

Be Thyself

SOME THOUGHTS ON A JOURNEY ACROSS THE US*

► I have recently driven ten thousand miles in America. The end of San Diego looked like the beginning of Philadelphia, and both looked awful. So any article on it could legitimately be a howl of rage; yet it could, with such a slight change of emphasis, be a Sandburg-like celebration of America, or rather of America's potential, the America that could be—not less American than it is now, but more.

For the local differences in America are immense; intensely felt, yet completely unexpressed in visual terms, as differentiation between places. They are unexpressed in the one sphere where differentiation could have most effect, where places could react on people and make them more individual, and so on in a kind of ascending spiral. Go out fifty miles from Chicago into Illinois and you see identical towns with identical outskirts (identical, also, with towns in New England, Oklahoma or even Southern California) yet incredible local feeling. Go anywhere off the main US highways and airways—and this applies, oddly enough, to the exurban hinterland of New Jersey as well as the complete isolation of New Mexico—and the country is immediately full of idiosyncrasy and individuality. It is expressed verbally—an American local paper, of which there are thousands, is the most local thing I have ever seen—but visually it is inarticulate except in the feeblest, weakest kind of way, the way of state badges and nicknames, of the biggest this and the widest that, of Babbitt's naïve love affair with Zenith. At that level it is childish and laughable, but only by a hairsbreadth. It could so easily be splendid and noble.

What has gone wrong, and how has America got itself landed by such a narrow margin with this bill of goods? There are dozens of reasons—one of the most obvious is the doctrine of overproduction, of having several where one will do—but the real problem in America is not mess but the lack of visual individuality and differentiation.

by Ian Nairn

Ian Nairn, driving across the United States and examining the American scene at the closest possible quarters, here discusses an aspect of territorial character and planning that applies to all countries but is most clearly illustrated in the newer, more vigorous and fast-developing countries where the process of change is visible to the naked eye

If all the mess were cleared up, there would still be something wrong. And I think the reason for this, basically, may be a philosophical accident: That history gave a particular pattern of freedom to the one nation which wanted it least.

Here I want to use terms which first appeared in the *Review* eleven years ago¹ in one of the best articles it has ever printed. There it was suggested that there were two principles of liberty: The rational principle, in which everyone was free to come to a common conclusion, and the radical principle, where each individual person was free to be himself, and the truth was a harmony or concordance of different opinions, and hence varied from place to place. The rational principle was equated with France, intellectual man, written constitutions, penal codes; the radical principle meant England, natural man, common law—and, translated into terms of the environment, be-thyself applied to places: The *genius loci* or townscape.

Now rational freedom can do very well, but the essential it must have is that everyone is like-minded, is going to come to the same conclusion. Otherwise it ceases to be freedom. And this pre-

* Reprinted from the December, 1960 issue of *The Architectural Review*

¹ Townscape, by I. de Wolfe, AR, December, 1949, page 355.



supposes either a small homogeneous society or the sort of cynical tolerance given by Frenchmen to their civil law today. Historical accidents—the accidents of 1776 and then 1789—ensured that America got the rational freedom to end all rational freedoms, the most eloquent written constitution, the most complicated system of democratic franchise; in town-planning terms, the most regular and rational of all town plans—the grid-iron—and geometrical systems for laying out the countryside. It was all conceived in terms of like-minded New Englanders; and over the next century it was applied to what has become the most polyglot nation the world has ever seen. Politically, this has meant that the nation which is most concerned with liberty is in some ways less free than any other—because there is only one conception of liberty you are free to adhere to. Hence the American way of life, which should be such a splendid, free-ranging, paradox-encompassing thing, has somehow become a symbol of conformism which is no less effective because it is not overt, like Communist, Fascist or Catholic conformism. The Civil War was fought not over slavery but over secession.

Observe, now, the town-planning consequences that flow from this rational principle applied in such inappropriate circumstances. (This is not intended to be the whole truth. It may, however, be an aspect of it; and in any case Be-Thyself admits of the coexistence of several truths about the same set of circumstances, which is handy.) The rational principle had at that particular time been identified with geometrical patterns of streets and squares. In New England it corresponded to a yea-saying community—I don't mean conformist, I mean a community of parallel thinkers. But look at what happened: Where law and government became Penal Code and Constitution, town-planning became Established Tradition, the equivalent of law. Hence geometrical plans everywhere, first by imitation, natural though inappropriate, and then, in the nineteenth century—and this is the fatal thing—as a matter of simple commercial expediency. This is the fundamental flaw of the rational principle: That once it is on paper or established, it cannot change its goal and it cannot distinguish motives—the law is the law. Be-Thyself, by the exercise of common sense, can discriminate, and its law is not inflexible. All of America's subsequent planning troubles can be expressed in terms of this—that, being inflexible, the rational way of thinking could only deal with mass production in the existing framework—by treating a group of ten thousand as though it were ten thousand individuals, possessing by right ten thousand individual freedoms. Of course, it is not; it is a different animal altogether, and a

very dangerous one. This is not to say that Be-Thyself or radical thinking will automatically recognize this, but at least it has the chance.

The connection between this and billboards or gas stations is absolutely direct. For one man to advertise his goods on his own land is legitimate: It makes direct sense, the doer cares about the thing done, account is taken of the environment. For ten thousand men, organized as a corporation selling petrol, to put down ten thousand signs on other people's land is by rational thinking treated as being the same thing. What else can it be?— $10,000 \times 1 = 10,000$; q.e.d. Hence, by analogy, every kind of mass-produced mass-disseminated dumping on the landscape is treated in men's minds as though each were a separate, individual act—rather like struggling in the clutch of a super-octopus yet treating each tentacle separately.²

And what is true of one person as against ten thousand people is true of one thing versus ten thousand. Ten thousand things have an economic life of their own, represent an investment which is not equivalent to the sum of individual units and cannot be dealt with in individual terms. To argue that a certain cake-mix or soup-powder is going to give you an individual cake/soup is immoral as well as incorrect. What it gives you is a constant, X, which is quite different from what you would make yourself, but may be bad or good. To inflate this constant into a norm for individual cooking is a process perfectly logical by extension of rational thinking, perfectly absurd in fact. Similarly, if you like, to inflate the (quite rational) responses of a particular type of Viennese to be a national standard of psychoanalysis. Similarly also, though this is a world-wide failing, to inflate a certain very specific pattern of urban living, the block of flats surrounded by green space, into a pattern to be applied to urban renewal everywhere.

And if the inflation of ideas in good faith is bad enough, what can be said for the deliberate creation of ideas in bad faith, or at least with the deliberate intention of raking in the lolly? Ranch-type houses make sense in the ranch country, *haciendas* in California, saltboxes in New England, each called forth by an individual response to climate and conditions. To offer this kind of spurious choice to a customer in Indiana—which could be justified by the rational principle, one-for-all, all-for-one, and so on—is an act which debases the originals, debases the recipient, and

dear God, how it debases the landscape. Radical thinking would say: X doesn't fit this particular set of circumstances, let us evolve our own alternative. In just the same way, mechanical air-conditioning is one mass-produced solution applied universally—what is needed is a dozen kinds of airconditioning, some mechanical and some natural, according to the different conditions of site, climate, diurnal and annual variation. In general what is needed is choice, is liberty—true Be-Thyself liberty, not a paper ideal imposed alike on cultivated Bostonian and illiterate red-neck from Mississippi.

Easy to say, and hard to do: It could be argued that the Puerto Rican gangs in New York are being themselves as hard as they can. But they are being themselves outside the law only because the existing pattern will not let them be-themselves inside it—all they can be is, really, all-Americans, the final debased end product of the rational principle. True Be-Thyself carries its built-in discipline. For if you are yourself to the nth then other people must be too. So must be the hillside at the edge of town where the supermarket went, the nigras down the road, the bum on the bar steps. Social limits become not a duty laid down by law (or class or tradition or whatever word you want to use to describe the face of falsehood) but natural reciprocal limits to your actions. Radical freedom was not built in a day—what there is of it in England took about a thousand years to create—but a little of it goes a long way.

So finally, to stop being an unqualified philosopher and start being an unqualified land-planner, my plea to the American environment is—be yourself. Be yourself, in all your glorious potential variety, individuality, multiformity. To the little Panhandle towns sheltering under their splendid elevators—shake off the dross put on you by those who neither know nor care about you, make up a pattern appropriate to your site and purpose. To the little dour country towns in Wisconsin, to the city-of-towers of Chicago, or the city-of-terraces of Baltimore; to Salem, Missouri, a hill-billy town and proud of it, and Salem, Massachusetts, a patrician town and proud of it—each be yourselves, to the limit of your ability. In character you are so already: Give the character visual form, and hence enrichment, roots, continuity. To the suburbs of New Orleans—stop looking like Detroit; to the suburbs of Detroit—stop looking like New Orleans. To everyone, select your own particular pattern, fulfill it as far as you can. The more you deviate from a statistical norm, the more you will be really and truly American, citizens in the real sense of the land of liberty. ◀

² I am writing this in a pub. Around, two dozen people are having conversations, leading no doubt to mutually contradictory conclusions, and I with my writing pad am non-conforming to a fearful degree, if we were living under a rational law. But English pubs, with limits of the anti-social assessed as carefully as a Solomon (different pubs, different limits) are apotheoses of Be-Thyself.





Journal readers may remember seeing the 1959 Rome Prize winners in the September issue of that year. One of the two Fellows chosen was Ted Musho, who received his BS in Architecture from the University of Cincinnati and his Master's in Architecture from M.I.T. Richard A. Kimball, Director of the American Academy in Rome, brought his sketches to our attention, saying "I wish you could see the originals, which are about 30"x40", but even the reduced reproductions show the freedom and 'dash' which give them their extraordinary quality. They are so completely the work of an architect, not just recording but, as he says, 'experiencing' architecture."

Sketches of St Peter's in Rome

by **Theodore Musho**



Notes by Theodore Musho, FAAR

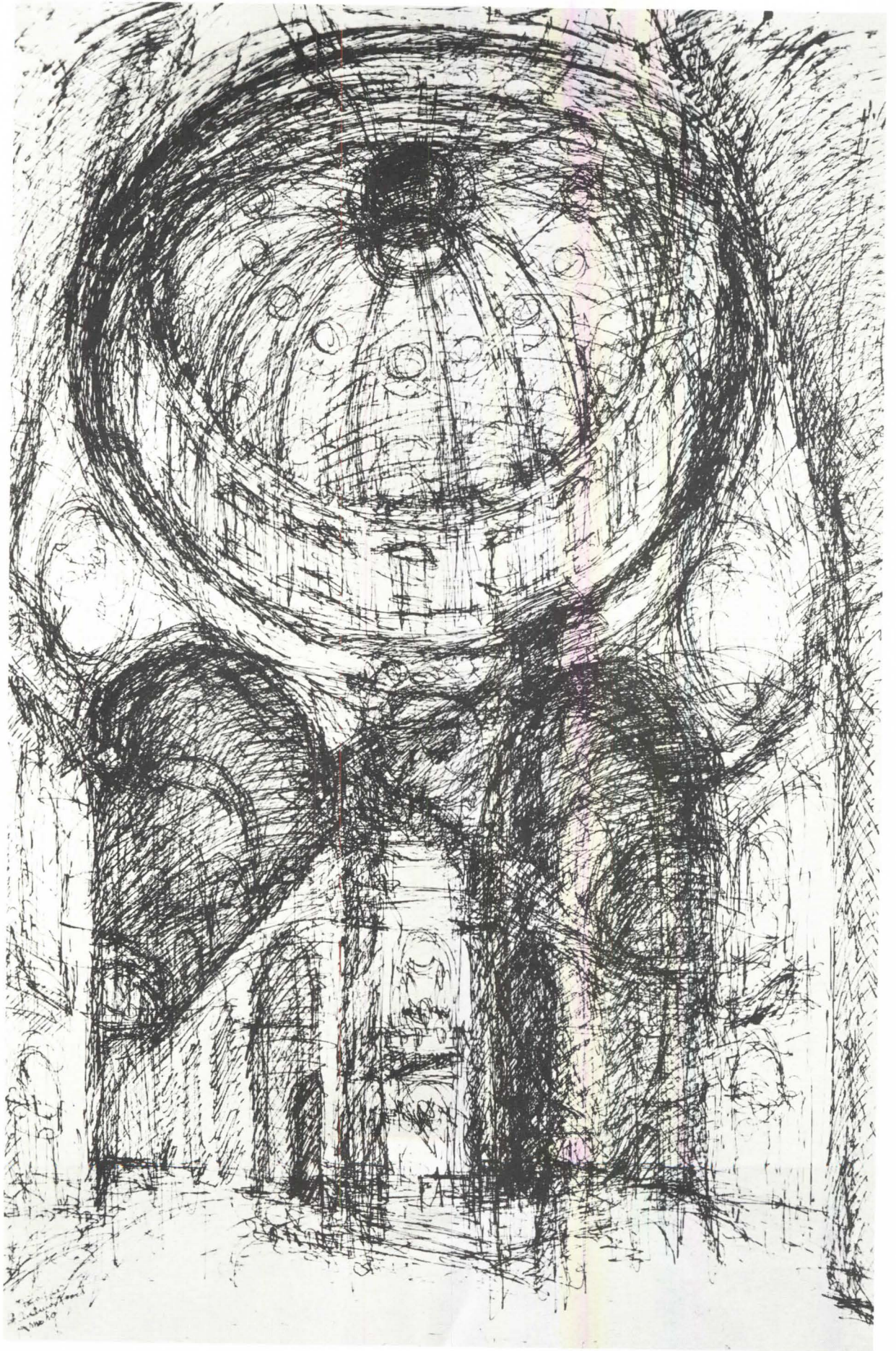
For an architect the process of sketching is a most rewarding method of experiencing architecture. It requires one's eyes to look at a subject for something like two hours, which is important in familiarizing oneself with the details of the subject and in imprinting them firmly on one's memory. A large sketch (the originals are generally approximately 30" x 40") increases the possibility that a considerable period of time will be devoted to its execution. Building it up in line, as I do is somewhat tedious but it has the advantage of forcing the consideration of details within the broad original generalization. Then the values, the lights and shades, must be developed, particularly in a Roman summer which is a shadow paradise.

Starting with the big idea which need not be too accurate, and gradually refining it keeps one continually aware of the structure which binds the whole together.

On completing my sketches, that is when the subject and the sketch become virtually identical in my eye, I find it useful to draw an overlay on transparent cellophane. This allows me to express relationships which are actual but only in the memory. In a sketch of an interior the overlay can be of the exterior and vice-versa. The overlay may extend the limits of the sketch and by the extension create quite a different impression. For instance, the facade of St Peter's takes on different characteristics when viewed through the columns of the Bernini colonnade, or the apse and dome of St Peter's seen from the south gain more meaning when the interior forms are suggested on an overlay. I find also that viewing the overlay alone often brings out exciting aspects which speak to an architect more clearly than words.

(Editor's Note: Unfortunately it is not practicable to reproduce the cellophane overlays.)







Omusho

Don't Tread on Me

by **C. A. DeDeurwaerder, ASLA**

Assistant Professor of Landscape Architecture

Department of Horticulture

The University of Wisconsin

*A member of an allied profession feels
that the architects are being too all-
inclusive in their claim to control the
design of man's total environment. In
his letter to the Editor he said he
believes "that our professions will be in
closer harmony only when the organs
of those professions begin to recognize
the potentials and abilities of related
fields." We gladly give
Professor DeDeurwaerder space to
state his opinions*

► The summer 1960 issue of *Landscape Architecture* included an article by this author called "Time to Heal the Split." That article and several since have referred to an apparent fusion of professional capacities which is unacceptable in the eyes of many professionals. That unaccepted point of fusion was dramatized in the article mentioned by citing the example of a conference planned by students of landscape architecture intended to promote collaborative efforts between building architects, school-trained city planners and landscape architects. Of two hundred invited city planners, fifteen participated. Only six out of 180 invited architects joined the two-day conference. Thus approximately 220 persons involved in the architecture of the out-of-doors talked to themselves of collaborating with professions too disinterested to listen. The conference appeal never reached the ears of the intended recipients for even the follow-up statement of conclusions and suggestions appeared only in the organ of communication of the landscape architects and never reached the journals of the other professions.

AIA President, Philip Will, Jr, in his statement of "The Mission of the Profession of Architecture" raises the question of "For what are we (or should we be) trained and educated?" His special answer to that question suggests that the architect is trained and educated to cure all ills. Rightly he states that in design we may find the solutions to debauchery

of land, pollution of streams, contamination of our air and ugliness in our urban environment. Wrongly he intimates that the province of design belongs to the architect alone. Although the statement goes on to admit America's need for the design professions, the challenge of society's need is reserved for the architectural profession. That challenge belongs to all of us.

James Rose in the book "Creative Gardens" points a finger at the most extreme oversight in the field of architecture today. In reducing design to an organization of positive and negative elements we find a basic contradiction in architectural philosophy. While developing structure there is continuous reference to the amalgamation of spaces within. Spaces being generally accepted as a nothing, it would be classified as the negative element in planning. Design in building architecture therefore is primarily concerned today with the negative elements—a commendable action—strictly according to current training and education. In moving to the out-of-doors, however, there seems to be a shift in thinking and the architect and city planner become involved in the placing and organizing of the structures, roads, walks, etc (the positive elements), in the landscape. The oversight referred to is the resulting hodgepodge of spaces between and around our positive elements. The design of those spaces, the negative element in the larger concept of our environment, is the special province of the landscape architect.

"Landscape Architecture" by John Simonds (a book for architects, landscape architects and planners), deals with an area of the planning process that is in many ways common to all three fields. The planning of man's physical environment, suggests Mr Simonds, is the job of the architect, landscape architect, engineer and urban or regional planner, working separately, or more ideally, in close collaboration. That close collaboration depends very heavily on the proper leadership within each of the fields involved in planning. Proper leadership is restricted to those big enough and honest enough to recognize the factual existence of the complexities of our environment. Today's plan needs a team. That team will never be a successful one without the realization of a degree of dependency within. It is the most urgent responsibility of the leaders of each and every design profession to make clear that proficiency in one field of training does not guarantee proficiency in all. Each profession, no matter how broad, has its limitations in the reasonable capacities of the practitioners of that profession.

Recently I was faced with a rather startling remark made by a registered architect which intimated that we teachers of landscape architecture are of rather limited value. The remark: "Because

there were no qualified landscape architects available, I (the architect) had to learn *all* about landscape architecture within the first three months after I began practice." Closer to home, Editor Glenn L. Black, of *Landscape Design and Construction*, has referred to landscape architecture as the "what's left" profession. He suggests that landscape architects should first be trained as architects or engineers. Then in one or two years of graduate training the necessary landscape courses might be added. The suggestion intimates that the four and five year undergraduate programs presently training landscape architecture apprentices are superfluous.

Now hear this: Schools of landscape architecture throughout the United States are training and educating design personnel in the very special treatment of the negative element we live in—space. Their curricula are not intended to produce professionals to compete with nor replace any of the other professions involved in the physical shaping of man's environment. The school training of a qualified landscape architect (of master's degree rank) requires generally from six to seven years of demanding college courses—not only three months or a one- to two-year graduate program. That education is broad enough to acquaint the landscape architecture student with general procedures involved in several other fields; ie, civil engineering, architecture, city planning, sociology and economics. It is narrow enough to convince the landscape architect that he cannot go it alone. Landscape architecture complements and is complemented by the other design professions. The trained landscape architect is neither a bush-

The Profession

pusher nor a pansy-propagator. He is a professional educated in spatial relationships, the handling of ground forms and the coordination of esthetics and function in the development of the landscape. Plant material is only one of the many tools he employs in his endeavors.

America needs the design professions. The leadership in the forming of tomorrow's America lies on the shoulders of every designer. Let us accept the challenge of society's needs by developing our specialties to their utmost, but primarily by recognizing our own limitations and working together. Only in collaborative effort can we possibly build an environment suited to best possible land use and human welfare. Let each profession rightfully warn "Don't Tread On Me." ◀

THE CONSTRUCTION INDUSTRY AND THE U.S. GOVERNMENT

BY EDMUND R. PURVES, FAIA

Consulting Director of the Institute

II. As seen by the Industry

The second article in a series of two by the Institute's Consulting Director written to examine many of the facets of the construction industry and its relationship to the diverse elements with which it deals

► In the first article the government looked at the construction industry with particular regard to the political impact of the industry's many and diverse elements, individually and collectively. Now we reverse the position and, removing ourselves from the immediate confines of the architectural profession, project ourselves into the industry to look at the Federal government, its interest to the industry, its impact on the industry and to clarify, insofar as it is possible to do so, the activities of interest to the industry of the vast democratic complexity under which we pursue our vocations and our ambitions.

The United States Government, in its attitudes, policies and operations, is often subject to misunderstanding due probably to the attempt to over-simplify our democratic setup and processes so that school children may have a picture of a perfect, if imaginary, nation. We are human beings. We are ambitious for ourselves and for our country and our vocation. We are at times intolerant and impatient, two characteristics bred by ignorance rather than founded on inherent quality. We are fundamentally antagonistic to authority except when we seek its protection and benefits. And yet I think that we forget we have set up the authority and the authority is in a sense ourselves.

As it should be in a democracy, the power is in the hands of the people. Some segments of the public are represented by pressure groups which may at times exert power or attempt to do so. The architectural profession, as exemplified by its organization, the AIA, is not a power or pressure group. It would be a fatal error for us to assume such a role even if we wanted to. What influence we have is thanks to the high caliber and intent of the profession and its rather enviable record. The Congress represents the people. It is through the Congress that the American citizen makes known his aspirations and his objectives.

That is why when Congress holds hearings through its committees on any issue the opportunity is always afforded the public to express itself. The expression is made in the case of the construction industry generally through the spokesmen of the innumerable organizations which represent the professions, and all the other elements. The American Institute of Architects is one of many thousands in the great body politic and economic of organizations which strives for the attainment of the objectives and which safeguards the interests of its members.

The Congress, except in rare instances such as an addition to the Capitol structures, is not the client of the construction industry nor of the architectural profession. The administrative agencies, principally the operating agencies, are the clients of the industry. The agencies are the contracting parties with the industry, not the Congress. It is the agencies, once the enabling legislation is enacted for them, which will establish the policies and establish the operating procedures for dealing with the construction industry in carrying out the construction programs. Should any individual in the industry find himself in disagreement with a Federal client, he is not likely to obtain relief from the Congress. Rather he must fight his own battles with his client as in private practice. Not infrequently dissatisfied groups and citizens have made their dissatisfaction known to their respective representatives in the Congress or even to committees of the Congress. However, I am skeptical as to the appropriateness of such procedure and certainly dubious as to the results. Should the policies and procedures of any agency be such as to work to the detriment of any substantial element then the intervention of the Congress may be sought to correct the injustice through legislative amendments, but the Congress is scarcely the body to turn to to solve a personal claim or grievance. The Congress must live with the executive and administrative agencies day in and day out. It is not likely to jeopardize the relationship.

The President of the United States is the chief executive officer. He enjoys a considerable power

and can be quite effective. The degree of his effectiveness depends to a great extent upon his own political skill and personality. His cabinet is not his board of directors. It is simply a gathering of the heads of the principal executive agencies. It may possibly act somewhat the same way as a board of directors in a great national emergency, such as a threat of war or of depression, but on the whole, as far as one can judge, it is simply a forum at which the respective heads voice their experiences and their programs and their policies.

A review of the Federal clients of the industry is of interest. There is one exception to the clients' being found exclusively in the executive branch of the government; namely, the Office of the Architect of the Capitol. The selection of this official is regarded as the prerogative of the Congress and not of the President. All other executive officers of any stature are appointed by the President with the advice and consent of the Congress. He is, as a rule, selected by the Congressional leaders and in effect appointed by them with the advice and consent of the President. The Architect of the Capitol is of interest to the construction industry for as the administrative and custodial officer of the Capitol and Capitol property it is he who is responsible for construction programs that take place within that area. He generally initiates these programs. His power of appointment may extend beyond what is commonly regarded as his province, namely the Capitol itself.

The following agencies have a relationship to our industry. These are listed in the sequence used by the Congressional Directory:

1 Executive Office of the President

For the last few years of the Eisenhower Administration there was a Coordinator of Public Works in the President's Office. The original purpose as far as the industry was concerned for such an official was the desirability, in fact the essentiality in our opinion, of there being a focal point in the Executive Office of the President to which the President might turn for advice with

respect to the industry and to which the elements of the industry might turn in communicating with the President. The office was not carried out in the pattern hoped for by the industry. Instead the office took on the responsibility of stimulating public relations programs and coordinating them at all governmental levels. This office has been abolished by a directive of President Kennedy who announced that he would seek his information on the construction industry from the Bureau of the Budget. It is hoped that the office may be revived and reestablished to carry on in a manner and along the lines which the industry had envisioned.

2 Bureau of the Budget

This agency and its policies have a pronounced effect on the welfare of the industry. It is a question as to whether or not the Bureau has a conception of the industry as we would like it to enjoy. We fear rather that it looks upon the construction industry as a service to supply construction demand and to operate only when money is available. However, the Bureau of the Budget enjoys a singular power as does anyone who has charge of money and finances. Control of money by anyone inevitably sets that person in a position to determine policy. By virtue of its persuasive ability to channel money where it deems best it can stimulate or obstruct construction programs. All agencies work closely with the Bureau of the Budget as does also the White House.

3 Board of Economic Advisers to the President

This Board has an interest in the industry as a factor in the general economy. It is continually seeking and acquiring information on the welfare of our industry in order to evaluate the general economy. For several years the Board looked to The American Institute of Architects to keep it informed with respect to the economic health of our profession. The profession is a pretty good barometer of the health of the *construction industry* and much valuable information can be gleaned from our profession, even so far as to indicate

possible future trends. However, the continuation of the current work survey seemed to be beyond the financial and other powers of the Institute and this effort was allowed to fall in desuetude. Presumably, the new Board of Economic Advisers will not be cognizant of the position of the architectural profession in the industry and in the economy. This, in my opinion, is regrettable.

4 Civil Defense Administration

The interest of the construction industry in this agency is sporadic. It would be advisable for all elements in the industry to keep in touch with this agency from time to time, such as the Associated General Contractors have done. AGC has set up committees or task forces upon which the Civil Defense Administration can call in the event of local emergencies, such as floods, or earthquakes, not only to combat disaster but especially to quickly alleviate the results. It can be readily seen that in the event of a major emergency or crisis the potential interest of the CDA to the industry would be tremendous.

5 Department of State

The Department does conduct one design and construction program; namely, Foreign Buildings Operations—a program which calls for the services of architects, engineers, planners, landscape architects and possibly some of the contracting elements of the industry, though to the best of our knowledge the construction work is performed by the people in the land in which the building is being erected.

The Department of State is of special interest to The American Institute of Architects and some of the other organizations in the construction industry in its international relations and programs for the establishment of better understanding between this country and others. In addition to the participation of The American Institute of Architects in such programs, both within and without the State Department, other elements of the industry, especially in the producing field, are involved.

6 International Cooperation Administration

The ICA does engage in considerable construction around the world. Some of the projects within its jurisdiction are very extensive. Its activities therefore are of interest not only to the design professions but presumably also other elements of our construction industry.

7 Treasury Department

Whereas for some twenty or more years the Supervising Architect's Office was located in the Treasury Department and the then Secretary of

the Treasury, Henry Morgenthau, was able to put through an administrative policy which set up a bureau for the production of the design of Federal buildings, nowadays about the only division of the Department of interest to the construction industry is the Coast Guard Service. The Service engages in relatively small building programs and employs professionals in private practice.

8 Defense Department

This Department is of major interest to the construction industry. The building programs of its three services are very large and important. The amounts of money spent on construction are staggering. Inevitably its design and construction activities are bound to have an effect on the general economy.

The Defense Department contains the three major services—Army, Navy and Air Force. It is the Department which is the client of the construction industry and it is with the Services that the contracts are made by architects, engineers and others in the industry who contract with the government. The Department of Defense may engage architects and engineers for study contracts and for the development of criteria, but the Department is not a building agency. The three Services request facilities and give their programs to the Department of Defense which reviews the programs and totals them within the guidelines established by the Presidential budget. The program is presented to the Bureau of the Budget by the Department of Defense and defended by the Department and it is the Department that presents the program to the Congress. The Department of Defense continues to exercise considerable jurisdiction and surveillances and apportions the authorized funds. The tie-in between the Department and its sub-departments, the three Services, is quite close.

In the three Services, the contact of the construction industry is usually either with the Chief of Engineers of the Army, the Bureau of Yards and Docks in the Navy which also serves the Marine Corps, and the Department of Installations of the Air Force. Save as described above, the three Services operate pretty independently of each other under the surveillance of the Department of Defense. The *Military Housing*, I think, is something else again and comes within the purview of certain of the acts of Congress.

9 Post Office Department

This department is of considerable interest to the industry. Its major post offices are sometimes, and the post offices incorporated into other Federal buildings are always, produced under and by

the public building service, the GSA which will be described elsewhere. Through its own Bureau of Facilities the Post Office Department engages in rather large programs. It has gone in for lease-purchase programs but its major program is a straight lease program which takes care of the thousands of minor post offices to be constructed throughout the country. So it can be said that the impact of this department is both direct and indirect. However, it is seldom, except in the case of the major post offices that the individual post office is anything more in the community than just another building built by private enterprise and leased to the Government. So it can be argued that the average small post office is a private rather than a Federal product.

10 Interior Department

The activities of interest to the construction industry of this department are rather relatively small. One of its programs, however, that of the Bureau of Reclamation, is of major concern to the general contractors. Of interest to the design profession are school and hospital programs of the Indian Bureau, the work of the Park Service and to a very modest extent the activities of the Alaska Railroad.

11 Department of Commerce

The purpose of the department as far as the construction industry is concerned is at times a little baffling. To the industry it is chiefly an informational bureau which takes on regulatory activities in times of crisis. At least it has done so in the past—or rather has had such regulatory practices assigned to it by the administration. With the exception of the Bureau of Public Roads it has no construction programs which engage the interest of the building industry. The programs of the Bureau of Public Roads are of interest chiefly to the Associated General Contractors.

The policies and practices of the department, however, are not without effect on the construction industry. In times of emergency and crisis it may, as has been the case, be asked to establish and maintain restrictive orders. I have found the department to be rather out of touch with the industry. Its policy and procedure seem to be arrived at without consultation with the construction industry although they have gone through the motions of consultation with elements of the industry but only after the policies and procedures of the department seem to have been pretty well established. Some thought has been expressed that any focal point of the industry should be placed in this department but whether or not this would be the most satisfactory solution is controversial. Its Bureau of Census does afford certain information

of interest to the industry and naturally the Bureau of Standards is of interest to the design elements and to the producers.

12 Department of Labor

Outside of the value of the information afforded by the Bureau of Labor Statistics and the occasional impact of the Wage, Hour and Public Contracts Division, this Department is of little interest to the industry.

13 Health, Education and Welfare

This is the Department which administers the Hill-Burtin program. Its impact on certain elements of the industry is considerable and especially on the design elements. Its Department of Education is chiefly of academic and research concern to design, and engineers and school administrators. However, it is possible that if the objectives of the Kennedy Administration are achieved certain additional activities may be assigned to this department through the Aid to Education Programs and possible extension of the Hill-Burtin Act.

14 American Battle Monuments Commission

This Commission is of interest to the design elements of the industry, especially to architects, painters, sculptors and landscape architects.

15 Atomic Energy Commission

The AEC engages in tremendous building projects. The activities have been of concern and may continue to be of concern and considerable interest to the industry. As is the case with these free services in the Department of Defense the establishment of an AEC project in any given locality will have a decided impact on that locality and on the free economy of the surrounding market area.

16 Federal Reserve System

The policy and pronouncement of the Federal Reserve System are of interest to the element of the industry engaged in finance.

17 Government of the District of Columbia

Various agencies of the government of the District of Columbia carry on programs which are of concern to the construction industry within the District. It is listed here only in as much as it is included in the Congressional Directory. It occupies much the same position as far as the industry is concerned as any large municipal government in the country.

18 Federal Home Loan Bank Board

An agency of interest to the financial elements of the industry.

19 General Services Administration

This agency administers programs of considerable interest to architects, engineers, planners and contractors. It is somewhat of a coordinating agency and, therefore, has comprehensive effect on the industry. Its construction programs are centered in the Public Buildings Services.

20 Housing and Home Finance Agencies

This agency has and probably will continue to have the most far-reaching effect on the construction industry. It engages the interest of the majority of the elements in the industry. The homebuilders', for instance, interests are centered almost exclusively in this agency insofar as the Federal government is concerned. The same also may be said of the lumber dealers to a certain extent, the realtors, the mortgage bankers, and the savings and loan leagues. Its components are the Community Facilities Administration, the Urban Renewal Administration, Federal Housing Administration, Federal National Mortgage Association and the Public Housing Administration. The possibility that HHFA may be transformed into a department which will have cabinet status enhances its interest to the industry. At the time of this writing the components of HHFA are relatively autonomous, the administrator serving chiefly as a boss of the components. If the department materializes it may well become the center of interest and focal point of the construction industry. In fact, some elements of the industry have openly expressed the hope that this will come about.

21 Securities and Exchange Commission

Policies of this commission will have some impact on the construction industry and probably relatively remote as far as architects and engineers are concerned.

22 Tennessee Valley Authority

The effect of this agency on the construction industry is not particularly great at the moment. When it was first set up under the Roosevelt Administration its policies and procedures did have something of an impact on the construction industry. Several elements of the industry regarded it as quite socialistic.

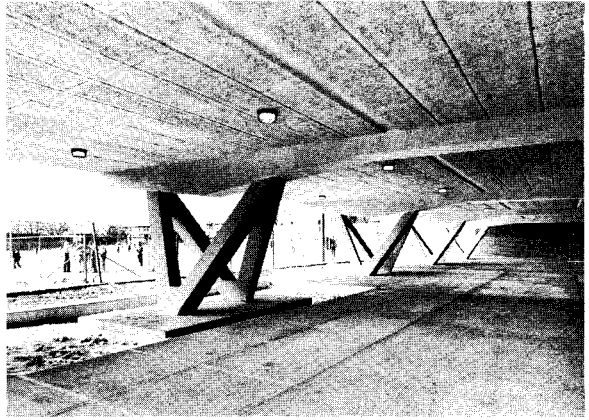
23 Veterans Administration

This Department from time to time carries on programs of considerable size though the likelihood of its doing so in the future is not very great. Its hospital program was one of major interest to the design professions. Its policies in so far as housing programs are concerned are of interest to other elements of the construction industry, notably the homebuilders and the financial people.

TO SUM UP: When looking at the Federal government the construction industry sees an aggregation of some thirty-five agencies and sub-agencies, some operating, some policy-making and some financing, but all independent of each other with the Bureau of the Budget exercising some authority in order to keep within the limits of the established budget. But each agency, and indeed each sub-agency, determines to a great extent its own policies, procedures, contracts and schedules of compensation. Every agency and some sub-agencies have their own general counsel. It could be practically said that the pattern of government operation in matters of design and construction is a reflection of the pattern of the construction industry itself.

From time to time there comes a doubt as to the desire of certain elements of the construction industry, especially as seen among our architects, to organize the industry. The type of organization generally envisioned by the enthusiasts is an impossible accomplishment. It is seldom realized until the enthusiasts are brought down to earth. It seems that those who agitate for an organization of the construction industry assume that it is their element, their organization, which will be the leader of the industry. Once they come to realize that in a democracy any of the opponents of any organization and its members who enjoy voting power, the decision is made by majority rule, the enthusiasts generally lose their enthusiasm for they realize that on the first controversial issue they would be outvoted and would be subjugated to, subordinate to, powers and policy and thinking which may be quite foreign to their way of life.

Some years ago a group within The American Institute of Architects endeavored to bring about an organization of the construction industry, operating on the supposition that the architect would naturally be the guiding spirit of the organization, dominating and directing its thinking. When it was realized that if such an organization were established, the decision would be made by majority rule, the architects beat a hasty retreat. Now any element of the industry, any organization, can dominate a gathering provided that it has the knowledge to support its argument and has the force of character to stimulate the enthusiasm of the participants of a meeting. Maybe it is well to simply let it go at that. *Let the industry* continue as it has in the past. Let those of its elements get together on issues on which they may be agreed and support each other as the occasion arises. The industry should have some entity in the executive branch of the government to which it can turn, which will understand its problems and its composition and which can afford it a tribunal in which it may have confidence. ◀



Gabriel Benzur

Modular Measure

WHAT IT IS
AND WHAT IT DOES

by **Frank J. Bull, AIA**

This article and the one that immediately follows, defines and suggests uses for modular measure. Mr Bull, our first author, is a principal in the firm of Bull & Kenney, Atlanta. Our second author, Hansell P. Enlow, AIA, is associated with the firm of Aeck Associates, also of Atlanta. Both talks were presented at an AIA—PC Joint Technical Meeting held in Atlanta last year. Above photo is of Craddock Elementary School, Atlanta, Georgia.

Bull & Kenney, Architects

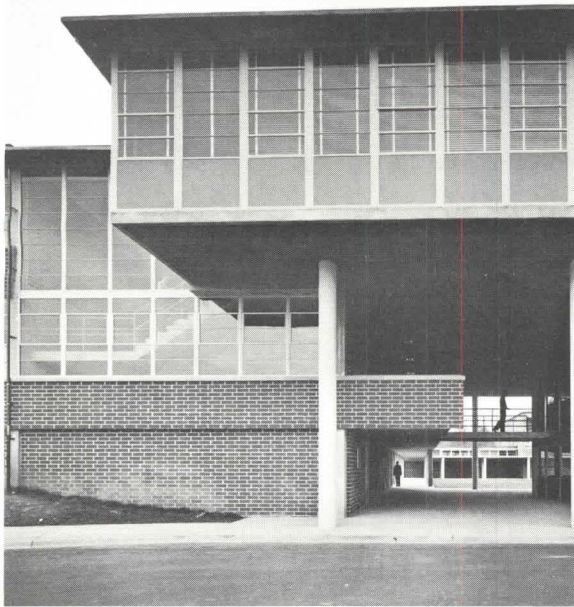
► Modular measure is, in fact, nothing at all but a system for measuring things. It is simple and easy to use. It is a single system for designer, detailer, manufacturer and job mechanic. As such, it is a tangible and useful tool. It is just the same as any other tool, device or system. The more you use it, the less awkward it is, the more skillful you become, and the more it pays off.

That is the crux of the whole thing: *Modular does pay.*

Craddock Elementary School for the Atlanta School Board contains 30,000 square feet, and cost \$10.20 per square foot in 1959. It was strictly a modular job. Preliminaries were drawn at 1/16" scale with one building at 1/4". There were ten full sheets of architectural drawings. All dimensions and details were worked out and all working drawings finished in ten man-weeks. My partner, Jack Kenney, did the detailing, but drafting was done by a new employee with three years experience, who had never before seen a modular drawing. Nine bids were received with an 8½% spread. During construction, one change order was needed to fill a well that was uncovered after the work began. One minor dimension error was found. There were three sheets of floor plans. There were eleven building sections. They were completely dimensioned and there was not one fractional dimension except on the large scale details.

That one experience almost runs the full course: Design was not affected; production time was short even though we had to train a new man; bidding was close; cost was low; and the job ran without a major hitch.

There was one element missing. Contractors in this area have not seen enough real modular measure because there are not enough architects using it. Contractors we have encountered on modular work do not know enough about it to get the benefits themselves, and so they are not passing any substantial savings back. However, we do believe



Headland High School, Atlanta, Georgia. Aeck & Assoc., architects

modular has affected the bidding. Most modular jobs have had very small differences from low to high. This indicates accurate take-off and clear information. We do not think we are getting credit for the labor and materials savings. We have seen these savings show up on the job, the result of quick, accurate layout and easy material placement. At the same time, there has never been any indication that modular caused bids to run high. Bidders are not afraid of modular and there is a plausible explanation for that too. Without modular, a contractor is like the milkman trying to read the note in the bottle. He was to interpret each architect's individual method of dimensioning. With modular, that sort of guesswork is largely eliminated.

So this thing is cumulative. Manufacturers can reduce stock types and sizes, which reduces manufacturing, warehousing, cataloging and packaging costs. This is being done whether we use modular or not. Contractors can reduce costs of labor and material waste. They can estimate more accurately and cut out some overhead. Meanwhile, the architects who are using the system are getting more efficient drafting and better construction.

What Does It Do?

From the standpoint of design, the common misconception is that modular measure is bringing automation to architecture. Nothing could be further from the truth. The design process is unchanged and modular will not relieve the designer

¹ The easy referencing of large-scale details afforded by modular drafting has made it possible for Bull & Kenney to achieve the inherent benefits of large-scale details such as apparent simplicity, easier to read, faster to draw when draftsman is accustomed to the scale, less demanding on drafting technique, and 4" increments coincide with ruled heavy lines when 1/8" scale grids are used as drafting underlayments. However, review of drawings from other architectural firms using modular drafting indicate a tendency to combine 1 1/2" sections and 3" details into 1 1/4" scale "section-details," thus eliminating one stage of the architectural drawings and keeping the number of sheets of working drawings to an absolute minimum.

of responsibility for what he does, whether good or bad. It is perhaps most important for the designer to understand the uses and limitations of modular in order to overcome any fear of it.

A disciplined design establishes a design module which is related to the structural bay. All that modular asks is that this be related to the four-inch detail module to achieve the best results in the use of materials. From there, design freedom is unchanged. Our experience is that design suffers less during detailing and results can be better, because now the designer and the detailer will be thinking along the same lines and using dimensions which spring from the same basis. On the working drawings, it eliminates fractions from plans and small scale drawings. You still have fractions on details, but most are explanatory and many of those will not be needed when the builders get accustomed to it. The plans and details are both easier to draw.

The only aid to modular measure that we use is a grid or cross-section paper for the detail sheets. The grid is printed on the paper in light blue that does not print, unless it is picked up with a pencil line. The grid may cause some confusion in locating a drawing on paper, but becoming accustomed to it speeds up drafting, for it partially eliminates the need for scaling every dimension. The tendency is to draw in too many grids and to give unnecessary dimensions in tying things down to the numerous reference points that are available. Here again, it is experience that counts, just as it does with any system for dimensioning.

Prior to modular, it had been our custom to do most detailing at 1 1/2" scale. With modular, we find it is faster to draw and reference at 3" scale.¹ Time is saved in checking, because dimensions are simple and errors are easy to spot.

There are just two precautions:

1 When you are using modular, use it all the way—for everything. You can't just dab it on here and there.

2 When the tool doesn't fit the job, lay it aside. Don't force it beyond its limitations.

How do you get started? Join MBSA and ask for help. Learn the few basic principles and just start. It is that easy.

Modular measure is not something you believe in or don't believe in. It is not a theory cooked up by somebody who never saw a working drawing. In fact, it is not a theory at all.

Modular measure is not a strait jacket. It does not limit your choice of materials. It does not standardize or sterilize architecture. It does not dictate design. In fact, it need not affect design at all.

Modular measure is nothing at all but a system for measuring things. ◀

Recollections of Going Modular

by **Hansell P. Enlow, AIA**

► Modular dimensioning has now become familiar enough in our office that we can have a little fun with it. In fact, we now define it as, "A system of dimensioning whereby you indicate very quickly, carefully, accurately and precisely where something *almost* is!"

The first modular dimensioned job at Aeck Associates that got into the actual construction stage was Headland High School. The contractor said that he had modular experience, but we soon found out that he had not constructed a fully modular job. His was the worst of all modular faults—modular on the outside and actual on the inside.

The contractor and his superintendent were invited to the office for a short period of instruction. This instruction had little apparent effect on the superintendent, for he said this system could not be trusted to the men under him. However, construction got under way and things moved fairly smoothly.

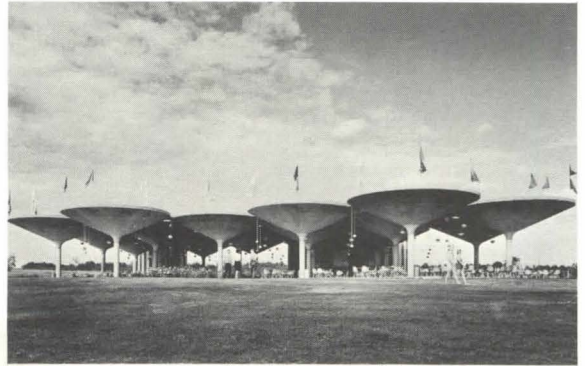
We began to keep a diary of the comments of the superintendent as he moved along and happened to hit what he called "lucky breaks." The first lucky break he discovered was that masonry coursed in both directions around openings with no cutting, and coursed from slab to slab with no odd joints. He was *truly* excited when he discovered that he could start the masonry anywhere on the wall, start as many masons as he pleased, and everyone would course in.

On one occasion, the plumber was locating sleeves in concrete forms with reference to grid lines that he had picked up on $\frac{1}{8}$ " plans with the help of the arrowhead and dot dimension. The superintendent was completely unnerved, and went through a long process of adding up strings of dimensions, actual and fractional, only to find that the sleeves *were* properly located. After this, the electrician began to locate panel boxes without using fractional dimensions. The superintendent began to give ground. The carpentry foreman probably had the worst trouble, because he had to learn to actually consult with details for key reference dimensions! It became apparent that he was accustomed to working without the help of details at all.

The superintendent is with us now as clerk of the works on another job—a remodeling which is not modular. He asks quite frequently when this client is going to do a new building, so that he can again get back to modular work, which he pushes at every opportunity.

By the time the Headland School was completed, we had been commissioned to put an addition on the school which had been designed with the original building. When this job got under construction, five masons that worked together for many years estimated that it would take approximately twenty days to complete the masonry within the building. After five days, the foreman called his boss and told him the job was half finished. After twelve days the work was done, including glazed tile which was not even in the original estimate.

Soon after came the Tallulah Falls School, which demonstrated the complete freedom of design, regardless of the type of dimensioning used. This school is in a small town in north Georgia, and the story goes that one day a salesman went through Tallulah Falls soon after the beginning of the project. He had a few hours to kill before he could see the person he wished to see so he asked one of the local residents if there were any picture shows around. The answer was "No." "Is there a



Ida Casson Callaway Gardens Pavilion. Aeck & Assoc., architects

pool hall?" "No." "What on earth do you people around here do for entertainment?" The old man replied, "You just come on up here to the school—there are some fellows up there trying to build a modular building!" Things were not quite that confusing, of course.

The Tallulah Falls School is on a mountain site, set among buildings that are faced with stone. Similar natural stone, gathered off the site, was a requirement of the owner for the new school. Obviously, stone could not be gathered that was premolded in 4" cubes, so we had stone veneer with modular masonry back-up, which became a very important element in design. The Memorial



Tallulah Falls Elementary School, Tallulah Falls, Georgia

Library wing involved a steep pitched roof with an octagonal skylight. We did not try to use modular dimensioning on the library wing. This was simply a place where it did not apply, and we made that fact obvious with a note on the drawings stating that everything on one side of a bisecting line was completely *modular*, and that everything on the other side used *actual* dimensions.

An interesting experience in connection with the shop drawings occurred on this project. A factory representative came to the office just at the time we were checking his non-modular shop drawings on casework. This was the opportunity we had been waiting for. We began teaching the fundamentals of modular to him, and it was quite obvious that he wished he had never left the factory.

Within twenty minutes the tables were reversed, and this man began selling modular to us. It took about that long for him to recognize the advantages of modular in the drafting room in preparing his shop drawings, and in the fabrication shop. He left with his rejected drawings under his arm — smiling!

The Robert L. Craddock Elementary School in Atlanta, is by Bull and Kenney, Architects. This is a completely modular building. Take note of the columns under it. They are modular too—modular at the *top* and at the *bottom*, connecting in between! The columns raise the school up off the ground to give a dry play area during inclement

weather. A sand pile around each of the columns gives the children a place to play, rain or shine.

The Callaway Gardens dining pavilion is an Aeck project in which we did *not* use modular dimensioning. This building did *not* involve the complexities associated with intricate mechanical and electrical systems, and the multitude of finishes and materials required of the average building project. The dominant considerations for this pavilion were largely the visual and functional effects of the structure which did not necessitate modular dimensioning as a means of simplifying the architectural drawings and providing coordination for construction.

As a final note, I would like to mention the philosophy we try to follow in our own office: It is not so *important* to be *serious* as it is important to be *serious* about the *important* things. Remember, a monkey wears an expression of “seriousness” which would do credit to any architect approaching a client. But the monkey is serious because he itches.

If you’ve tried modular, and things didn’t seem to work just right, maybe you were allowing modular to use you instead of your using it. As Frank said, “This is a tool, just as a hammer is a tool. You don’t put in screws with a hammer, and you don’t drive nails with a screw driver. Use the right tools when the right time comes. Don’t get discouraged. Remember, it is often the last key in the bunch that opens the lock!” ◀

“It’s the Law”

by **William Stanley Parker, FAIA**

The Consultant on Contract Procedures continues his review of Judge Bernard Tomson’s book

► It is unfortunate that the author sees fit to urge the desirability of making all decisions of the Architect final, instead of subject to arbitration, which has been the declared policy of the architectural profession for forty-five years. He states that “The Courts, in construing the General Conditions of the AIA Contract, have held that the Architect’s right to make decisions in respect to disputes between Owner and Contractor is confined to a narrow area.” We are not aware that the Courts have taken any such action.

Eighteen States have passed statutes making agreements to arbitrate future disputes binding and enforceable. The provisions of the General Conditions state that the Architect shall make decisions on all claims of the Owner or Contractor *and on all other matters relating to the execution and progress of the work*. If no special Supplementary General Conditions have been added in a particular contract that amends this provision, and I have never heard of any, the field of the Architect’s responsibility is unlimited.

It is stated that no provision is made for the substitution of another Architect; due to death or other reason. This is not correct. In Art. 38 provision is made, in such event, for the appointment by the Owner of a capable and reputable Architect against whom the Contractor makes no reasonable objection, whose status under the Contract shall be that of the former Architect. It also states that a dispute in connection with such appointment shall be subject to arbitration. How better could such a contingency be handled?

The author of the book argues at length in favor of making the Architect’s decisions final as is customary in contracts with the Federal Government in which the decisions of the Government Engineer in charge have long been made

final. The only Court cases cited involve such government contracts. The Wunderlich case is considered at length in citing the final upholding of the Engineer’s decision by the Supreme Court in spite of its arbitrary and unfair decision.

The book then reports the action of Congress, in Public Law 356 in 1954 which, as a result of the Wunderlich case, amended the finality of the Engineer’s decisions by providing that a decision of a contracting officer in respect to a question of fact shall not be final and conclusive if the same is fraudulent, capricious, arbitrary, so grossly erroneous as necessarily to imply bad faith, or is not supported by substantial evidence. This in effect defeats the finality of his decisions.

This lengthy discussion of the Court cases involved gives support to the principle of arbitration which for forty-five years has been the policy in the construction industry for private or public contracts that are based upon the AIA General Conditions. We believe this is why it is so difficult to find Court cases dealing with disputes in such contracts. If disputes arise, they are settled by arbitration and never reach the Courts.

It has also been asserted that this is to the advantage of the legal profession as Lawyers find it takes much less time to solve such problems by arbitration than in Court, and in most such cases a Lawyer is generally involved.

The Architect is not an arbitrator in regard to such disputes. He is the professional interpreter of the conditions of the contract and the character of its performance. He is required to be impartial and to use his powers under the contract to enforce its faithful performance by both parties. He should continue to pursue his *duties to the Owner* and the Contractor in this way as has been the rule since 1915. ◀



A. Reinhold Melander, President, Duluth, Minnesota; Chandler C. Cohagen, 1st Vice President, Billings, Montana; Paul W. Drake, 2nd Vice President, Summit, New Jersey; A. John Brenner, Secretary, Phoenix, Arizona; C. J. Paderewski, Treasurer, San Diego, California; Earl L. Mathes, Director, New Orleans, Louisiana; John E. Ramsay, Director, Salisbury, North Carolina; George F. Schatz, Director, Cincinnati, Ohio; Walter F. Martens, Past President, Charleston, West Virginia

Arizona and the NCARB

by **A. John Brenner, AIA**
Secretary, NCARB

► The early 1950's marked the real beginning of Arizona's interest and participation in the Council, although we know that one board member was a delegate to the New Orleans Convention of 1938 or '39. Real recognition and appreciation of NCARB examination policies and the syllabus came slowly, and it was not fully realized until about 1955. In 1959 we signed our first report to NCARB covering a completed written examination and it was 1960 before we reported a successful Senior examination. For a State that has had continuous registration since 1921, we have to admit to a past record of an apparent indifference toward our fellow Boards that is not pleasing in retrospect. Transition from a procedure routine of long duration does not come about over night. So it has been with us. Many circumstances contributed to our own delinquency. Just when the Board began to take a serious interest in the national picture and, through a long period of internal persuasion, became conscious of a need for higher and consistently uniform examination standards, we went through about two years of 100% "lame-duck" service, with consequent disinterest brought about by *uncertainty* of succession. This setback was followed by simultaneous appointment of a whole new nine man Board, only two of whom were reappointments familiar with past policies and procedures.

In spite of all these adverse circumstances, some progress continued, with 1959 and 1960 showing impressive strides, culminating in final and complete recognition and acceptance of NCARB poli-

cies and procedures and giving to it our fullest possible enthusiastic support, for which we received in return many valuable services, help and blessings it offers its member Boards. Now seems appropriate our advice to aspirants for Arizona registration by reciprocity—get an NCARB Certificate first—we won't recognize you without it!

The Arizona State Board of Technical Registration is what is commonly referred to as a "Joint Board," that is, we are an administrative board of the State government constituted by law to register and control the professional behavior of architects as well as geologists, land surveyors, assayers and eight categories of engineers. More often than not, in states having joint law, the Board itself is divided into an architectural division and an engineering division, operating independently of each other, except for occasional policy making meetings. Our Board, however, always meets as one body, dedicated to over-all improvement of every profession under its control, and mindful always of its primary duty of safeguarding the health, welfare and safety of the public.

Only in one area of Board activity do we have separation. Usual practice is to delegate only architect members to NCARB and only engineer members to NCBEE Conventions, with our Executive Secretary attending both. This, however, is more a matter of economic expediency rather than a fixed policy. We feel that occasionally when finances permit, an architect member should be sent to NCBEE and an engineer to NCARB to strengthen and add to our common understanding.

Then too, we are usually fortunate in having among us at least one member who is dually registered and who can, in a tight situation, pinch-hit for either group, with equal effectiveness. For example, a few years ago, due to one death and two resignations, and failure of the Governor to appoint successors, the active membership had dwindled to six, of whom only one was singularly an architect. Full membership is six engineers and three architects, with three engineers and two architects required to constitute a quorum. The architect-engineer, whose appointment had actually been as an engineer, by acting as an architect, made it possible for the Board to continue its function.

The Board is particularly proud of its almost perfect record of unanimity, proving that, contrary to the general rule, architects and engineers can get along with each other in complete harmony. We like to think that the mere fact that one Board and one law controls all has brought about the feeling of unity and cooperative understanding that prevails in our professional endeavors and between our various societies and institutes. This professional climate of ours is perhaps largely responsible for the fidelity with which architects and the various engineering branches voluntarily adhere to their own particular fields of endeavor without overstepping beyond the boundaries of their own personal qualifications and capabilities.



The author, A. John Brenner

We know that such an amicable professional atmosphere rarely, if ever, exists or can be hoped for, where separate and different laws govern each.

The "Joint Board" particularly favors the architect. Our resident registration roster shows that the architects are outnumbered 7:1 by the engineers. Board representation is three architects and six engineers, with engineers divided into civil, structural, mining, electrical, chemical, nuclear, metallurgical and mechanical categories. Obviously, we architects (185) by ourselves, are an insignificant and ineffectual minority in public policy making or legislative matters, but when combined with the registered engineers (*over 1300*) we form a formidable group of not inconsequential potency. ◀



Incorporations: Advantages and Disadvantages

by **Fritz Von Grossman**, *Chairman*,

Sub-Committee on Study of Incorporation

The Board Directive

Study advantages and disadvantages of rendering architectural services by incorporation of architectural firms, such study to be objective, definitive and factual; and further, to consolidate the findings of such study into a factual statement for submission to the Board, and in such form that it might be made available as an informational statement for distribution to the Institute membership.

I Introduction

Over a period of some years, considerable discussion has taken place throughout the United States with regard to the corporate practice of the professions generally. Specifically, architecture has been among those toward which discussion has been directed.

To provide objective, definitive and factual information about the advantages and disadvantages of rendering architectural services by the incorporation of architectural firms, the Board directed the Committee on Professional Insurance to study this subject. The Committee submits the following report.

The advantages and disadvantages of incorporation listed hereinafter are considerations which should concern a firm intending to incorporate in any one of the twenty-four states presently permitting such incorporation. It should, as well, be of value to those who are considering whether or not to ask for legislation in their state to permit corporate practice.

II Assumptive Definitions *

This study is predicated on the assumption that an incorporated architectural firm would conform to the following basic requirements:

A A corporation in which a majority of the

Board of Directors are, and the controlling stock interest must be held by, professional architects

B The responsible executive officer shall be a professional architect

C The members of the corporation shall be personally liable for their professional acts as architects

D Transferability of interest must be limited to the extent necessary to insure control of the corporation by professional architects

E The firm name include no names other than of active principals

The foregoing endeavors to insure that "package dealers" or engineering firms would be excluded from the practice of architecture.

III Advantages & Disadvantages— Benefits and Detriments

Findings of advantages and disadvantages are categorized under two major headings:

Professional Advantages and Disadvantages Client Benefits and Detriments

Matters which may be advantageous to the practitioner may be disadvantageous to the public or the client, and vice versa. They vary from state to state and instance to instance both in kind and in degree.

- A Possible professional advantages:
- 1 Provides organizational ties for staff architects, by assigning stock equities to them
 - 2 Provides tax advantages in establishing pension and deferred compensation programs for practitioners **
 - 3 Establishes a program for the transfer of an interest or of ownership, to key personnel
 - 4 Permits accumulation of non-taxed reserves
 - 5 Provides tax advantages permitting capital gains through stock transfer
 - 6 Permits the pre-determination of plans for the continuance of disposition of a firm upon retirement, incapacity or decease of a principal
 - 7 Working capital may be obtained through the transfer of stock rather than by borrowing
 - 8 Allows business expense deductions on insurance and pension plans for principals and employees
 - 9 Provides for special tax advantages or continuing income for widows or other dependent survivors
 - 10 Reduces some aspects of personal liability and protects non-architectural assets
 - 11 Corporate clients may favor retaining a professional organization of similar form
 - 12 Makes mandatory the keeping of accurate records of transactions and costs
 - 13 Encourages efficiency of organization and procedure, with definition of duties and operating responsibilities, thus helping to avoid duplication and conflicts of effort

- B The following are possible *disadvantages* that may accrue to the professional:
- 1 Incorporation can be very expensive because of attorney's fees and costs of filing as required by the state of incorporation
 - 2 Possibility of double taxation, ie, personal plus corporate income taxes
 - 3 Some states have special taxes and fees which apply only to corporations
 - 4 Corporation dissolved for unprofessional causes or other legal reason may reorganize and practice under a new corporate name
 - 5 Clients might question the presumed avoidance of personal liability
 - 6 Some public agencies do not permit agreements with corporations for professional services
 - 7 A corporation invites lawsuits because of its impersonal nature
- C Possible *benefits* which might accrue to a client:
- 1 Incorporation assures the client of the stability and continuity of the firm
 - 2 In cases of alleged negligence the client could have recourse against both the corporation and the architect who has certified the plans
- D Possible *detriments* which might accrue to a client:
- 1 Client cannot look to assets other than those of the corporation or the certifying architect (in a partnership, client could look to assets of *each* of the partners)
 - 2 Client might believe there is a lessening of the personal fiduciary relationship
- E Listed below are a number of *miscellaneous objections* to corporate practice deemed not to fall in the above categories:

* Dictionary definitions of "Corporation" (noun):

1 *Webster's*—An artificial person created by law, consisting of one or more natural persons united in one body under such grants as secure a succession of members without changing the identity of the body, and empowered to act in a certain capacity or to transact business of some designated form or nature like a natural person. Corporation may be civil (to facilitate the conduct of business), close (owned or managed by a few persons or whose vacancies are filled by itself), complete (having full powers; compare QUASI-corporation, under QUASI), ecclesiastical (to secure public worship), lay, municipal, private, or public. It may be laid down as a general rule that a corporation may, within the limits of its character or act of incorporation, express or implied, lawfully do all acts and enter into all contacts that a natural person may do or enter into, so that the same be appropriate as means to the end for which the corporation was created.

2 *Black's Law Dictionary*—4th Edition (1951)—An artificial person or legal entity created by or under the authority of the laws of a state or nation, composed, in some rare instances, of a single person and his successors, being the incumbents of a particular office, but ordinarily consisting of an association of numerous individuals, who subsist as a body politic under a special denomination, which is regarded in law as having a personality and existence distinct from that of its several members, and which is, by the same authority, vested with the capacity of continuous succession, irrespective of changes in the membership, either in perpetuity or for a limited term of years, and of active as a unit or single individual in matters relative to the common purpose of the association, within the scope of the powers and authorities conferred upon such bodies by law.

** Keogh-Utt Bill. The Committee studied the Keogh-Utt Bill and its predecessor, the Keogh-Simpson Bill, as to its relation to the establishment of professional pensions. Its passage is uncertain. I.R.S. Ruling: A recent ruling facilitating pension provisions is treated in detail in Section IV, "Alternative Procedures"

* Corporate characteristics, to meet the criteria of the Treasury Decision 6503 are: A-Associates; B-Objective to carry on business and divide the gains therefrom; C-Continuity of life; D-Centralization of management; E-Limited liability; F-Free transferability of interest.

The Institute

- 1 Traditionally the practice of a learned profession is limited to natural persons because they alone can be charged with the attendant moral and ethical responsibilities
- 2 Corporate practice may tend to stress the monetary advantage rather than the art and science of building
- 3 Incorporation may tend to stress the big business aspects and stifle the opportunities of the smaller proprietary firms
- 4 Architecture is a *profession but a corporation is a business*
- 5 Through transfer of stock or succession

- non-professionals might come into control of architectural practice
- F Miscellaneous objections to be considered *if the corporation itself* could be licensed to practice as an architect
 - 1 Interposes a barrier reducing personal and fiduciary relationships
 - 2 Professional services are based on individual competence, integrity, responsibility and control not provided by a corporation
 - 3 A corporation cannot evidence professional qualifications through examination

IV Alternative Procedures

New rules and regulations promulgated by the Treasury Department and published in the *Federal Register*, Thursday, November 17, 1960, pp. 10928 to 10934, and titled "Treasury Decision 6503, relating to the Internal Revenue Code Subchapter F—Procedure and Administration—Part 301," set forth in detail the acquiescence of the Treasury Department in the "Kintner Case." The key point is that individuals may band together into an "Association," "Limited Partnership," "Partnership," "Joint Stock Company," and the like, as defined and restricted by the regulations, and thereby become taxed as a Corporation,* with all of the accompanying advantages and disadvantages of such status.

In many cases this may provide a procedure for firms which are not incorporated but which may desire to obtain some of the tax and other advantages of incorporation. On the other hand, the Committee emphasizes that there are many factors which should be carefully examined before effecting such a program. Since this is a ruling of an administrative body, the practitioner should be alerted to the fact that the ruling might be changed, and more especially that its application to particular circumstances might vary. Nevertheless, because it follows a Circuit Court Decision, the chances that it will be drastically changed are diminished.

If properly handled, and dependent upon state laws and court rulings, the following forms of organization can be used to meet the tests of the above noted Internal Revenue Service ruling:

- A Association
- B Partnership
- C Limited Partnership
- D Partnership Association
- E Joint Stock Company
- F Trusts

V Statistics

The Registration Laws of the fifty-three jurisdictions which grant licenses for architectural practice (subject to some overlapping) divide into these categories:

- A States permitting Corporate Practice without restriction 24
- B States permitting Corporate Practice only by corporations which were incorporated prior to the promulgation of a registration act 3
- C States in which no adjudication has been held but which apparently permit corporate practice 7
- D States which permit corporate practice for certain purposes 1
- E States which do not take a position specifically in their law 10
- F States which definitely provide that there will be no corporate practice permitted 10

VI Recommendations

That the Board receive the foregoing report as fulfillment of its special directive, that the committee be relieved from further study of this directive, and that the report be made available to the Institute membership.

VII Bibliography

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B "Corporate Practice of Architecture," George M. White, LLB, AIA; published in the *Western Reserve Law Review*, Vol II, No 4, pages 616-630, September 1960

C FEDERAL REGISTER, dated Nov 17, 1960, "Associations & Trusts," Chapter 301. 7701, 1-7

D "Corporate Practice of Engineering," William Britton Stitt; reprinted from July 1957, *The Business Lawyer*.

E Melvin Nord, PE, the legal aspect, "The Conflicts of Corporate Practice," October, 1960, "Consulting Engineer"

F Maurice J. Leen Jr, Attorney, Dayton, Ohio, *Ohio Architect*, June 1959, page 15

G Special Report of Committee on Professional Insurance, October 18, 1958, presented to the Institute Board

H "What Kind of Office?" Clinton H. Cowgill, FAIA, and W. Irving Cousins, Jr, AICPA, *AIA Journal*, Vol XXIX, No 5, May 1958, pages 221-226

I Special Report on "Incorporation of Architectural Firms" by the Committee on Professional Insurance, from the Board Agenda of the April 1960, San Francisco pre-convention meeting, pp 12-17 inclusive and dated March 25, 1960

J "Corporations," AIA Handbook of Architectural Practice; eighth edition, third printing, p 11-1.04 ◀

Memo from William H. Scheick, Executive Director



► You all know the old joke about a camel being a horse designed by a committee. And if you have read “Parkinson’s Law,” you know that this eminent author holds this organizational mechanism in low esteem.

I hold quite an opposite view on the committees of the AIA, which I previously have mentioned on these pages as one of our most valuable assets. I doubt whether many of our members comprehend the scope and importance of the job done for the AIA by its national committees and I propose to deal with this subject now.

First of all, here is an amazing fact: When we have a meeting of our Board of Directors or its Executive Committee we expect 100% attendance! (Other association executives in Washington would find this hard to believe.) The same is essentially true for all of our committees.

This unusual record clearly indicates the seriousness with which AIA committee members accept their responsibility. It is wonderful for the Institute and for the profession. I believe this dedication to duty is no accidental thing. It is there because national committeemen are members who have already distinguished themselves in chapter work; because they believe there are important jobs to be done; because they know that AIA committees achieve results; and because they are given responsibility that helps to direct the course of events at the Octagon.

Committee work is being improved by First Vice President Henry L. Wright. For two years he has accepted the assignment as Chairman of the Committee on Committees so that he could study means of improving the entire committee structure.

In 1960, Henry Wright initiated a meeting of new committee chairmen early in January, which repeated in 1961 and is to be an annual event. At this meeting reports of committee work for the previous year are reviewed and objectives for the coming year are discussed, thereby achieving a broad coordination of committee work.

The 1961 edition of AIA Committee Structure lists fifty committees comprising more than 300 members who give their time in this manner to your professional society.

This year’s budget for travel and per diem allowances for officers, directors and committeemen is almost \$130,000. This sum will be increased because the addition of four new Regions will add new members to the Board and to the vertical committees. I cannot think of a better way to spend a significant portion of the members’ dues.

Few societies or associations pay the travel of their committeemen. By doing so, the AIA makes it possible to ask *any* member to serve—not just those who could afford it or whose offices could afford it. Think what the *time* of all of these professional men would cost if we had to pay for it!

More interesting than statistics, I am sure, is some explanation of how our committees work, the extent of their authority and responsibility and how the results benefit the membership. The range of committee activity makes it hard to do this, except by citing examples. In order to do so I must run the risk of mentioning some and not others, but I’m sure our chairmen and committee members will understand that no slight is intended through omission.

The vertical committees (Chapter Affairs, Education, Hospitals and Health, Office Practice, Public Relations, Schools and Educational Facilities) have a member from *each Region* of the AIA. Thus representing a full geographic cross-section of the membership. Obviously, this is absolutely necessary in the Chapter Affairs Committee (George Pierce, Chairman). All other committees are smaller than the vertical committees and their members are selected with particular attention to their experience and interest in their subject field, and for their representation of geographic viewpoints.

None of the committees may establish policies for the AIA. Their recommendations are reviewed by and acted upon by the Board. Nor can they appropriate or allocate funds, though they can recommend expenditures for various activities.

The committees are “thinking mechanisms,” with two important responsibilities. One is to develop programs which properly *interpret and meet* the needs of the membership. The second is to implement programs approved by the Board. Im-

plementation may be accomplished by various means: The work of committee members themselves often accomplishes the desired results, frequently in the form of the published reports approved by the Board. In other cases, a program or project recommended by a committee results in work done by the staff at headquarters. A few examples will illustrate:

The Committee on Professional Insurance (Harry D. Payne, Chairman) studies the entire subject of professional liability and related matters. Through its Chairman, this committee maintains liaison with other committees dealing with the consideration of professional liability in the wording of the standard documents. Recently the Committee on Professional Insurance submitted to the Board a carefully prepared report on a study of *incorporation of architectural firms*. The Board directed publication of this report in the *Journal*.

The Public Relations Committee (Gordon B. Wittenberg, Chairman) is one which recommends *projects*. This vertical committee meets with staff from the Division of Public Affairs and also the AIA Public Relations Counsel. The committee interprets the needs of the chapters for public relations programs and media in all parts of the country. Then ideas for new "PR" tools take shape in terms of films, articles, handbooks, workshops. The preparation of each item is developed as a project requiring a specific allocation of funds.

This committee is looking ahead several years to plan and develop a growing collection of public relations media, assigning priority to projects which they believe should be developed as promptly as possible.

The Public Housing Administration Committee (Thomas F. Faires, Chairman) is one which deals directly with the Federal government in the interest of the members of the AIA. The committee's activities are being accelerated this year in view of opportunities for cooperation with the new Administration. Results of this committee's work take tangible form in agreements reached with the government regarding architectural services on PHA projects. The work of this committee is closely integrated with the other activities of the Division of Public Affairs of AIA which maintain close liaison with Federal agencies.

The membership is familiar with the technical publications resulting from the work of such committees as Hospitals and Health (E. Todd Wheeler, Chairman); Schools and Educational Facilities (Norman C. Fletcher, Chairman); and Safety in Buildings (Ralph O. Mott, Chairman). The staff of the Members Services Division at the Octagon supplements committee work with research. The resulting series of technical publications in the *Journal* (authored by committee

members, staff and others) are well known. Not many of our members know that the work of a number of our "technical" committees also develops conferences and technical publications by *other* organizations which they pay for. In addition our committees have stimulated and caused the performance of hundreds of thousands of dollars worth of research by other organizations.

A group of AIA committees are carrying on, in this fashion, a far-reaching program of genuine research activity in cooperation with the staff.

Several AIA committees maintain liaison with the professions and businesses of the construction industry. AIA liaison committees work with their counterparts in the Associated General Contractors of America, the Engineers Joint Council, the Producers' Council, the Construction Specifications Institute and the American Bar Association. These organizations attach great importance to the work of liaison committees for the exploration and solution of mutual problems. Their work reaches its most tangible form in the periodic revisions of the AIA documents, as well as in the other forms of collaboration with these organizations.

The Office Practice Committee (Daniel Schwartzman, Chairman) is concerned with many of the problems dealt with by the liaison committees collectively. Procedures are being developed to achieve the greatest possible degree of collaboration between the committee chairmen.

An unusual responsibility rests with the Committee on the Profession (James M. Hunter, Chairman) concerned with the destiny of the profession in the next twenty to thirty years of our changing urban civilization. This committee's report, published in the June 1960 *Journal*, has had tremendous impact. The committee continues at work to interpret and implement the broad concepts which it has stated for professional practice, education and the functions of the Institute.

Recent expressions from the membership have demonstrated that the Committee on the Profession was only a year or two ahead of the times in sounding an alarm for progressive thinking and action to jar us out of the status quo. This committee will be a work-generator for other committees of the AIA as the time comes to implement its recommendations in terms of AIA activity.

This brief article makes no mention of many committees whose work is *vital* to the functions of the Institute as one of the nation's great professional societies—committees which have to do with its ethics, its finances, its structure, and many fields of national and international significance. I know I am speaking for the officers and the Board when I extend our sincerest thanks to our committees and their chairmen for a terrific job that never ends. ◀

Library Notes

20th Century American Architects

In December 1958 "Library Notes" carried a list of books dealing with the lives and works of American architects who practiced primarily before 1900. The present list comprises books on the lives and works of American architects of the Twentieth Century. Books about Breur, Gropius, Mies, Neutra and Wright have been omitted from this list. All books, with the exception of a few noted as reference, are available on the Library Loan Service at a charge of fifty cents for the first volume and twenty-five cents for each additional.

BARBER, DONN, 1871-1925.

Monograph of the work of Donn Barber. Philadelphia, J. C. Baker, 1924.

BELLUSCHI, PIETRO, 1899-

The Northwest architecture of Pietro Belluschi; edited by Jo Stubblebine. New York, F. W. Dodge Corp. [1953]

BRAGDON, CLAUDE FAYETTE, 1866-1946

More lives than one. New York, A. A. Knopf, 1938.

BRUNNER, ARNOLD W., 1857-1925

Arnold W. Brunner and his work, by Robert I. Aitken, and others. New York, Press of the American Institute of Architects, Inc., 1926.

CORBETT, HARVEY WILEY, 1873-1954

Proceedings at the dinner in honor of the late Harvey Wiley Corbett, at the Architectural League of New York, Thursday evening, 17 February 1955, under the chairmanship of Julian Clarence Levi, as transcribed by Jeffrey Ellis Aronin, n.p. [1955]

CRAM, RALPH ADAMS, 1863-1942.

Ralph Adams Cram, Cram and Ferguson. New York, McGraw-Hill book company, inc., 1931.

The work of Cram and Ferguson, architects, including work by Cram, Goodhue, and Ferguson. New York, The Pencil points press, inc., 1929.

My life in architecture. Boston, Little, Brown, and company, 1936.

DRAKE, GORDON, 1917-1952

California houses of Gordon Drake [by] Douglas Baylis and Joan Parry. New York, Reinhold Pub. Corp. [1956]

ESCHWEILER AND ESCHWEILER

Fifty years of architecture, being an accounting of sorts on the work done in half a century by a father and his sons. [by] Richard S. Davis. Milwaukee, Wis. [Printed by Hammersmith-Kortmeyer co.] 1943.

FRANZHEIM, KENNETH, 1890-1959

Drawings and models of some of the recent work of Kenneth Franzheim architect together with sketches of a few proposed buildings. Houston, [1951]

GILL, IRVING, 1870-1936

Irving Gill, 1870-1936 [by] Los Angeles County Museum, in collaboration with the Art Center in La Jolla. Los Angeles. 1958.

GOODHUE, BERTRAM GROSVENOR, 1869-1824

Bertram Grosvenor Goodhue, architect and master of many arts. ed. [by] C. H. Whitaker. New York City, Press of the American Institute of Architects, Inc., 1925.

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The architectural work of Graham, Anderson, Probst & White, Chicago, and their predecessors, D. H. Burnham & co., and Graham, Burham & co. . . . London, Priv. pub. [by] B. T. Batsford, ltd., 1933. R.E.F.

HASTINGS, THOMAS, 1860-1929.

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Raymond M. Hood. New York, McGraw-Hill book company, inc., 1931.

KAHN, ELY JACQUES, 1884-

Ely Jacques Kahn. New York, McGraw-Hill book company, inc., 1931.

LINDBERG, HARRIE THOMAS, 1880-1959

Domestic architecture of H. T. Lindeberg, with an introduction by Royal Cortissoz. New York, W. Helbvrn inc., 1940.

MCGOODWIN, ROBERT RODES, 1886-

Monograph of the work of Robert R. McGoodwin. Philadelphia, Wm. F. Fell co., printers, 1942.

MENDELSON, ERIC, 1887-1953

Eric Mendelsohn, by Arnold Whittick. London, Faber & Faber limited, 1956.

MIZNER, ADDISON, 1872-1933

The legendary Mizners; illustrated by Reginald Marsh. New York, Farrar, Straus and Young [1953]

Florida architecture of Addison Mizner; introduction by I. Tarbell; New York city, William Helburn, inc. [1928]

OKIE, RICHARDSON BROGNARD, 1875-1945

The residential architecture of Richardson Brognard Okie of Philadelphia, compiled by Ronald S. Senseman, Leon Brown, and others. [Washington, D. C., Senseman. 1955]

PURCELL AND ELMSLIE

A guide to the existing buildings of Purcell and Elmslie, 1910-1920. by D. Gebhard. Roswell, New Mexico, Roswell Museum and Art Center, 1960.

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Eliel Saarinen. by A. Christ-Janer. [Chicago] Univ. of Chicago Press [1948]

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Ralph Walker, architect of Voorhees, Gmelin & Walker; Voorhees, Walker, Foley & Smith; Voorhees, Walker, Smith & Smith. New York, Henahan House, 1957.

WEISSENBORN, LEO JULIUS, 1877-

Materialization of an urge. Chicago, R. F. Seymour [1954]

Book Reviews

Sound in the Theatre. Harold Burris-Meyer and Vincent Mallory. Mineola, New York, Radio Magazines Inc, 1959. 95 pp illus 8½" x 10½" \$10.00

Thirty years of varied design and application-experience have proved to these authors what can be done with electronic sound control for live performance. This is an eminently practical book filled with valuable information for the architect and others who collaborate on facilities for audience and live artist(s) or speaker(s). An excellent brief introduction (ten pages) leads into discussions of available equipment (including recording), control techniques (thirty-two studies), systems, details of equipment and controls, organization and planning (rehearsal procedures: What-where-who), installation, operation and maintenance.

The book is full of sharp quotes: ". . . the layman believes that the microphone is to be treated as a telephone . . ." ". . . the notion that electronics can only *magnify* sound . . . the combination of artistic imagination and technical skill necessary to exercise *control* is lamentably rare . . ."

The authors point out that even excellent architectural acoustic design will not provide, without careful electronic assistance, for the true values of different scenes in the same show. They also remark upon the complexity and subtlety of human voices—the faithful rendition of which is essential for vocal performance of any kind. This was brought home most vividly to this reviewer during a recent demonstration of a new (small) computer. Its total "memory" capacity was expressed to us in two ways: It could store about twenty minutes of 100 word per minute typing—or *sixteen seconds* of barely intelligible speech, *twelve seconds* of somewhat better speech! The point is, so far as the theatre is concerned, that realism and artistic values completely disappear if the voice is distorted in any elements of its range or quality. Unless indeed designed distortion is indicated. In either case it calls for the best of equipment and design for sound. ". . . distortion is not the price of audibility . . ."

Illustrations are abundant and clear, there are useful tables and graphs, a few typographical errors, the authors are not afraid of recommending trade-name equipment. The only serious lack is that there is no technical glossary. E. P.

The Work of Living Art. Adolphe Appia. Coral Gables, Univ of Miami Press, 1960. 131 pp illus 6" x 9¼" \$6.50

This is the second in the *Rare Books of the Theatre* project of the American Educational Theatre Association.* It also is edited by Bernard Hewitt, translated by H. D. Albright, and carries the subtitle, *A theory of the theatre—but for architects it is much more than that.*

Appia (1862-1928), the Swiss scene designer, director and theorist, is considered one of the founders of the three-dimensional modern theatre. His theories are most important for architects concerned with how people use space and how light affects space. They are presented here in mature form in English for the first time, although published forty years ago. For him, the actor and the movement of his body through space was of fundamental importance. This conviction brought him into collaboration with Dalcroze in the development of Eurhythmics.

The essence of Appia's theory is perhaps contained in his question ". . . can form in space be manifested in successive time-durations, and can these time-durations, in turn, be expressed in terms of space?" He saw the stage space ". . . in a state of latent power as regards both space and light . . ." and architecture's highest aim ". . . to express weight in a harmonious arrangement, measured by the scale of the living body and designed as a background for the mobility of that body . . . embracing both time and space . . ."

In our time we have seen the great cubage-squeeze and the constant attrition of ceiling-heights. In the common American tradition

we say we need "room to swing a cat." Few architects today are permitted to plan with the space we need for bodies and light. We do not recall seeing it pointed out that this has come about through real estate pressures codified and made into controls during the New Deal and expressed in FHA, Hill-Burton (with all the good they have done) or some other architecture- and life-forsaken catalogs of regulations. A generation of planners has been so conditioned by these that this non-architecture has slopped over into buildings of all types. Once in awhile when we walk into some great conspicuously "wasteful" railway concourse or main reading room of a library we feel this elevation of thought, the pressure-relief of space, which is a part of architecture we have abandoned to governmental clerks with handbooks.

In his search for a living esthetic quality, Appia offers a refreshing idealism concerning the human body—that circumstance of shame to his victorian generation. It is curious that the word "dance" is evaded throughout the book. Possibly it meant something different in his time, probably the artificiality of the classic ballet bothered him as much as the two-dimensional limits of easel and stage painting with their enforced selection of a static and literary moment of time. His esthetic theories are concerned with dynamics—chapter headings in this book include: "*Living Time — Living Space — Living Color — Organic Unity . . .*" (italics by Appia)

The group of illustrations are reproductions of scene sketches, typical of Appia's work, which do not do justice to the quality of dramatic mystery in some of the originals, or to the clear geometry of others. A final brief essay in aphoristic style, *Man is the Measure of All Things*, (a quotation from Protagoras) summarizes many of these ideas. All of his essays (about fifty) have been collected and will eventually be translated into English. This is an important text and AETA has done us a good turn in making it available. E. P.

Early Public Theatre in France. W. L. Wiley. Cambridge, Harvard University Press, 1960. 326 pp illus. 5¾" x 8½" \$6.75

An important half-century in France (1580-1630) brought about

*1st issue was *The Renaissance Stage* — see review in *AIA Journal*, January 1961, p. 65.

the transition of the theatre from a combination of no-longer-popular religious mystery, all-too-popular smutty farce, the peddler-pitchmen (les Opérateurs!), and private entertainment of the Court, into a professional, public theatre. It was in this period that Cardinal Richelieu prepared the way for the classic French tradition(s) of Corneille, Racine and Molière. This brief span of years has engaged the attention of Professor Wiley who has dusted off a bookfull of sources which seem to have mastered him completely in this effort to produce a readable text. The material of a good story is here, some of it of interest to architects of a building-type-archaeological bent, but it is filled with obscure references and as confused by repetitions and retakes as the raw footage of an uncut motion picture.

It is rewarding however, even if less than digestible, to trace the painful evolution of a rich tradition. Between the lines we can find something of the unquenchable spirit of showbusiness beginning to appear with all its appeal of the quick mind, the awareness of the values of all the languages of the theatre (voice, gesture, posture, expression, costume, movement) and the synthesis of this total communication for interpretation.

Readers interested in business arrangements can also piece out here the fantastic story of the 150-year struggle of actor-producer companies against the financial monopoly over the Paris theatre by a favored organization (how like Broadway!). Eventually the illicit conversion of indoor tennis courts (*jeux de paume*), with their bad influence on theatre-form, took over and plays could be produced elsewhere than in the edict-protected *Hôtel de Bourgogne*. Technically they were all terrible theatres—the Italian tradition was far better. E.P.

In Praise of Architecture. Gio Ponti. New York, F. W. Dodge, 1960. 270 pp illus. 5½" x 7¾". \$6.95

The author of this book is an internationally-known Italian architect, designer and publisher (*Domus*). He has herein set down some hundreds of aphorisms, notes and brief essays on architecture—in a chaos he asks us to enter at random, a sort of miniature Divine Comedy at times rhapsodic, rarely superficial in his loves and hates,

always vigorous and individual, no doubt sincere, occasionally profound.

The temptation to quote is hard to deny:

"... Architecture stands still and its spectator moves . . . it is a show produced by passing through in every direction, coming and going, and looking around, looking up. The architect must be the director of this difficult and total performance . . ."

A line from an "Imaginary Diary": "... a politician exists who loves architecture . . ."

Elsewhere: "... as far as I am concerned, 'the past' does not exist because I consider everything in our culture to be simultaneous . . ."

We understand that we owe this graceful and obviously faithful translation to the noted engineer Mario Salvadori and his wife Giuseppina but in another sense we owe the book to Jeanne Davern of the *Architectural Record* who had faith that it would be appreciated by American readers. We may not, as architects, agree with all of Ponti's evaluations, or even see a place today for his expensive abhorrence of the right-angle, or the prettiness of some of his interiors—but we need this sort of lively communication of architectural ideas so that we may begin again to have a public, not so much for books as for ideas in architecture. E.P.

Revue annuelle suisse d'architecture, d'art et d'urbanisme. Lausanne, Anthony Krafft. New York, Wittenborn, 1961. 270 pp illus. 9" x 11¾". \$5.00 paper; \$7.50 hard cover.

The 7th yearbook is notable for its many interesting photographs. A section on Felix Candela provides the best series of photos. The text ranges from a provocative query on the role of sculpture and art in architecture and city planning by Meyer Shapiro to a rather vivid polemic in a neo-platonist vein by Herbert Read. The main text is in French. German and English summaries of some of the articles are provided but there seems to be no logical or quantitative standard employed in choosing pieces to be summarized. While the pictures are diverting and a few of the texts have merit, the publication suffers generally from a lack of editorial discipline and does not seem calculated to serve any serious purpose.

While a lengthy roster of famous names and genuine talents is to be found in the table of contents, the promised intellectual adventure turns out to be a *Readers Digest* safari through brightest Switzerland. Like the *Digest*, it leaves the reader with a general feeling of disappointment, but not many strong feelings pro or con on any of the things between the covers.

The most extensive continuous treatment is given to Brasilia, but nothing new is said. A section of photographs on urban development in Puerto Rico also fails to develop any new insights.

Work by Luc Peire, Jean Baier and Hans Aeschbacher is illustrated. Sandwiched between some eighty pages of advertising, sections are devoted to Swiss school building, industrial and office buildings, luxury apartments, co-op row-housing, dream castles, student work, exhibits, book reviews and progress reports of sister organizations. G.H.

Penn's Great Town—200 Years of Philadelphia Architecture. George B. Tatum. Foreword by Theo. B. White. Philadelphia, Univ. of Penna. Press, 1961. 207 pp illus. \$12.50

In a readable style Dr Tatum has sought "to tell the story of the continuous architectural endeavor of a great town from its inception to the present." (page 7) More than a mere chronicle of buildings and architects, the author has woven into his narrative much of the city's social and cultural background. The relation to important architectural developments elsewhere is pointed out.

The plates, occupying as many pages as the main text, are a vital element of the book. The illustrations are all of prints and drawings, in order to maintain a feeling of "visual continuity." (p. 9) The "Notes to the Illustrations" provide pertinent bibliographical data on their sources, and also contain much valuable data on the buildings and architects.

As presented here, Philadelphia's architectural heritage is an impressive one with many firsts and outstanding examples. Reflecting also most of the important developments in the history of American architecture, this volume should prove useful in many libraries. An excellent example of a local architectural history. G.E.P.

Editor's Page

Preservation, Conservation and Architecture

Reading the *Washington Post* last night, I found myself reflecting on how many activities reported in the papers today have a bearing, directly or indirectly, on architects or architecture. Concerned as we are with shelter—certainly one of man's basic needs, and having further embellished that basic need with amenities such as convenience, utility, beauty, sentiment and occasional whimsy, at least half of what goes on in the world, or in a city, will affect, even though sometimes by remote and tenuous connections, the work or the interests of the architect.

But setting aside the remote and tenuous connections, and setting aside the obvious connections, such as the real estate columns, an article stating that the District Commissioners are going to give the RLA "the needle," and the death of the former architect for the Federal Bureau of Prisons, two items in particular interested me at the moment.

The first was an editorial entitled "Future of the Railroads." It is well known that the rails are suffering, and apparently the eastern railroads are suffering worst of all, particularly the New York Central. Now I can get to my point by quoting from the editorial: "The Central and the Pennsylvania, the nation's two biggest railroads, are both in precarious circumstances. The Central, for example, showed a profit last year only because it made money on its Manhattan hotels; this year, despite the hotels, it is running a deficit."

Architects the country over have been concerned with the threat of the New York Central Railroad to fill the great airspace of its magnificent concourse with three floors of bowling alleys. The above quote will show non-New Yorkers the real pressure behind the railroad's desire to squeeze every penny out of its midtown real estate. It is likely most of the profession are not aware of the prominent part played by the New York Chapter AIA in the opposition to the Central's proposal. A zoning variance was needed to permit bowling alleys in such a congested area, and after listening to the arguments of chapter President Frederick J. Woodbridge and the representatives of other civic groups (including the National Trust), the application was denied by a vote of 4-0. However, as Victor Gruen says, they have won a battle but not the war. The Central is thinking up other possible uses for that airspace and nothing but public pressure can stop them.

There are very few who do not admire the concourse, and there are many, I'm sure, who agree with me that it is one of the finest great interiors anywhere. It was, you know, designed by Warren & Wetmore—Reed & Stem in the best Beaux Arts tradition, completed in 1913. Cluttered with advertising exhibits from Rochester and Detroit as it is, it is still a thrilling experience to walk through it—which I will walk several blocks out of my way to do nearly every time I go to New York.

In the February issue of *Oculus*, the New York Chapter publication, appears the following: "Central Vice President James Boisi complains that his company lost over \$2 million last year, and that Grand Central Station costs \$10 million a year to run (including \$3,831,000 for local taxes). Revenue from leasing bowling alley space, he estimates, might be \$100,000 a year. Opponents of the scheme question whether it is worth destroying a grand old room for a paltry one per cent—especially in view of much greater added revenues (and added congestion) from the huge Pan American building going up next door." As an aside, one might comment that it is strange indeed that the Department of Buildings apparently didn't hesitate to issue a building permit for this enormous tower which it is estimated will bring 25,000 more people daily into the already over-congested Grand Central area, while the Board of Standards and Appeals properly upheld the zoning ordinance which prohibits bowling alleys because of the congestion they cause!

In order to bring this matter to the broadest possible front of public attention, a group of ten graduate students in the School of Architecture at Pratt Institute, working with a committee composed of Professor William Breger of Pratt, Victor Gruen and Douglas Haskell, Editor of the *Architectural Forum*, have made a study of the whole problem with the aim of illustrating the damage already inflicted by irresponsible commercialism on this important structure, and to show methods by which desirable accessory uses could be incorporated into it without despoiling its architectural character and its great esthetic impact. The results of this study were placed on exhibition at the Architectural League on June 23rd. The *AIA Journal* hopes to publish some of this material in the not-too-distant future, as a topic of general interest to the profession.

I see I've used up all my space on the thoughts aroused by this *Post* editorial. The other thing I wanted to mention was an article on the fight to save the nation's fast-vanishing shoreline.



Theatre Architecture, or:

HOW DOES IT LOOK FROM WHERE YOU'RE SITTING

by **Thomas DeGaetani**

Mr DeGaetani is President of the US Institute for Theatre Technology, New York City; Director of the Stage Department of the Juilliard School of Music, and Director of the ANTA-sponsored US Center, International Association of Theatre Technicians. An International Colloquy on Theatre Architecture was held in Berlin, November 21-25, 1960. The conference was sponsored by the International Theatre Institute, the International Union of Architects, and the International Music Council. Main topic of the colloquy: Theatre construction and modern theatre production, modern architecture, theatre technique. Fifteen nations were presented; US participants attending under various grants—all active in US Institute for Theatre Technology—included: Arthur Benline, past-president BOCA; Peter Blake, AIA; Thomas DeGaetani, president USITT; Philip Johnson, AIA; Dr Carolyn Lockwood, opera specialist; Dr Joel Rubin, IES, technical secy USITT; Ben Schlanger, Vice-president USITT; Helge Westermann, AIA. The US Mission in Berlin reported to the Department of State:

"The colloquy was beneficial to US interests in the opportunity provided to show that American problems in theatre construction stem from the particular interest in our country for amateur participation in dramatic productions, in our willingness to experiment, and in our individual initiative."

Two of the participants and principal speakers of the Berlin conference have contributed papers in this issue, Thomas DeGaetani and Joel Rubin. All of the authors in this special technical issue of the Journal are members of the US Institute for Theatre Technology

► It is hardly possible to read a newspaper or periodical these days without realizing that there is an amazing amount of theatre planning and building going on in the United States. Hundreds of American university and community cultural centers in particular are currently faced with the economic and artistic problems of either renovating existing theatre facilities which have proven inadequate, or planning, designing and building new structures better suited to meet the demands which increased and varied performance activity have brought with them. On the academic, community and civic levels, professional and non-professional, the United States has 2,000 drama groups, 750 opera companies and workshops, 750 dance groups, 1,100 symphony orchestras, and chamber music and choral societies which defy enumeration. Unlike the metropolitan civic centers, it is a rare university or community center which can afford to build separate facilities for the different performing arts. The realities of economy dictate the need for (but not necessarily the desirability of) a single auditorium to house the presentation of all or some combination of these arts: The multi-purpose theatre.

To further compound the problem, the drama in America has, during the last three decades, been revolting against the conventions of the proscenium or picture-frame stage. The academic theatre, followed by off-Broadway theatre, has sought theatre shapes which allow the director more presentational freedom and, even more basic, involve the audience more directly in the dramatic event. "Togetherness" has come to the theatre. Many prospective theatre builders, confronted with three possible theatre shapes (proscenium, arena, apron), rather than playing, "Tom, Dick or Harry, which one shall I marry?" are more frequently choosing architectural polygamy. They decide not only for multi-purpose but multi-form as well.

The challenge thereby presented to the architect is at once stimulating and frustrating as he ponders an obvious truth: the function of theatre architecture is to serve the performance. The visual, acoustical, and physical factors to be considered, evaluated and properly applied in the successful design of a single-purpose theatre are formidable. In the design of a single auditorium to house two, three, or more art forms, a direct square law starts multiplying the

factors astronomically, while the chances for success seem to be reduced inversely as the auditorium's expected functions increase.

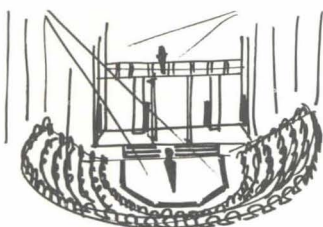
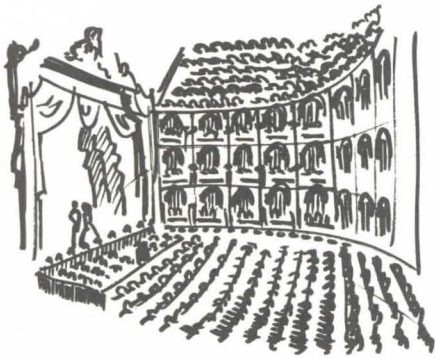
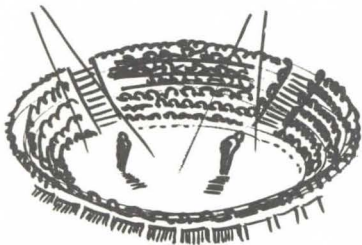
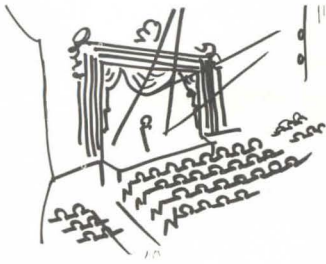
The irreducible factors in the design of any theatre are the performing area (stage) and the seating area (auditorium). There are several ways in which these two areas can be physically and spatially related. *However, once this connection (or separation) has been architecturally fixed, so too are the functions to which the theatre can be successfully applied.* For on this one fundamental relationship of stage to auditorium are all other factors architecturally predicated. Sight-lines and seating plans will be based on it; acoustics will, in large measure, be dictated by it; staging techniques will be circumscribed by it.

The "Modern" Broadway Theatre

Nowhere is the limitation of presentational technique by fixed architecture better exemplified than it is on Broadway. The legitimate theatre throughout America, its playwriting, acting technique, presentational style and scenic concepts, is predicated on the physical and stylistic limitations of thirty-two New York playhouses—which are probably the worst examples of theatre architecture to be found anywhere in the world. The youngest of them thirty-three years old, their design reflects the esthetic proposition of their era: The theatre is the ultimate mirror of life, a literal reflection of events in realistic detail. The ormolu clock ticks on the wall, and an authentic Schrafft's restaurant is reassembled on stage for the assignation scene. An evening in the theatre presented the audience with a series of *tableaux vivants*, all neatly framed and enclosed by the proscenium arch.

Technical

But these Broadway playhouses, even at the time of their construction (1903-1927), were inadequate for the purposes for which they were built. Artistic hopes were compromised by a practical reality: Money. These theatres were built not by high-minded citizens seeking to bring cultural enlightenment to their fellows, but



by real-estate operators, seeking to make a profit on their investment.

The high cost of New York real estate discouraged purchase of generous sites, so the two irreducibles, stage and auditorium, were shoe-horned into the square footage of three city lots, sometimes four. (A city lot is 25' x 100'). The stage was reduced to the smallest possible dimension and fitted out with the absolute minimum of equipment. The auditorium was crammed with as many revenue-producing seats as the limits of physical endurance and the fire laws would permit, and whatever room was left over was then given to dressing rooms, box-office and some semblance of a lobby. With this approach it was inevitable that at least one Broadway playhouse was found, upon completion, to contain no dressing rooms at all. But they *all* had the proscenium arch, the invisible fourth wall through which the audience, like so many *voyeurs*, could look into the "real" world the director and designer had placed before them.

Since the 1930's several playwrights and directors have read the handwriting on the proscenium wall and realized that the theatre's hopes lay not in fake realism but in the re-emphasis of the very thing that makes theatre unique: The here and now of the dramatic event, the interaction of performer and spectator. Thornton Wilder's *Our Town*, in 1938, was performed without scenery, and dialogue was spoken directly to the audience by a stage manager-character-narrator. Several of Tennessee Williams' works have employed either this rapport-achieving narrator or extensions of the stage which attempted to get the action closer to the spectator, or both.

Although new theatres are not being built for Broadway, they *are* being built for its country cousins, the community and academic groups, and the new theatre forms are invariably based on historical examples which are being revived to bring the live performer and his audience closer together. The theatre of tomorrow actually reflects, in many of its features, the theatre of yesterday.

The Greek Theatre

The earliest formal theatres which have come down to us are those of Greece. The simplest consisted of a flat circle, called the

orquestra (playing space) located at the base of a hill which formed a natural amphitheatre and whose sides constituted the semicircular *auditorium* (hearing place). A *skena* (hut), for the use of the performers, was located at the rear of the circle. Later, the theatres became architecturally permanent: Stone seating banks ringed the now-marbled *orquestra*, and the *skena* was replaced by a two-story building whose simple facade contained three doors which gave access to the area between the *skena* and *orquestra*. This area, the *proskena* (in front of the *skena*), is our first identifiable raised stage. Action flowed freely between the *orquestra* and the *proskena* and even reached the roof of the *skena* when a God appeared from Olympus. (It might be said that Zeus played the first balcony scene.)

Natural acoustics were excellent, but resonance factors to improve vocal modulation were introduced by inverted *echeia* (vases) tuned to a tetrachord and placed under the seats. Scenery and stage machinery played a very minor role in the Greek theatre and in no way shaped its architecture. The intellectual freedom and democratic ideals manifest in Greek plays is reflected no less in the design of the theatres, which allowed the entire audience to see, hear and participate in the dramatic event taking place in their midst.

Roman Theatre

Theatre-on-the-Tiber was a Roman variation on the Hellenistic theme, provided at government expense as an opiate for the population. Under the Romans, drama was transformed from a means of intellectual stimulation to an entertainment. Their playwrights have left us no body of drama worthy of the name. Their theatre architects have left us colossal monuments to sight and spectacle. A glance at the plan of a Roman theatre shows the *orchestra* flattened into a semicircle, the *scaena* pushed forward and physically connected to the auditorium. What is *not* shown is that the *orchestra* is now given over to the seating of high officials and the actor has been banished to the *proscena*, that narrow elevated stage.

The *scaena* still has the three classical doors, but the facade has been transformed from a simple acoustical reflector into a niched

nightmare housing hundreds of statues screaming to heaven the splendor that was Rome and only faintly echoing either the glory that was Greece or the voice of the actor. Against this background the Roman soloist looked like a crowd scene as he chanted his lifeless Roman verse. It wasn't long before the producers introduced scenery, lots of it, to lure the crowds from the boxing matches. In so doing they brought about the conditions which demanded the front curtain, behind which the scenery was shifted.

In its search for bigger and better bromides and places in which to present them, Rome conceived the stadium, the saucer-like theatre, on whose flat elliptical center was dished up the ultimate in Roman spectacle. It is best described as two connected *auditoria*, open end to open end, surrounding a circular arena accessible through tunnels under the seating banks. That some were flooded for the staging of sea battles gives some indication of their size. In their dry state they were used for sporting events, chariot races, animal and gladiatorial combats, and throwing Christians to the lions. As a place for human combat, the Roman arena survives today as the boxing or football stadium and the bullfight arena. As a place for entertainment we may know it as the circus. As a repository for the drama we may recognize the theatre-in-the-round.

Renaissance Theatre

Theatre architecture was reborn when the Dukes of northern Italy commissioned court architects to build theatres in which the newly-discovered Greek and Roman playscripts could be performed for the entertainment of the Duke and his court. Based, as they were, on the descriptions of Greek and Roman theatres found in the writings of the Roman Vitruvius, these court theatres could best be described as *roofed over* models of their classical predecessors. The best extant example is the Teatro Olimpico in Vicenza, designed by Palladio in the late sixteenth century. Examination of its plan reveals the same familiar semi-circle of seats, the platform *proskena*, the *skena* and its three doors which frame a permanent background of perspective streets. But the *orkestra* is now less than semicircular, and everywhere there is statuary, which, incidentally, served to

counter the bugaboo which had moved indoors with the drama—reverberation.

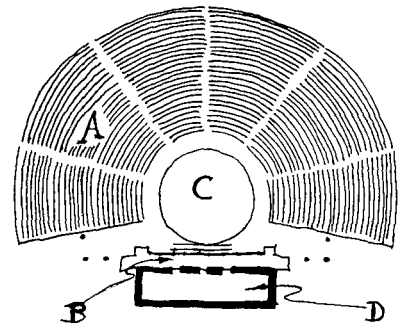
The permanent scenery in Vicenza is an exception to the Renaissance rule. For once again elaborate spectacle came more and more to dominate the performance, until we see the center door of the *skena* developing into a true arch, framing a rear stage which housed the scenery and the complicated stage machinery. Action still took place on the *proskena* platform *in front of the arch*. But it was action in the palest sense. The real excitement was provided by the ingenious stage machines which could amaze, delight and even frighten his highness and the royal guests by bringing cloud-borne deities to earth on horsedrawn cloud-chariots, or produce the devil from the very depths of hell.

A court performance was generally an adjunct to some special social event: A wedding, a birth, a visit from a neighboring duke. The host, participating in a Renaissance version of keeping up with the royal Joneses, spared no expense in his efforts to present an unbeatable production. On very special occasions the duke might even admit the public into a performance, by his generosity pointing up the vast gulf existing between royalty and the masses. The commoners were permitted to stand in the rear of the *orkestra* which, depressed below the level of the aristocracy's seating banks, became known as the "pit." The portion of the *orkestra* closest to the stage was by now reserved for the musicians, and sometimes dancers, who provided diversion during the interludes necessitated by scene-shifting. The Renaissance theatre, too, was a theatre of spectacle.

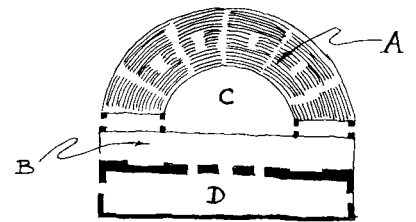
It was in the midst of this social and cultural environment that an event took place in 1600, the artistic ramifications of which are still with us, and whose physical requirements dominate the concept of theatre design to this day. A Florentine named Peri, attempting to imitate a Greek pastoral, produced a *drama per musica*—and opera was here to stay.

The Opera House

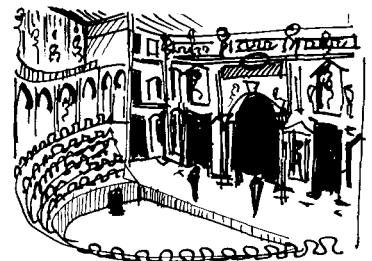
It was impossible to keep this new art from the people, and the seventeenth century saw hundreds of public and royal opera houses springing up all over Europe. It would be safe to say that, then as now, much as the people loved



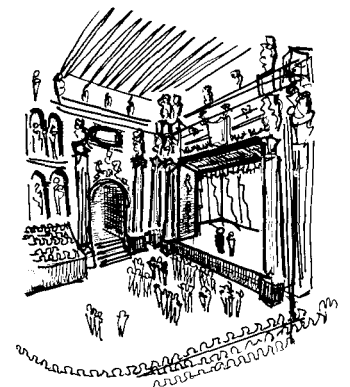
The Greek Theatre
A Auditorium
B Proskena
C Orkestra
D Skena



The Roman Theatre
A Auditorium
B Proscenium
C Orchestra
D Scaena



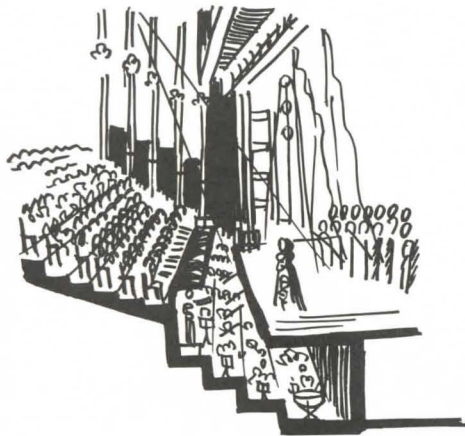
Vicenza—Theatro Olympico



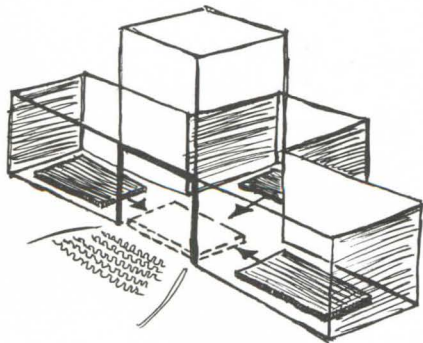
Parma—1608



Elizabethan Playhouse



Bayreuth (1876)



Wagon Stages

opera, so did the architects commissioned to house it detest it. The problems were legion, for this one art form constitutes the collaboration of virtually all the performing arts. The singer must be visually related to the scenic background, but be positioned so that he can get his lines from the prompter, his tempi from the conductor, and still face the audience. And what of the seating plan? This new art was expensive and would require a large income-producing hall. The upper classes must be clearly separate from the populace who would come in droves. There was nothing for it but to enlarge the *orquestra*. Widen it? No, that would push the side seating banks out so far that patrons would be unable to see into the rear stage with all that exciting scenery. No, make the *orquestra* longer, that was the only way. The musicians could play in the portion of the *orquestra* closest to the *proskena*. The plan was no longer semi-circular, for the lengthened *orquestra* had produced a horseshoe shape, and the seating banks became stacked tiers of plush boxes. The king or local duke enjoyed the advantages of the box located in the center of the lowest tier, where he could see the entire stage and in turn be seen by a majority of the house. For in the Baroque opera house there were always two observable spectacles—the stage and the audience.

The Orchestra Pit

By comparison with the Baroque audience, the Westchester Ladies Clubs attending a Wednesday benefit matinee are models of decorum, mute as giraffes. The auditorium of the Baroque Opera was bedlam during performance, the commoners exchanging lusty greetings, the aristocracy chatting and visiting in the boxes, occasionally dropping the refuse of their dinners into the thronged "pit" to receive howls of protest and imprecations in return. The musicians sawed away, and onstage the prima donna might, while waiting for her next song, be banging on the floor with a cane to let the conductor know what the tempo *really* was.

How they were ever able to tell we'll never really know, but some seventeenth century purists started complaining about the noise coming from the portion of the pit occupied by the musicians. They were playing too loud. Clearly something had to be done, and it was not long before we see the

performer moved back into the rear stage and the acting platform replaced by a sunken pit to accommodate the musicians. The separation of performer and audience, started on the day the first tired Roman plunked himself into an *orquestra* seat after a hard morning at the Forum, was completed by the banishment of the performer to the area *behind the proskena arch*.

The Traditional Opera House

The development of the opera auditorium after this is almost exclusively one of interior decoration devolving into a sumptuousness verging on decay. And, as the auditorium grew more elaborate, so did the scenic effects. In the late seventeenth century, the first of a long line of theatre architects and designers bearing the family name Bibiena, introduced perspective scenery to the opera. The stage picture as an attempt to fool the eye displaced the stage machine. Sides and overhead of the stage were filled with cut-out wings and borders carefully perspectivating to an architecturally correct painted back-cloth. (It is the stage picture which the ballet, requiring a level, unobstructed area for its movement, still uses today). The side wings could be slid off and replaced by others, the overhead borders could be raised out of sight and others lowered in, as could the back-cloth.

But this kind of scenic manipulation required some cooperation from the architect. The flying of overhead scenery required expansion of the stage volume vertically. The art of perspective scenery required a deeper stage; the wings needed some room at the sides from which they were slid on. The men or machinery needed to manipulate the wings could be housed under the stage if the room were made available. These were genuine enough demands for a theatre gone scenery crazy, and resulted in the expansion of the stage house outward and upward. Soon the total volume occupied by the stage was almost equal to that occupied by the revenue-producing auditorium, in which rows of seats had been installed in the *orquestra*. This form of continental opera house was to remain fairly constant until the late nineteenth century.

England and the Elizabethan Playhouse

Fifteenth and sixteenth century

companies of English strolling players adapted the galleried country inn-yard to their dramatic purposes. A platform was erected in one corner of the yard, giving a raised performance area surrounded on slightly more than three sides by standees in the courtyard and seated patrons in the galleries lining it above. The gallery directly above the acting platform was reserved for elevated scenes, while the portion of the platform extending under this gallery was curtained and used for interior scenes.

When the first formal Elizabethan playhouse was built in 1576, it was patterned after the improvised inn-yard theatres which had served the players so well. It was open air, of octagonal shape, with an acting platform jutting half way into the yard, re-uniting the performer and spectator for the first time since Greece. It is this theatre to which the narrator refers in the opening lines of Shakespeare's *Henry V*, when he asks: ". . . can this cockpit hold the vast fields of France? Or may we cram within this wooden O the very casques that did affright the air at Agincourt?" For this was theatre without scenery in which the playwright's words and the spectators' imaginations were all—and how much more than all!

The closing of the public playhouses in 1642 put this type of theatre into a premature grave. But it would not stay dead. Theatres patterned on it are to be found in many American and British universities, and in 1953, it was used as the touch-stone for a Canadian commercial venture, the Stratford, Ontario, Shakespeare Festival Theatre. Here designer Tanya Moiseiwitsch and director Tyrone Guthrie collaborated to produce a stage which incorporates the functionalism of the Elizabethan, an auditorium deriving from the Greek, and access to the performing area borrowed from the Roman arena.

If the Elizabethan theatre had a drawback it was only in the limiting of actors' entrances and exits to and from the rear stage. The Stratford theatre has made the acting area accessible from virtually any point of its perimeter by the introduction of tunnels under the seating banks which open on to the stage. It becomes possible for a performer to make an exit while moving toward the audience, and an entrance moving away. The

playwright's words, the architectural stage and the audience's imagination again provide all the scenery.*

Wagner and Bayreuth

The Festival Theatre in Bayreuth, built in 1876, is a single-purpose theatre, conceived, designed and built for the performance of Wagner opera, and nothing else. It incorporates features conceived by Wagner and designed by an architect named Semper for a Munich opera house which was never built. The stage and auditorium are visually and acoustically related so that the audience can see and hear Wagner opera to best advantage. The auditorium is wedge-shaped, a series of unbroken stepped concentric arcs rising at a continuous pitch. There are no tiers of boxes, no balcony. All seating is on this one ramp. A series of simple columns slot the side walls of the auditorium and form the exits. The auditorium seems to continue into the stage, because the double proscenium, instead of being the traditional arch, consists of a pair of the columns flanking the orchestra pit. Every seat has an excellent view of the stage, unobstructed by either prompter's box or pit conductor, for here, in the relationship of auditorium and stage, and the orchestra pit to both, is Bayreuth's most startling innovation. The stage is below the level of the first row of seats, and the orchestra pit between is partially canopied, descending in tiers under the stage and completely invisible to the audience. The conductor and performer are on almost the same level.

The stage occupies an area slightly larger than that of the auditorium, but has a greater vertical volume for the flying of scenery. Although the depressed stage and canopied orchestra pit have been considered too specialized an application to have been widely adopted, the wedge-shaped auditorium will be found in the majority of playhouses built since then.

Theatre in the Nineteenth Century

The Industrial Revolution and the subsequent social upheavals of the nineteenth century are amply manifest in the theatre and its architecture. The rise of the lower classes and man's determination to be self-governing politically and artistically produced a wave of public theatre building throughout Europe in the latter half of the nineteenth century. Emile Zola's Natu-

ralistic Manifesto gave the people their drama, put their life on the stage, and by asking for realism, posed problems of scenic accommodation which were in turn solved by products of industry's technological advances.

As in America, public playhouses were built as private commercial ventures in the capital and larger cities of most European countries, Germany, still culturally decentralized after the political unification of 1871, built its theatres throughout the length and breadth of the land with public-voted state funds.

The German Theatre

Because of a series of tragic theatre fires, wide reforms had been written into the continental building codes. Structural steel took the place of wooden beams and allowed for the introduction of stage machines which made those of the seventeenth century look like tinker toys.

The German theatre generally adopted the seating plan à la Wagner plus balcony for the auditorium. The construction of the stage house and its mechanism was dependent upon the artistic and esthetic ideals of the age. The obvious problem introduced by theatrical naturalism was that of the scenery which was large, three-dimensional and heavy. The sheer bulk of this scenery demanded space and mobility within the stage house. A naturalistic drama or an opera with realistic scenery might call for several scene shifts. But breaking the scenery down into small portable parts, taking it away, bringing new pieces on and assembling them would have consumed too much time and labor. How to accomplish the almost instantaneous scene shift was answered by the German architects and technicians by a system we can call "the put and take," in which the curtain is lowered, the stage and all its scenery are taken away and another stage with different scenery is put in its place—and the curtain is raised. Time elapsed? Twenty seconds.

There are two ways of accomplishing this. One is the revolving stage, the scenic lazy susan. It requires an overall stage width and depth considerably larger than the opening between stage and auditorium. The revolve is segmented into two, three or more wedges, like a sliced pie. The arc of each wedge exactly fits the stage opening. Different settings are simply revolved

* For newest version of Elizabethan theatre see project on pp 85.

into the opening by means of hydraulic or electro-mechanical drives. This system, however, has not proven completely satisfactory, for all settings must be largely angular in plan, are spatially restricting, and it is almost impossible to achieve exteriors following interiors or the reverse.

So, a system which can only be likened to a huge game of chinese checkers was evolved, in which the main stage is seen as a rectangle of given size. This rectangle was duplicated on either side of and to the rear of the main stage. Wagons, of stage size, were housed in these side and rear stages. On these wagons the settings were erected and a tall sky-cloth surrounding the main stage on three sides masked them from the view of the audience. When a wagon has to be shifted to or from the main stage, the sky-cloth is either raised into the flies or rolled up in a corner, like a window shade on end, and then lowered or rolled back when the shift is complete. Many pre-war German theatres had the main stage on a large elevator, or combination of elevators, which could individually raise the stage to different, interesting levels, or, as one unit, could raise or lower the main stage to side and rear stages located above and below the main stage level. It was possible to do a performance calling for nine different sets in which no stage hand ever touched the scenery.

Multi-Purpose Theatres

It is obvious that the auditorium of the modern theatre has been affected by Wagner's Bayreuth Opera House. It is also obvious that the dictates of naturalism have shaped the stage and backstage areas. But, how can a meeting of stage and auditorium be achieved which will produce the utmost versatility *within a fixed seating plan*?

Many German theatres have no fixed proscenium. Instead, a portal, whose opening is variable and which can move to any point within the depth of the stage, is used when a frame is desirable. The fixed apron or permanent orchestra pit are rare in Germany today.

In figure (1) we see the elevators positioned to form a deep orchestra pit for Wagner, or Strauss, or ballet. In figure (2) the elevators are rearranged to form a deep orchestra pit, partially covered, which allows the vocalist or dancer to get closer to the audience. Figure (3) shows the elevators in position for cham-

ber opera, while figure (4) shows the elevators raised to form a modified apron stage.

A few German theatres have mechanically-driven accordion sections which can extend the auditorium walls and ceiling well into the stage area. The resulting opening, smaller in dimension and farther upstage than the normal stage opening, is then filled by an acoustically suitable surface flown in from the flies. The forestage elevators are arranged in position (figure 4).

It is generally agreed that a theatre with the above stage and forestage mechanics is the most versatile *within a fixed seating plan*.

Multi-Form Theatre

In America, the move away from the traditional proscenium was initiated in the 'Thirties by the academic and community theatres. The University of Washington's Penthouse Theatre, the Cleveland Playhouse, Margot Jones' Arena Theatre, the Globe Theatre in San Diego, and the Dallas Theatre Center are but a few examples of academic and community non-proscenium theatres. The off-Broadway movement, dating from the early 'Fifties, is just as much a reaction to the limitations of proscenium production as it is to the economic restrictions which make production in Times Square more a financial gamble than an intellectual experiment.

All of the above theatres still represent, albeit non-proscenium, a fixed seating plan and a fixed relationship between stage and auditorium, whether apron or arena stage. It was only natural that steps would be taken to manipulate the stage *and the seating plan* in an effort to reconcile the needs of the traditional drama, opera and dance with those of the apron and arena. Although no single theatre has been built which can house successfully the traditional and modern forms of all the theatre arts, several new theatres may very well be forerunners of the Total Theater described by Walter Gropius in 1927:

... I submit that the fundamental task of the modern theatre architect is to create an instrument of light and spaciousness so objective and flexible that it belongs to no one form, but unites the ideals of all theatre craft. ◀

Mr DeGaetani's article originally appeared in the Spring 1960 issue of *The Juilliard Review*. Permission to reprint gratefully acknowledged



FIGURE 1

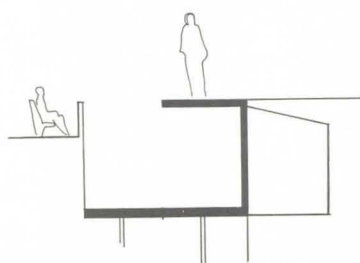


FIGURE 2



FIGURE 3

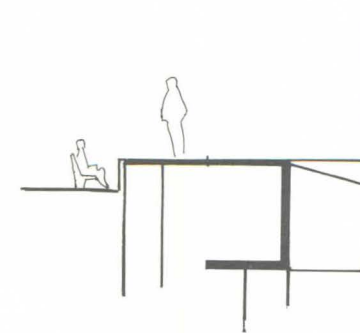


FIGURE 4

The Role of the Architect

by Eric Pawley, AIA

The following talk was presented by Mr Pawley before the First Annual Conference of the US Institute for Theatre Technology held in February in New York. The author is AIA Research Secretary and Chairman, USITT Subcommittee on Theatre Architecture

► The organization of this program indicates that someone is in the advanced stages of the dread disease known to students of creativity as "*hardening of the categories!*"*

We know the special meaning of the titles here of course but to slice up the job into:

- the role of the architect
- the role of the administrator
- the role of the creative and interpretative artist

with any implication that these are mutually exclusive little cells of professional competence, does not show the "*tolerance for initial ambiguity!*"* which is essential for creative work.

This does not refer to the well-known cross any professional bears when working with people not of his profession—they seem convinced that they know his job better! Thus every architect has in him some of the ham actor, every actor knows how to manage a theatre, and of course every owner, manager, designer, technician and actor has all the answers and skills the architect needs and more so.

It might help here to outline for this audience the typical preparation for architectural practice, if there is such a thing:

- 5 years of undergraduate study for a bachelor's degree which is now an essential part of qualification for registration in most states
- 3 years of experience working in an architect's office required to qualify for
- a rough four-day state examination for registration and license to practice in that state only

• usually, unless you have independent means, about ten more years of work for an established architect before independent practice.

Some are not interested in the quite serious responsibilities and administrative duties of name-practice and even after licensing remain to become valued top production people in an organization. Others work over into specialties, into research, teaching, editing, writing and speaking—to help with the tremendous professional task of technical communication in this complex field. It is my belief that there is no broader education and preparation required for any other profession. It is curious, however, that everyone without this rigorous training believes himself qualified to be listened to on this subject. Basta!

To return to breaking up the hardened categories set for this program—let me explain.

An architect must be creative, and in a sense, an interpretative artist or he is not worth the title. He must be a good administrator or he will not be in practice long. His role then tends to include many other qualifications than that of a drafting service to draw white lines on blue paper around the ideas of other people. The popular image is just that, this misconception of the ancient, honorable and mysterious art of blueprinting (read them and earn big money!). The only other image is that it is the architect who makes buildings cost more, that he causes expensive "extras." This is another error which we have no time to explore. The building contractor of course is always the guy who "really knows." He sure does. He gets his 10% plus without any question—but somehow an architect is un-

ethical and grasping if his fee approaches 6%. Actually he's lucky to take home 1¾% for himself even out of an 8% fee—against the unquestioned 10% net of the builder who does not have his expenses. We must love the work.

The good architect *is* in love with architecture. I have said enough to indicate the tremendous effort he must put out to educate each new client. In some way he must express and bring into focus, in relation to the proposed building, the learning and accumulated culture of his whole professional career. In those few crucial hours of decision, when his services are decided upon, the architect's role must be played with such professional integrity and intensity that it does approach the task of an actor in a great part . . . in a play moreover (the building) which must often run (be appropriate, that is) for fifty years. To be good, he must be right, he must be inspired. He needs the help of many specialists. No one can contain all this knowledge — but a competent architect can and must know enough and know how to correlate it. He has the ultimate responsibility as the agent of the owner and to everyone who uses and sees the building. A consultant of any kind does not have the architect's total responsibility for budget. This is an important area of potential conflict which every consultant should understand and strive to avoid. More projects have been ruined (if they are not killed) by a specialist consultant who gets a client excited about some new feature the project cannot afford. It is easy to avoid this. The feature and its cost should be discussed first with the architect in complete good faith. Perhaps a design-swap can be worked out if they agree that it is a good thing.

Theatre architecture is a special challenge. It is a fascinating building type because it combines so many elusive elements of design. Just consider how the visual and acoustical relationships generate and govern the plan and section, consider the many functional demands on space and equipment, the safety of that precious but unreasoning beast, the crowd, the alterations of mood-magic required in the design of form, light and color of a fine theatre.

To solve these problems the architect must work with the precision, inevitability and impact of the poet. Could we say—only the good ones keep out of the doggerel house! ◀

* quotes from Dr Irving Taylor, "The Nature of the Creative Process," AIA Journal July 1960, pp 48-53

Theatre Lighting / A NEW ERA OF TECHNOLOGICAL DEVELOPMENT

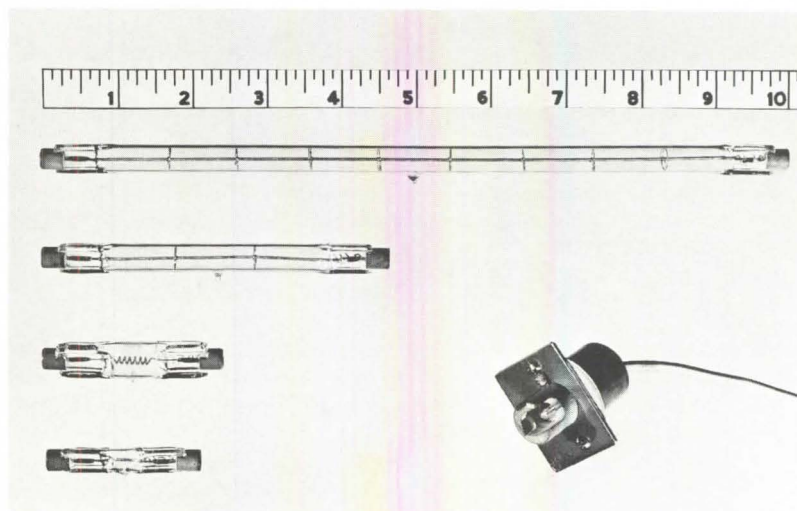


Figure 1: Quartz-Iodine Cycle Lamps. From top to bottom: 1500 watt, 2000 hour life, 277 volts; 500 watts, 2000 hour life, 120 volts; 100 watt, 1000 hour life, 6.6 amperes; 45 watt, 1000 hour life, 6.6 amperes. At right: the socket receptacle designed especially for use with these lamps. Photo courtesy General Electric Co., Lamp Division

by **Joel E. Rubin**

Dr Joel E. Rubin, Technical Secretary of the US Institute for Theatre Technology, is Director of the Theatrical Lighting Division of Kliegl Bros. Lighting. A past Chairman of the Technical Developments Project of the American Educational Theatre Association, he is presently Chairman of the Committee on Theatre and Television Lighting of the Illuminating Engineering Society

► During the period from 1900 to 1960 fundamental progress was made in light sources, theatre lighting fixtures and control systems, and the theatre lighting practice itself. The over-all period may be divided into three phases.

The first period extending from approximately 1900 to 1920, was an era which saw the disappearance of acetylene, natural gas and limelight light sources, and the more widespread use of the relatively new incandescent filament lamp. This period contained the first tentative experiments in spotlighting practice, the gradual evolution of resistance dimmer control systems, improvements in the design of striplights and floodlights, and redevelopment of equipment to meet newly established standards of safety.

The second phase, encompassing the years from approximately 1920 to 1935, saw the development of highly concentrated lamp filaments with prefocused bases, of Fresnel lens and ellipsoidal reflector spotlights, reflectors of permanent finish and high reflectance, multi-scene preset switching systems, multi-scene preset dimming systems controlled from console keyboards, and reactance and autotransformer dimmers. Stage lighting practice

following 1920 was increasingly characterized by the use of spotlights. The period from 1920 to 1935 was probably the most technologically active in the entire history of stage lighting.

The spotlight generation

The last phase, from approximately 1935 to 1960 was an era in which the technological progress of previous years was consolidated and equipment underwent constant design and modification in attempts to improve efficiency and flexibility. Particularly in the last ten years of this phase two main channels of development may be singled out. The first of these was concerned with the continued development and integration into theatrical production of the projector and reflector spotlight and floodlight lamps first introduced in the mid-1930's. A formidable array of sizes, voltages and wattages of these lamps were being utilized by stage and theatre lighting specialists. The second channel of development was seen in the continued metamorphosis of the remote-control preset dimming system. Within a ten year span, architects and engineers specifying such systems were confronted with such devices as motor-operated autotransformers, thyatron

tubes, saturable reactors, magnetic amplifiers, and silicon controlled rectifiers. By 1960 the last of these types was clearly seen to predominate and to indicate the channel of most promising further development. The control-console resolved itself early in the period to two, five and ten scene preset systems, and by 1960 further schemes of pre-setting in advance, even to "infinity," were postulated and advocated.

The period from 1935 to 1960 has, in terms of lighting practice, been characterized by such phrases as "the spotlight era" and "painting with light." Theatre lighting was used as the coordinating element of stage spectacle, serving not only the purposes of selective visibility, plasticity, and mood and compositional effects, but also serving to organize and relate the actor, scenic investiture and stage space.

Today we can prophesy another great era of technological development in theatre lighting equipment. Upon what is this prediction based?

Lab experiments—projectors

First, the commercial availability of new and proper light sources. The theatre lighting instrument is, quite obviously, developed hand-in-glove with respect to a particular light source. In the case of the projector and the reflector lamp, the light source becomes in effect also the instrument. We may, therefore, expect to see continued expansion of the projector and reflector lamp source: These units will be capable of precise focusing and adjustment; some of them will also pack tremendous power, for example, 1500 and 2000 watt projector lamps sealed into the old 300 and 500 watt lamp bottles.

Perfect light maintenance—quartz-iodine

A second new light source, already finding important theatrical lighting applications, is the quartz-iodine cycle lamp. (See Figure 1.) This family of lamps, $\frac{3}{8}$ of an inch in diameter, has nearly perfect light maintenance throughout life due to the nature of the tungsten-iodine cycle. At design voltage the efficiency of this new lamp is 21-22 lumens per watt, equal to that of present spotlight sources; but, due to the small bulb size, efficiencies of the total instrument optical system may more than double in some cases. The 500 and 1500 watt lamps, which presently must be operated in horizontal position, are

suitable for floodlighting applications such as lighting of cycloramas or to replace present borderlights and footlights. The 45, 100 and 200 watt sizes (there are several others), which may be burned in any position, are suitable for spotlight applications. All of these lamps may be dimmed using systems already available.

Excellent energy distribution—cesium

A third new light source, the cesium lamp in a newly developed polycrystalline alumina ceramic envelope, looks externally much like the quartz-iodine cycle lamp, but is actually of the electric-discharge type. This lamp has excellent energy distribution throughout the light spectrum and in addition produces efficiencies in the order of 35 lumens per watt. The lamp itself is in the laboratory stage, and dimming systems for its control are yet to be invented; this is, however, one of the more promising of the new light sources.

Trading panels for bulbs?

A fourth new light source is the electroluminescent panel. While most theatre lighting applications are concerned with point and linear light sources, this area source promises to have important theatrical use. One may imagine a thin indefinitely extended area of light, capable of endless variations of color and brightness. The cyclorama of the near future may well be a sheet of plastic, 0.01 inches in thickness, weighing 0.09 pounds per square foot (a 30 foot by 80 foot cyclorama would weigh only slightly more than 200 pounds). This cyclorama will provide sufficient color brightnesses of any color or admixture of color throughout the visible light spectrum and continuous intensity variation down to blackout. Color is varied by changing the frequency of the current and voltage supplied to the panel; intensity is varied by changing the magnitude of the voltage applied; systems for control of both frequency and voltage are already available. Figure 2 is a photograph of the first large-scale application of the electroluminescent source; figure 3 is a close-up of one electroluminescent panel; this is a decorative installation in a hotel lobby, not a theatre cyclorama. Present problems in engineering and production which limit panel size and brightness will, in all probability, be met in the not too distant future.

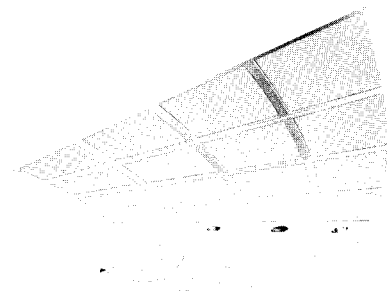


Figure 2: One quarter of the giant 27' x 19' ellipse composed of glass electro-luminescent panels mounted in a suspended metal frame

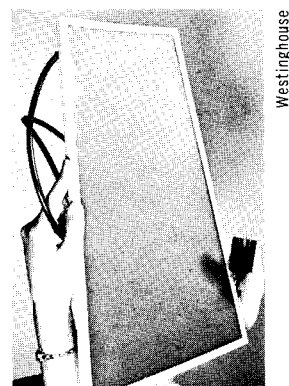


Figure 3: A view of an individual glass electro-luminescent panel. The thickness is less than $\frac{1}{2}$ ". Electroluminescent panels may be made on metallic, glass or plastic bases; each of these offer specific advantages or disadvantages for a given installation

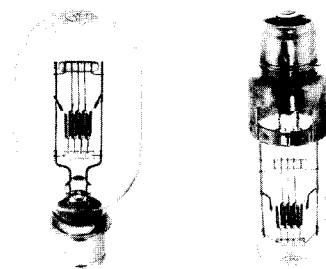


Figure 4: Left: The T20 glass bulb once associated with 250 and 500-watt lamps is now used to house 750 and 1000-watt lamp filaments. Right: The T12 and T14 glass bulbs, originally designed for 250 and 500-watt filaments are now being designed for 750 and 1000-watt lamp filaments. Many existing lighting instruments which will accept the higher wattage lamps are not properly ventilated for them; lamp blistering, shortened lamp life, or breakdown for the instrument may result

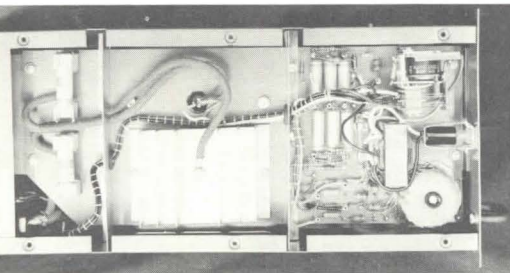


Figure 5: A dimmer of the silicon controlled rectifier type employing highspeed SCR's in series with the line and the load as the sole means of control. The plug-in module is typical. The particular dimmer shown is 7" high by 3" wide by 15" long, weighs 8 pounds and controls loads up to 3000 watts. Dimmers of this type are available up to 15,000 watts

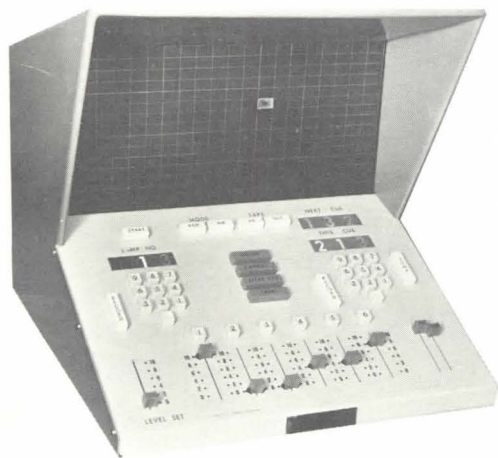


Figure 6: Demonstration model of a 500-scene preset in advance lighting console, capable of controlling up to 300 individual lighting units or groups of lights. This 50 pound control center is the actuating end for a magnetic drum memory storage device

The list of other promising new sources might include xenon arcs, zirconium arcs, radio-frequency controlled lamps, even new mercury and fluorescent lamps.

What is happening with the old well-known stage lighting tungsten filament lamp? Developments here, except for periodic cost increases, and periodic decreases in bulb size, are almost at a standstill.

Over the last decade spotlight and floodlight lamps have risen to 224% of their cost in 1950. At the time of the last price increase in April of this year, the *Wall Street Journal* reported that all lamps of every type averaged out to a general 1% cost increase. Purchasers of spotlight and floodlight lamps could not help but note that the lamps in these lines increased twenty percent in cost at this time. There are well over two hundred types and styles of spotlight and floodlight lamps; lamps used in filming of motion pictures (slightly over thirty types and styles) have risen only 155% in the last decade. Some groups advocate, regretfully though, considerable reduction in the line of spotlight and floodlight lamps in order to make a lesser number of types more profitable to the lamp manufacturers. One unfortunate result of this will be that increasingly some lighting equipment will be obsoleted by lack of replacement lamps.

One alternative may well be that if lamp types are not reduced in number, spotlight and floodlight lamps will become more and more prohibitive in cost.

The second development in tungsten filament sources is that higher wattage filaments are being packed into the same bulb sizes (see figure 4 A and B), and that there is a general tendency to encourage reduction of bulb sizes. Better ventilation of the lighting instrument, including forced air ventilation of more instrument types, and harder glass jackets, will combine to encourage this tendency. Higher lamp efficiencies and optical system efficiencies should result.

Factors effecting change

The first of the factors then, that should contribute to technological development in theatre lighting, will be the light source. We can predict that a decade hence principal light sources of the theatre will be sources that, in the main, do not find employment in the theatre of today.

Research in related fields—application?

The second of the factors contributing to technological development is invention and improvement in related technical fields such as illuminating engineering, optics, physics and mechanics. One cause for great concern today is the lack of direct invention in the theatre field; one reason for great optimism is that the theatre is frequently quick to seize upon and make use of invention in other fields.

Missile dimmers—peace of mind

This ability of the theatre to adapt inventions in other fields for its own use is illustrated in the developments shown in figures 5 and 6. Figure 5 shows a dimmer of the silicon controlled rectifier type. The complete dimmer package (from right to left) consists of a primary protection circuit breaker and pilot light, a pre-wired control card which triggers the dimmer to conduct current and prevents excessive current, two silicon controlled rectifiers which carry and control the current delivered to the lamp load (these are encapsulated in heat dissipators termed "heat sinks"), extremely quick acting short circuit protection fuses, and finally the plug-in device which makes the dimmer easily removable in the event maintenance is required. The silicon controlled rectifier was initially developed for use as a high-speed, light-weight, efficient, *switch* for missile applications; the use of this device for dimming control was the first non-military commercial application. The plug-in technique and packaging of dimmers as complete modules is one adapted from standard electronic industry procedure.

Computers compete

Figure 6 shows a complete lighting console, a 24" cube, weighing only fifty pounds, capable of setting intensity levels on up to 300 dimmers and 500 presets. This console operates a standard magnetic storage drum used in the computer field.

Even in such mundane areas as equipment testing and production there is evidence that quality standards are being encouraged. A report on photometric testing prepared by the Committee on Theatre and Television Lighting of the Illuminating Engineering Society has been adopted as the official testing practice of that Society, of the Society of Motion Picture and

Television Engineers, and by the American Educational Theatre Association among other user groups. Proposed equal step dimming curves for all dimmer types are now being studied by the same I.E.S. Committee.

Role of the specialist

A third contributory factor to further technological development is the continued rise in popularity of the lighting consultant, the lighting designer and the illuminating engineer: professions almost unknown just two decades ago. The best of these practitioners have been instrumental in seeing that new equipment was developed as required.

Need for revision and enforcement of codes

A fourth factor is the stimulus to be derived from increasing attention to fire and electric codes. There is considerable ferment in these fields today and every reason to hope that some of the unnecessarily restrictive code sections will be rewritten or withdrawn. Safety and proper application of material

for a given use are two ultimate aims of code writing which are beneficial to theatrical fields as well as others. Strict enforcement of codes to an area such as the Broadway theatres would help do away with many of the inefficient and outlandish practices of the commercial rental situation there.

The more the better!

A fifth factor encouraging technological development is the incentive attendant upon an era of extensive theatre building. Present predictions are for upwards of 750 theatres to be erected on college and university campuses in the next decade, an equal number of community and civic theatres, thousands of theatres on primary and secondary school levels, as well as great civic and cultural centers such as those now planned for New York, Los Angeles, Seattle, Washington, D.C. and other areas.

Not only is there great theatre building activity, but the technical and architectural theatre of this country is in a state of great ferment. Not for nearly half a century has there been such appe-

tite for change—extending from our very concept of play production through our architectural design and into all phases of technique and equipment.

Finally, throughout the first sixty years of this century the most persistent contributory factor to technological advancement was the development of the theory of the art of stage lighting. Lighting theory always preceded lighting practice in any given period. Consequently, there was always the necessity of producing equipment capable of meeting the demands of lighting theory.

It is difficult to postulate any vast change in theatre lighting theory. Theatre lighting equipment has tended more and more throughout the years to explore the utmost limitations of lighting theory. Theatre lighting is a limited art in its broadest sense of subordination to the play. Thus while in earlier years lighting theory was the most important factor in the stimulation of technological activity, in succeeding years this particular incentive will, in all probability, gradually lessen. ◀

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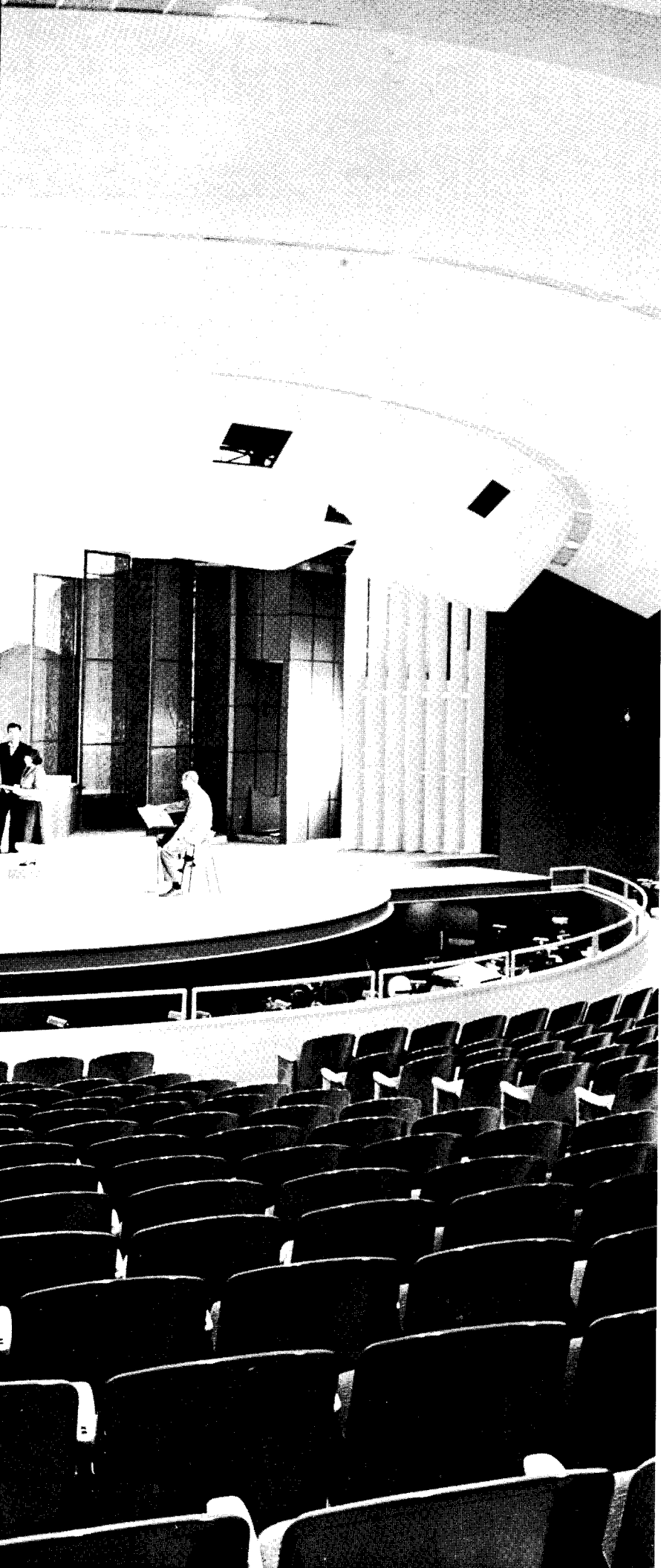
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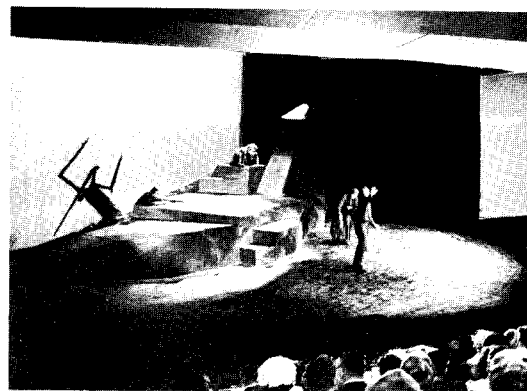
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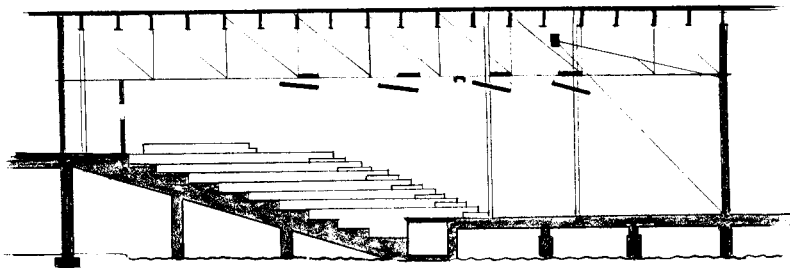
* Reprints available at 10¢ a copy from the Publications Division, The American Institute of Architects, Washington, DC



A Theatre Portfolio

**Music Center,
Stanford University**
Stanford, California (photo at left)
Architects: Pflueger, Spencer,
Ambrose





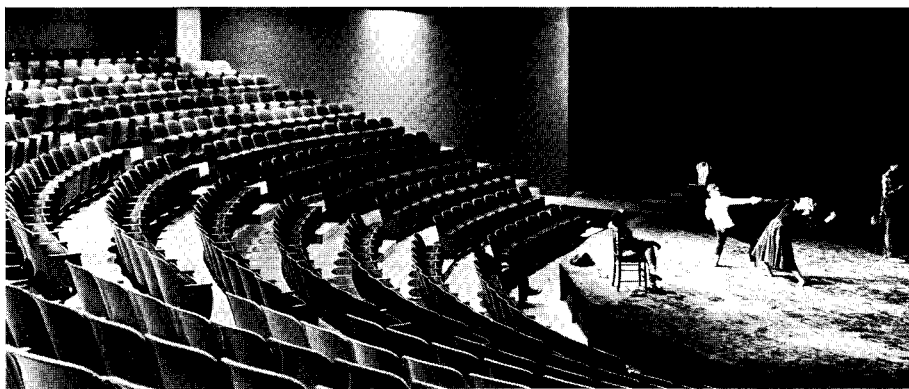
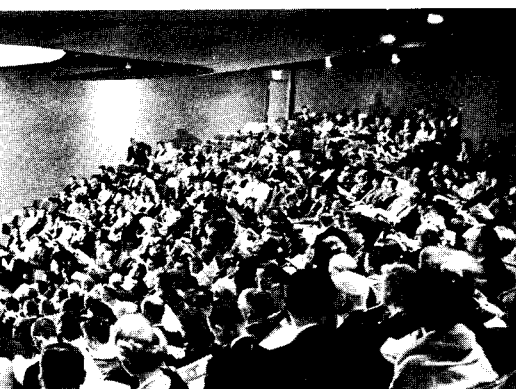
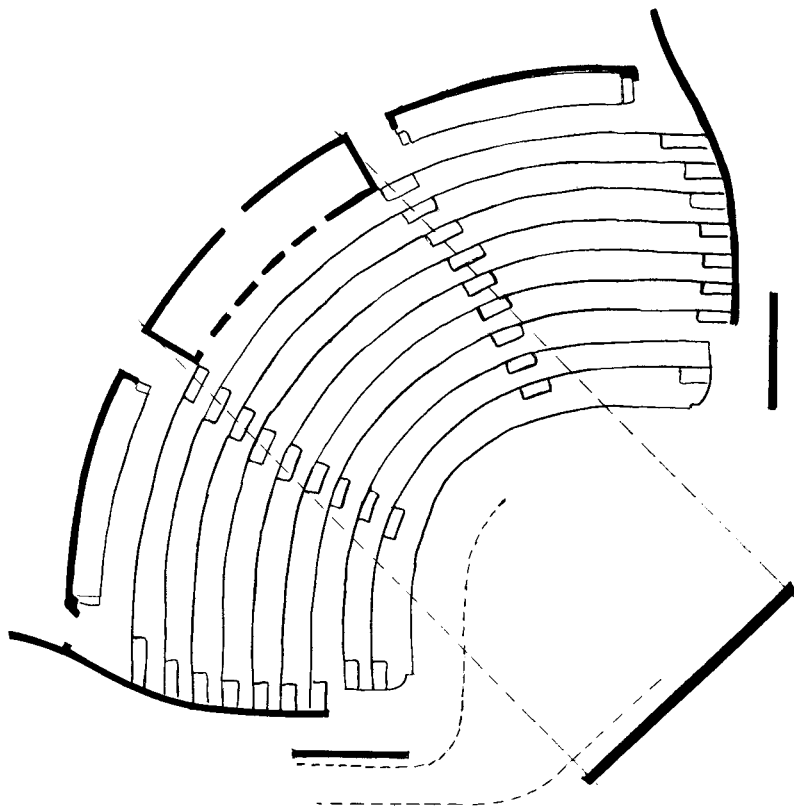
Theatre of Western Springs, Illinois

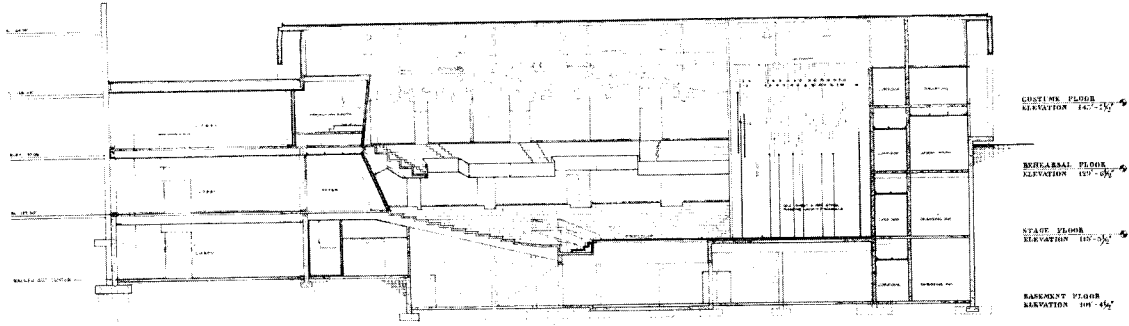
This theatre, designed by James Hull Miller, opened in May 1960 with the performance of *Dark of the Moon*. Mr Miller's modified open stage plan—in the absence of a proscenium arch—providing an uninterrupted view from side seats as well as those in the center (no seat is more than 35' from edge of stage), has answered the long-felt need for a community theatre which draws its audience from nearby villages and around thirty suburban communities west of Chicago. 412 seats, stage measures 55' x 30'; cost: approx \$250,000 equipped; about \$20.00 psf.

Illustrations this page: Scene from opening *Dark of the Moon* shows projection of misty mountain in distance. Small stage scenes introduced at either side—mountain is permanent set. Seating terraces 12" by 38". Acoustical ceiling planes hung in space, partially mask lighting system.

Elevation of lobby over stage level creates roomy basement for children's theatre activity, also storage.

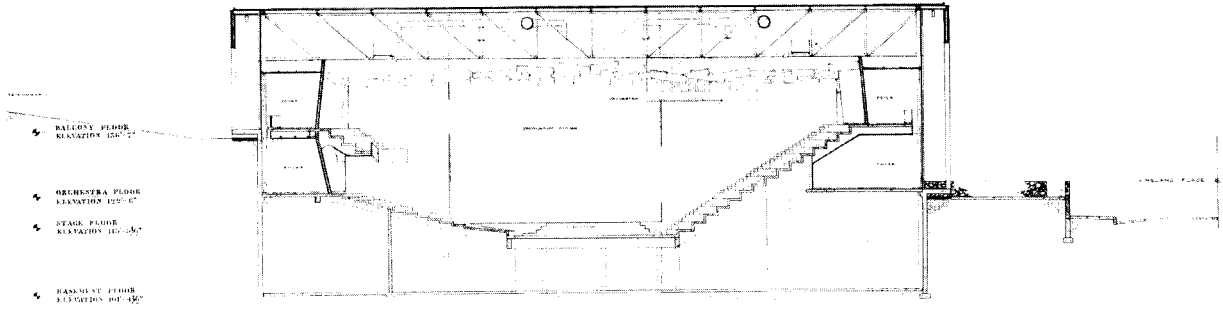
Architect for the building was Gustave Orth, AIA, of the office of Fugard, Burt, Wilkinson and Orth.





Longitudinal Section

Traverse Section



Tyrone Guthrie Repertory Theatre

Architect: Ralph Rapson, AIA; Theatre consultant: Jean Rosenthal, USITT; Acoustical consultant: Robert Lambert

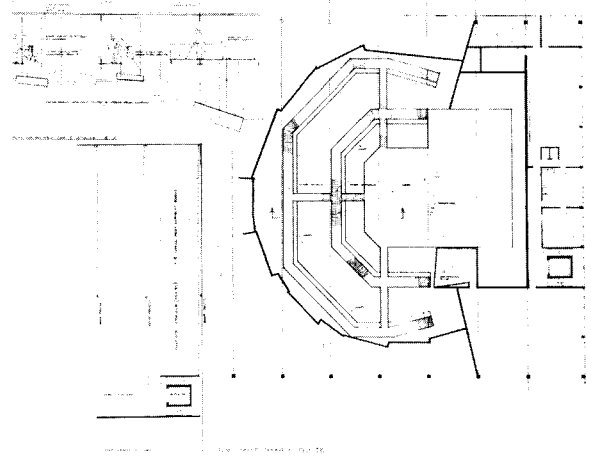
New building to house the Tyrone Guthrie Repertory Theatre Company, to be built adjacent to existing Walker Art Center building in Minneapolis.

Emphasis on open stage-type production with seating wrapping around three sides of stage. Seating is asymmetrical in that seats on one side of stage rise at steep rake to join to the balcony seating continuing on around to the back and opposite side. Differing vistas from varying positions, with all seats having a clear view of stage. No seat will be more than 14 rows from center of action, average 30-33'. Forestage and proscenium stage will be "trapped" to provide flexible acting and performing conditions; wagon stages will also be used.

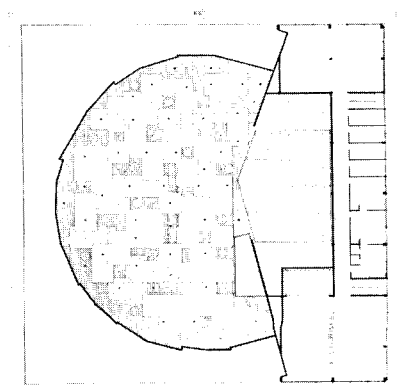
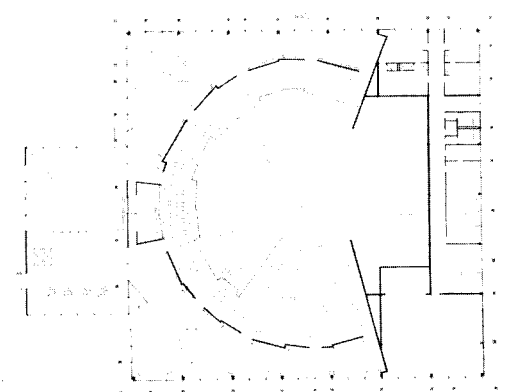
Backstage facilities include rehearsal spaces, costume and stage design rooms, sewing, dyeing, individual and group dressing rooms, property and costume storage, shops, etc.

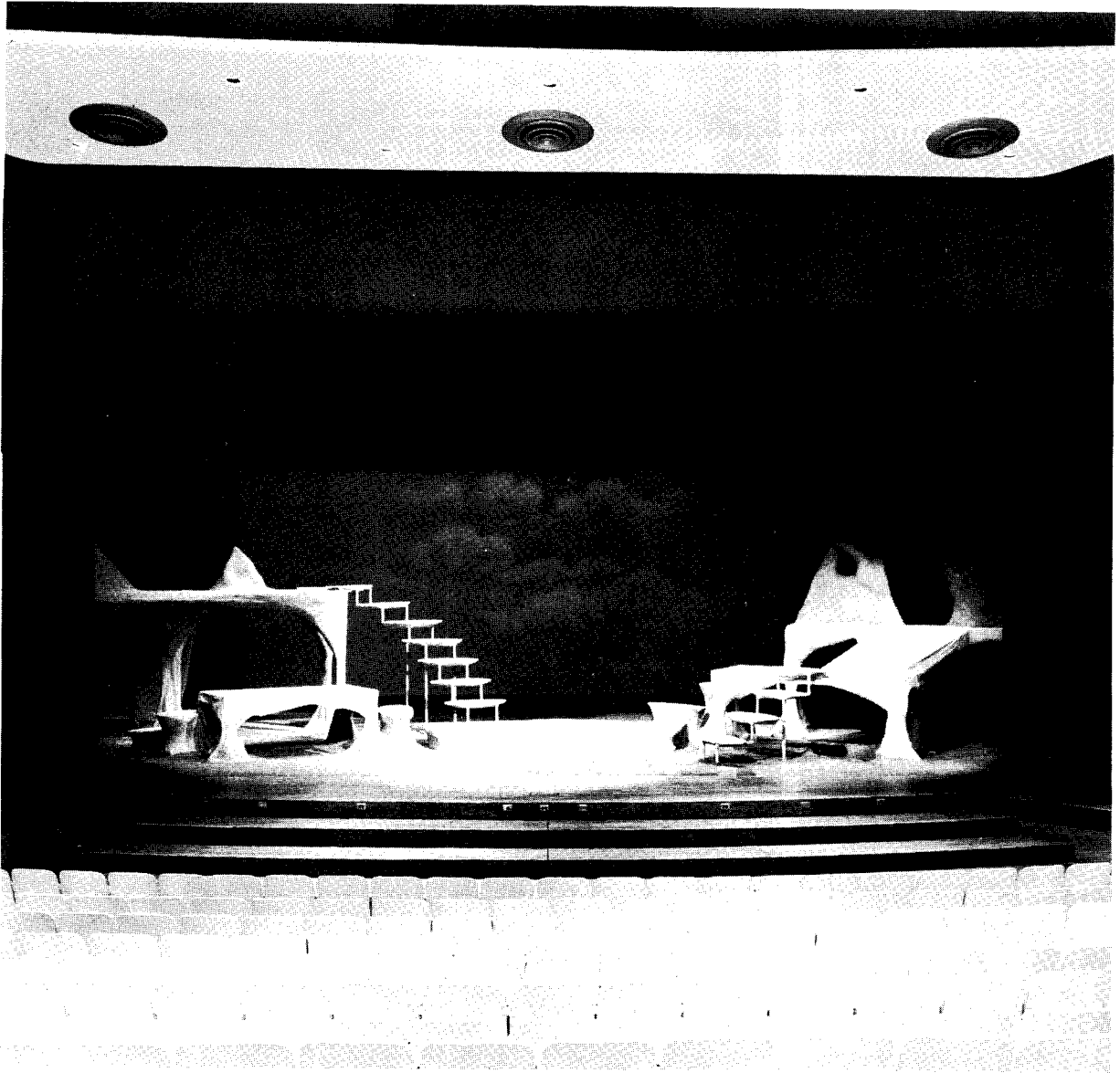
System of flexible ceiling "clouds" over forestage and house seating to accommodate varying lighting, acoustical and visual effects.

Plan above ceiling



Reflected ceiling plan and costume floor

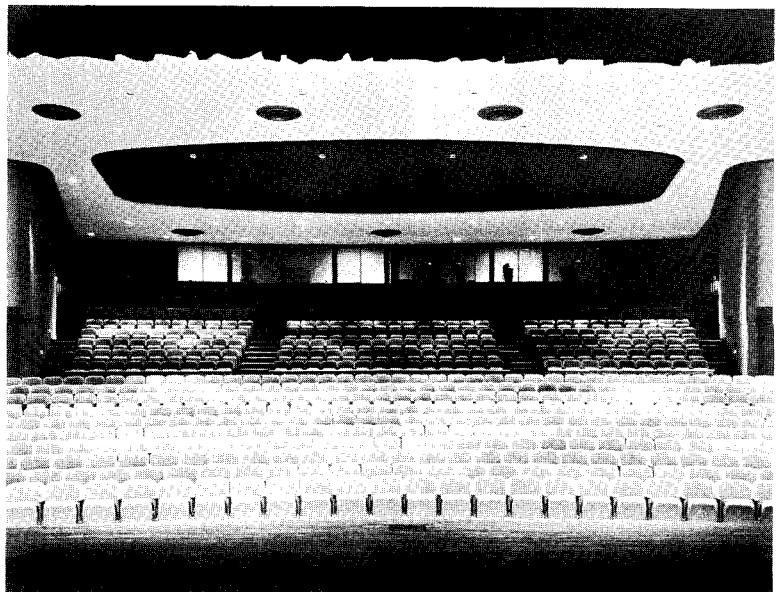




Music and Speech Center
Kent State University, Kent, Ohio

Architects: Mellenbrook,
Foley & Scott

View from audience on stage,
scenery; and from stage towards
auditorium—proscenium type stage



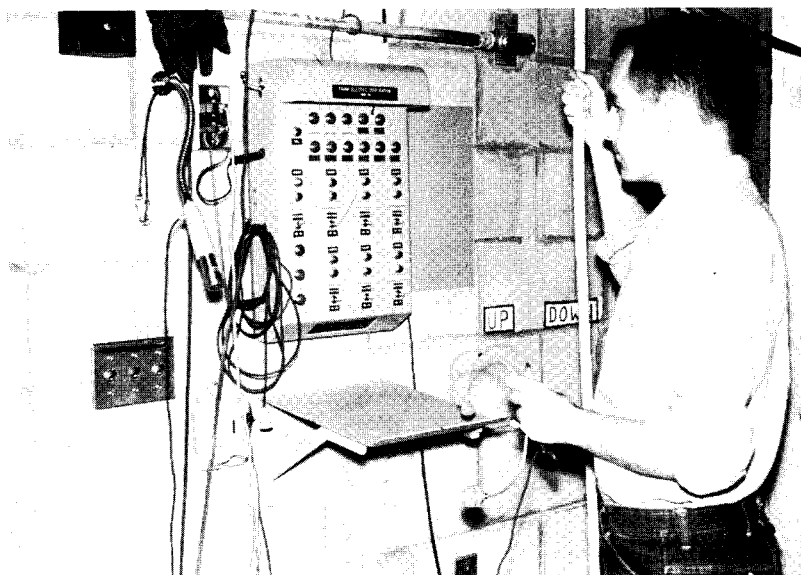
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School Plant Studies

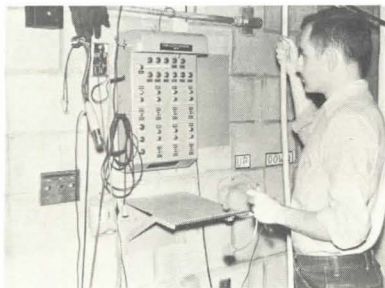
BT 1-46

Tonight
at
Eight
Twenty-Nine



by **William M. Davis, AETA**

One of a series of papers prepared by members of the AIA Committee on School Buildings, and by selected specialists, to make laymen aware of school building problems and trends and to stimulate discussion. They are not intended to be definitive last words and carry only the authority of their respective authors. New subjects are being worked on and contributed articles are welcome. Reprints of these non-technical articles are widely distributed to educators and laymen. One copy each current issue free—additional copies 10¢ each.



Stage manager's control panel

Tonight at Eight Twenty-Nine

by William M. Davis, AETA*

The American Educational Theatre Association—one of the largest organizations of persons interested in the theatre—meets annually for a three-day convention. The work of the association is carried on by various projects devoted to different aspects of theatre arts: new plays, graduate research work, curricula, summer theatre activities; technical disciplines are covered by two projects: "Scene Design Technical Developments Project," and "Theatre Architecture Project." TAP, one of the larger groups within the association, devotes itself to the study of research and development in the field of theatre construction and equipment. Various current investigations include: collection, study and publication of data on new theatres constructed in the US and Canada; a study to determine the best type of space for teaching dramatics in the American highschool. TAP maintains close liaison with the US Office of Education, various state offices, professional societies and school administrators. The work of the various projects is reported in AETA's "The Educational Theatre Journal." TAP is associated with and assisted in the formation of the American Center for AITT, and has been instrumental in the recent founding of the broader US Institute for Theatre Technology (not limited to educational theatre). Many AETA members belong to both. Inquiries concerning the work of the association or the Theatre Architecture Project can be addressed to the Executive Secretary of the association, Professor John Walker, Michigan State University, East Lansing, Michigan.

► "Magic Time" is the expression often used to describe the short period of time in the theatre when the house lights are dimming and a sense of anticipation grows in the audience. This article will deal with a "magic moment"; the instant before a performance actually gets under way. In front of the curtain the audience is waiting; in back of it everything has been checked, everybody is in place, the Stage Manager has received the phone call from the House Manager at the box office assuring him that everyone has arrived, and the director has said goodbye and left the stage. The Stage Manager now looks around, takes a deep breath and raises his hand to signal—and right here we are going to immobilize, as it were, everyone in the building. Thus stopped in their tracks, we will move around the theatre, take a look at some thirty-seven of the sixty-odd people required for the performance, and discover why each is where he is, and how the design of the building is planned so that they all can perform to the best of their ability.

The play is *MacBeth*, by William Shakespeare. It is going to be a big show, vivid and exciting; a lot of labor has gone into getting it to

the moment at which we freeze all movement.

Shakespeare's first scene, a very short one with the three witches, has been cut, and the play will start with the scene of the camp near Forres. The change from scene to scene during the play will be done with lights for the most part; they will dim out, there will be a quick change, and they will come up. For some scenes this will not be necessary; instead the action will shift to or from a side stage.

Since seven o'clock the students working on the show have been arriving backstage: The actors to make up, and the technicians, for the most part, to make a quick check (everything was gotten ready during the afternoon) and then to study for tomorrow's classes until curtain time. By eight-twenty-five the Stage Manager had his word from the House Manager that he would be able to begin on time. He called "Places for act one" and waited till eight-twenty-eight: Then made a personal or telephonic check that every person who was involved in the first two scenes was on stage and was ready. The first intimation that the audience will have of the start of the performance will be music swelling from the auditorium speakers. Six-

ty seconds of this and then the house lights will start down, while the music gets louder. Now the Stage Manager leans forward to buzz the Sound Man, we put them into suspended animation, take a look at the diagram, and discuss each one.

The numbers on the diagram are counter-clockwise. Those in bold are technicians; those in italic are actors.

1 Light Controlboard Operator

2 His Assistant:

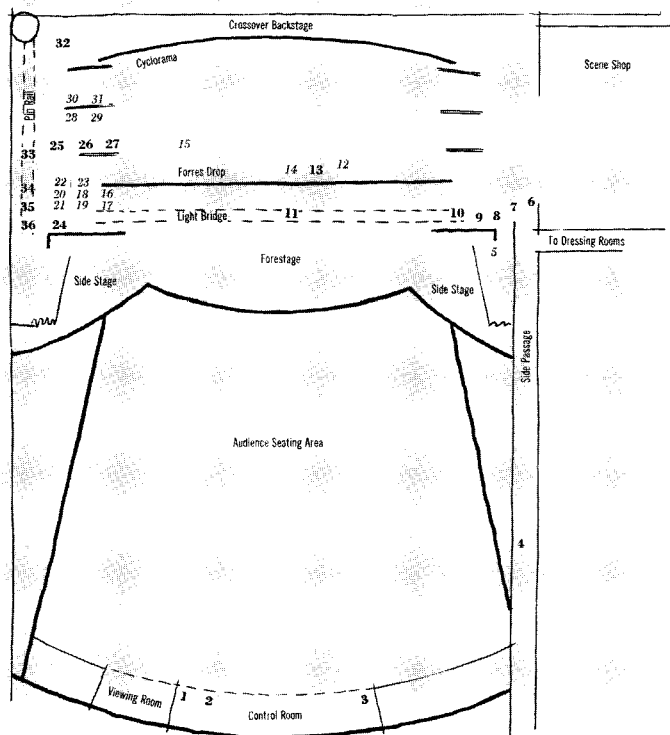
Their architectural requirement is a soundproof, ventilated control room, located in a position that will allow them to watch the show from approximately the same point of view as the audience. Thus situated, they can coordinate their routines precisely with the action on the stage, instead of working blindly, by ear alone. They hear the play through a PA system, which also is piping the lines elsewhere: Dressing rooms, Green Room, and director's office. The operators view the play thru a soundproof window. They are in touch with the Stage Manager via intercom telephone. A second architectural requirement is that the control room be accessible to the backstage area without the need of passing thru the auditorium.

3 The Sound Operator:

He has the same requirements as the light controlboard operators, and for the same reasons. Where the electricians must coordinate exactly with an actor who ostensibly switches on a lamp, the Sound Man must match exactly the movements of an actress who turns on a hi-fi set. He needs enough room in front of his window for a bench large enough to hold a tape deck, a three-speed turntable, an amplifier, a record rack, and his cue sheets. In addition there may be a pre-amplifier, and a set of controls for various speakers backstage.

* American Educational Theatre Association

Note: This layout is not to scale, nor is it a complete plan. It should be regarded strictly as a block diagram of the areas and positions discussed in the article. It is representative, rather than precise, concerning the requirements of actors and technicians in any theatre, performing any play.



4 The Director:

His work is finished; a moment ago he turned over responsibility for the running of the performance to the Stage Manager and is now on his way out to the rear of the auditorium to watch and make notes on the performance. He is going along a small passageway which connects the backstage area with the lobby. This passage is NOT a public way. Its function is to allow *unobserved* indoor traffic from the stage to the lobby. Once the performance begins it is not possible for anyone to pass through the auditorium. The Director, the Scene Designer may want to drop back to check something. The crew chiefs backstage will want to take a look at the actual performance to see how it is going. But most important, actors in costume may need to use it. There are times when actors enter or leave the stage (*Our Town* and *Waiting for Lefty* come to mind) through the auditorium. They could go around outside if the weather permitted. But only if, because they must not damage their costumes. Since there can be no way of knowing the weather a month in advance, when the play first begins rehearsal, the protected route is necessary. Without it, such special pieces of action are either omitted or are made awkward; hiding in the cloakroom, for instance.

5 An Actor, playing a wounded sergeant. It is probably not correct to speak of an actor's architectural requirements for a stage. In the sense we mean, it is the director's requirement. This actor is where he has been told to be. He is just inside the entrance to the right-hand side stage. As Duncan and his entourage enter the stage from the left-hand wings, this actor will limp into sight from his position. He cannot, from where he is, see the entrance of

the other actors. But on the wall in front of him is a small green lamp: When it goes on, he will get ready, and when it goes out, he will enter. This is a cue light, for silent signals. It is operated from the Stage Manager's control panel, and there are nine more of them in various positions around the stage, including one in the lobby to signal actors waiting there. The Director is using the side stage for this first entrance because he wants to bring the play as close to the audience as possible for a moment, thus briefly giving them the idea that this is going to be a colorful, exciting drama. As the performance goes on, these side stages will be used more and more. When *Lady MacBeth* is somnambulant in the great shadowy hall of the castle, the Doctor and Nurse will be "concealing" themselves on one of these stages. The final battle will be fought all over them, as well as the main stage.

6 The Technical Director:

He is a faculty member, and the only adult remaining backstage during the performance. Except in an emergency he will do nothing all evening long (except drink coffee). He keeps himself

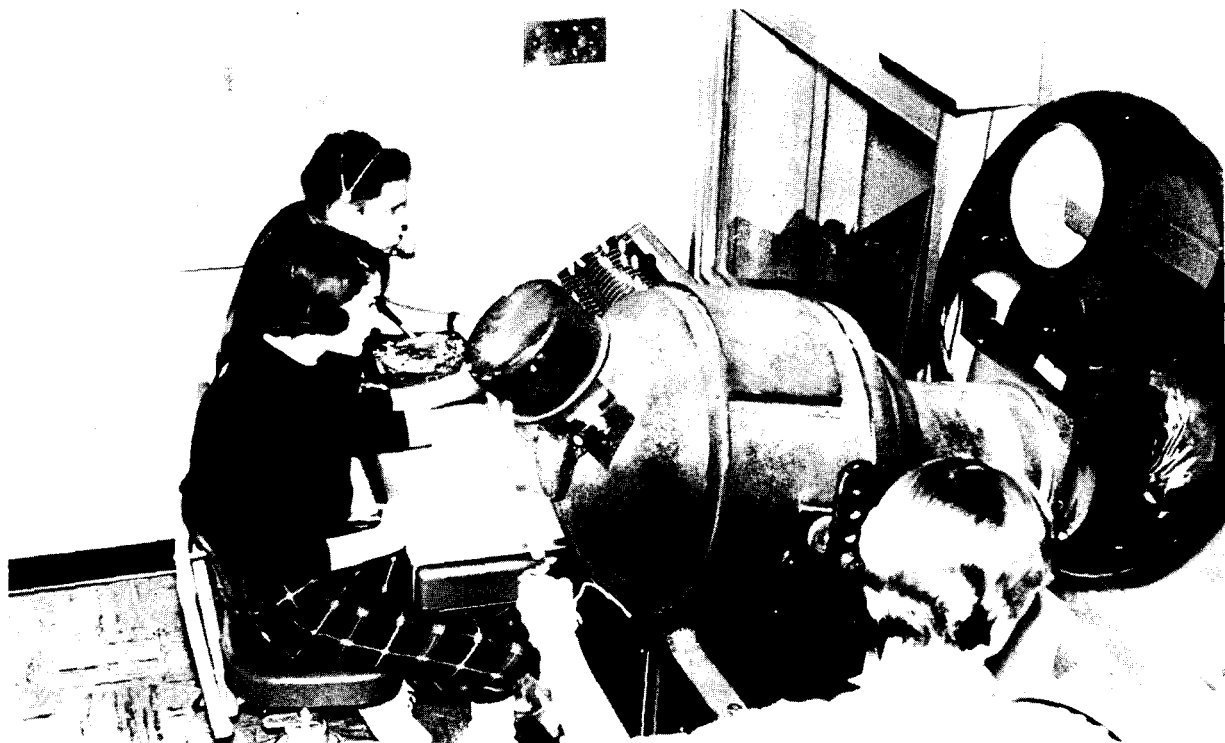
as insurance against any mishap, including a missing crew member—but *not* a missing actor! Thus he stays well out of the way. There must be plenty of off-stage space for him to keep clear of the actors and crew members, tho it is a little far-fetched to say that this is an architectural requirement for him at this point.

7 An Assistant Stage Manager:

There is always at least one ASM for every play, and their primary job is to be an understudy for the Stage Manager. As a rule, of course, he is never called on to take over the running of the show. His other duties include checking on actors and scene shifts and reporting this to the Stage Manager. Right now he, too, is keeping out of the way.

8 The Stage Manager:

The most important person in the entire production. He has the ultimate responsibility and therefore he has ultimate authority. He starts the show, he sees that it continues, in all its aspects and in order, and he ends the show. When he says, "No more curtain calls—house-lights up," that's that. To accomplish all this he has one or more assistants, and he himself



Control room, color wheel

is located in the most advantageous position backstage. This is almost invariably in the same place: Next to the curtain ropes. It can be on either side of the stage. By placing the Stage Manager and the Curtain Man side by side there is instant, and *quiet*, communication between them. There can be no misunderstanding of the command "Curtain!" with that juxtaposition, and there have been countless missed cues when these two people were located on opposite sides of the stage. Indeed, if a whisper is too loud, a tap or gesture will do. This is particularly important during curtain calls, since their number is almost never pre-determined, yet the curtain goes up and down rapidly. There is split-second thinking here, and the final curtain is not known till it's over.

The Stage Manager has the Master prompt book, in which is marked every cue, and the warning for every cue, every entrance, and the point at which each actor should be on stage to be able to make that entrance. He needs a small shelf to hold this book, usually a looseleaf notebook. For his communications he needs an intercom phone (a master), and perhaps a mike for backstage PA. There ought to be a clock, because all acts are timed. And there needs be a panel for the cue light

switches, mentioned in connection with the wounded soldier previously. Sometimes there are some light switches there as well, for lights controlling the backstage areas. All this requires a section of wall against the front of the stage, the proscenium wall, a width of about three feet is plenty. This position must be about eight feet away from the stage, in order that actors and scenery will not be blocked as they go on and off stage. The downstage position is also the one where, in nine shows out of ten, the Stage Manager can get a pretty good view onstage. His intercom cable should be long enough so that he can move some eight feet from his station if necessary. A companion requirement to this clear wall space for his control station is the placement of the door to the dressing rooms near by: Thus he can see actors come (and go) without stirring from his stool. And keeping track of actors is his most vital and most difficult duty; they tend to be very casual at times, particularly undergraduate actors, who are not always amenable to the discipline required during a performance.

9 The Curtain Man:

His position and the reason for such position are given in the previous section on the Stage Manager. An alternative position often

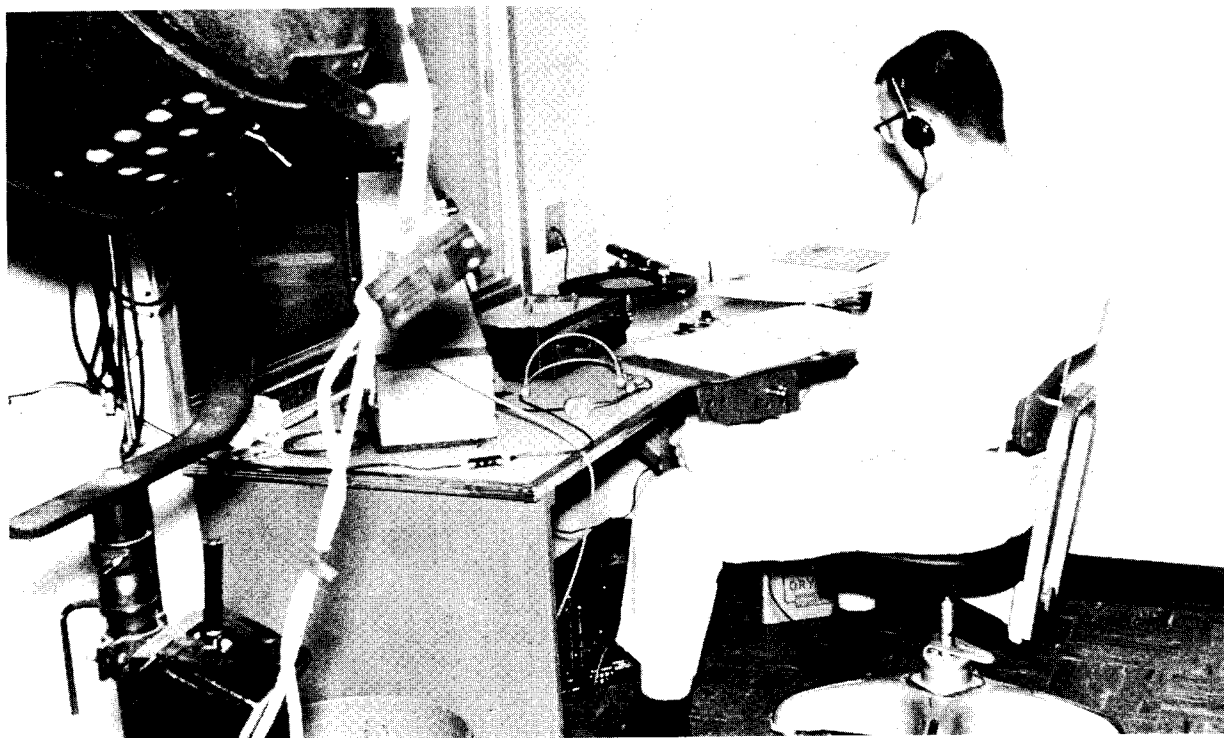
found for the curtain lines is against the side wall, where they are the first set of rigging lines.

10 The Prompter:

She sits just out of sight of the audience, hidden from them by a semi-permanent piece of scenery called the *Tormentor*. While her preferred position is always near the Stage Manager for the sake of communication, it is always governed by the plan of the scenery, and because of this she may even shift her position from act to act as the settings are changed. She places herself where she can get the best view of the stage, yet not be seen herself. Because of this, she is the exception to the rest of the persons mentioned in the article: She has no architectural requirements. The prompter is always related to the scenery and nothing else. She has a small-wattage lamp to see by; it is plugged into a house-type outlet under the Stage Manager's panel.

11 Electrician:

This crewman is not on stage, but is standing on a metal catwalk running the length of the proscenium opening, and hanging just above it. It is called the *light bridge* and usually serves as an inner proscenium — the front and underside of the walk being covered with dark velour. Architec-



Control room, studying before show

turally this is a requirement of the lighting designer rather than of this particular electrician. It is primarily a mounting position for many lighting instruments having pipes and electrical outlets for this purpose. The electrician is on it as a matter of economics. During the Witch Scene, coming up, three spotlights will be used from here, all with green color media. They will not be needed again until Act IV. So as soon as the scene is over, the electrician will remove these green media and substitute light blue ones for the many castle interiors that are due. This means that fewer instruments need be purchased for use, and fewer circuits need be incorporated in the controlboard. When necessary, special follow-spotlights can be operated from this position.

12 An Actress, playing the First Witch. She is in position behind the Forres drop, ready before the performance begins, in order that there will be as little delay as possible between the first and second scenes. It may be straining a point to say that architecturally what she needs is acting area space: space to move around in without seeming cramped.

13 A Property Girl:

She is standing by the witches' cauldron. All good cauldrons must

steam a little from the evil broth inside and this one will be no exception. The girl has been stopped in the act of putting a container of dry ice into the pot. She needs a place to keep this ice before the play begins; that place is an ice-chest in the room where all current properties—articles used on stage—are kept. Such a room is not shown on the diagram.

14 and 15 Actresses; the Second and Third Witches. Same as the First Witch. The Stage Manager knows they are there because the Assistant Stage Managers have told him so.

16 17 18 19 Actors, playing Duncan, Donaldbain, Malcolm and Lennox. They stand in the wings, ready to enter as the lights come up. They need space. All have swords hung at their sides and they must keep far enough apart so as to clear each other's armament. And they must be far enough apart so that they will enter as a king and his retainers, not like a group of commuters coming out of the Times Square Shuttle.

20 and 21 Actors; Standard Bearers. Duncan is the King of Scotland. The Scottish colors and his own personal standards follow him. Thus these two actors have eight-foot poles which they carry *upright*. They need space, too, not

only off-stage floor space, but overhead clear space.

22 and 23 Actors:

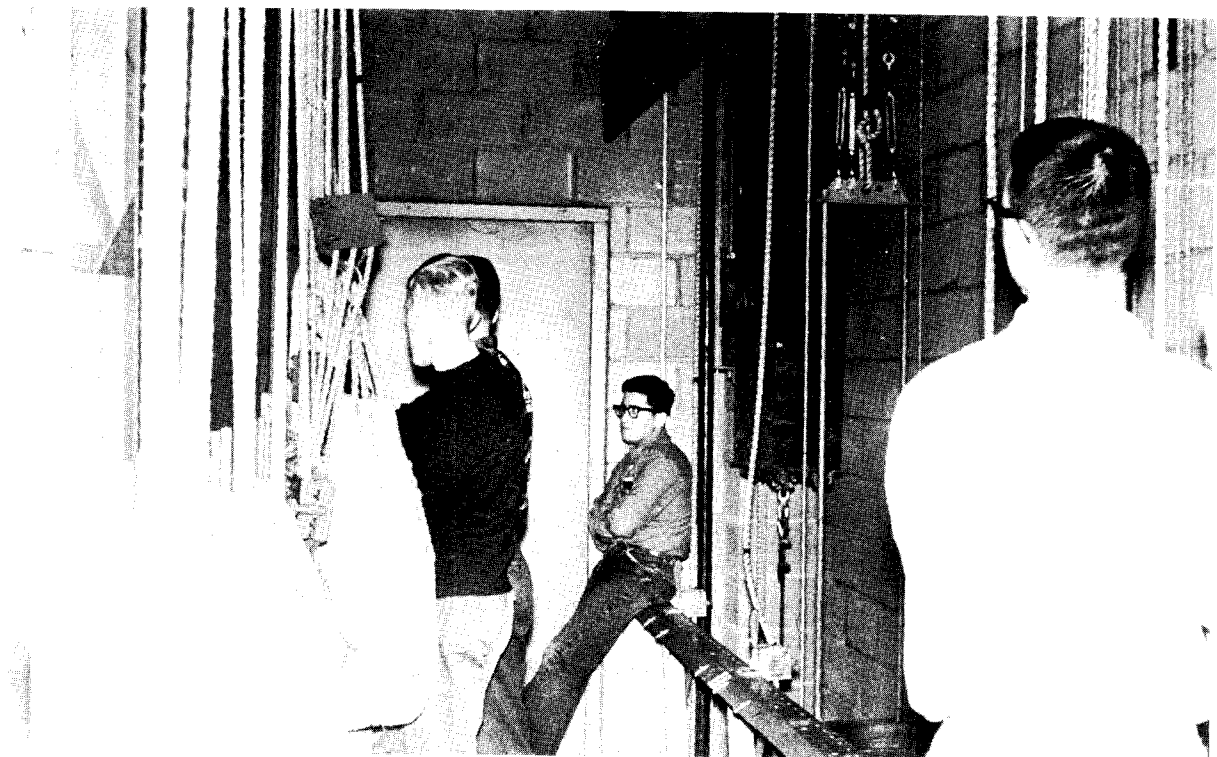
Men-at-arms. They are guards; they carry heavy spears. More space needed.

24 Assistant Stage Manager:

This is a large, complex production, with many scene changes and a large cast. Therefore there is an Assistant Stage Manager stationed permanently on this side of the stage to check all actors and scene changes in this area. He stays in contact with the Stage Manager by intercom phone; the outlet is located on the wall by the entrance to the side stage. No scenery can be stored right here; it must be kept somewhere else.

25 A Floor Electrician:

At the end of the Witch Scene, when the lights are out, he will go onstage, pick up the "fire" under the cauldron and continue *in the same direction* off the other side. Since the fire is actually electrical in nature, it is supplied by a cable which will be invisible during the dark scene. He will pull it off after him. He needs space: Space to wait offstage as he is doing now, and space on the other side of the stage to move into quickly without fear of tripping over a piece of scenery in the dark.



Pin rail crew ready

26 and 27 Two more Property Girls:

For them the same as the electrician just mentioned. One will take the cauldron off, the other the tripod that it stands upon. Space. They will store these items in the property room until Act IV.

28 and 29 Actors; MacBeth and Banquo. They wait offstage to enter in the second scene.

30 and 31 Actors; Angus and Ross. They, too, enter in the second scene. There must be enough clear space offstage for them to stand in.

32 A Property Girl:

She is in charge of all the properties on that side of the stage. Thus she has just given out the two standards and the two lances to the men-at-arms. And when they come offstage she will take them back; if this is not done they will be laid almost anywhere, since actors cannot be trusted to put things back where they should go. All the area back of her is for property storage during the performance. At the moment she is just standing.

33 34 35 Flymen:

They are on a side gallery some twenty-two feet off the floor and it is their job to raise and lower all the scenery hung on the pipes over the stage. These pipes are for

the most part counterweighted, although a few have sandbags. Only No. 34 will work during the first shift—Forres to Heath—since all that is required is to pull up the Forres Drop and the Heath with the Witches will be seen when the lights come up. There is a cue light up here but he will not use it this time, but take his cue from the lights blacking out.

36 The Chief Flyman:

He works along with the others, but is the one responsible. On the wall by his position is an intercom outlet and a green cue light. No intercom will be needed tonight, but the cue light will be used in some of the succeeding shifts. When it goes on the fly crew gets ready; when it goes off, they work. By raising their working position so far off the floor, that much space is freed from the movement of scenery and actors. The crew are leaning against the rail now, watching the show begin.

This is everybody in position on the stage. Before the evening is over many more will be involved; some six scene shifters, and nearly twenty actors. When Birnam Wood moves on Dunsinane, it's going to take a good bit of offstage area, clear of scenery, for all that greenery to assemble before its entrance. And it takes up a lot of space in

the property room between performances, too. Nor have we mentioned the makeup and costume crews, who work elsewhere in the building.

A stage is like a physics laboratory: The best results can be produced with the best equipment. A good worker can do wonders with poor equipment, but that is no reason to saddle him with it. Backstage one of the most important features of the planning and design is *enough room*: Room to store the scenery and furniture that is used in the second act, and still leave room for a group of actors to go off without jamming up in the exit. Limitations of the budget can cut down the cubage, but such cutting down should be done with the knowledge that to a greater or less extent, the productions will suffer. Beyond a certain point, some plays simply cannot be done.

This paper has shown what space and design features are needed, and *why* they are needed. A theatre building serves its inhabitants so that they may serve the audience. It is the hope of the author that by this postulating of a perfectly possible play in a not-too-idealized theatre (indeed, it follows an existing one quite closely) some of the technical requirements will be clearer in the readers' minds. ◀

WHO LOOKS AT THE ROOF?

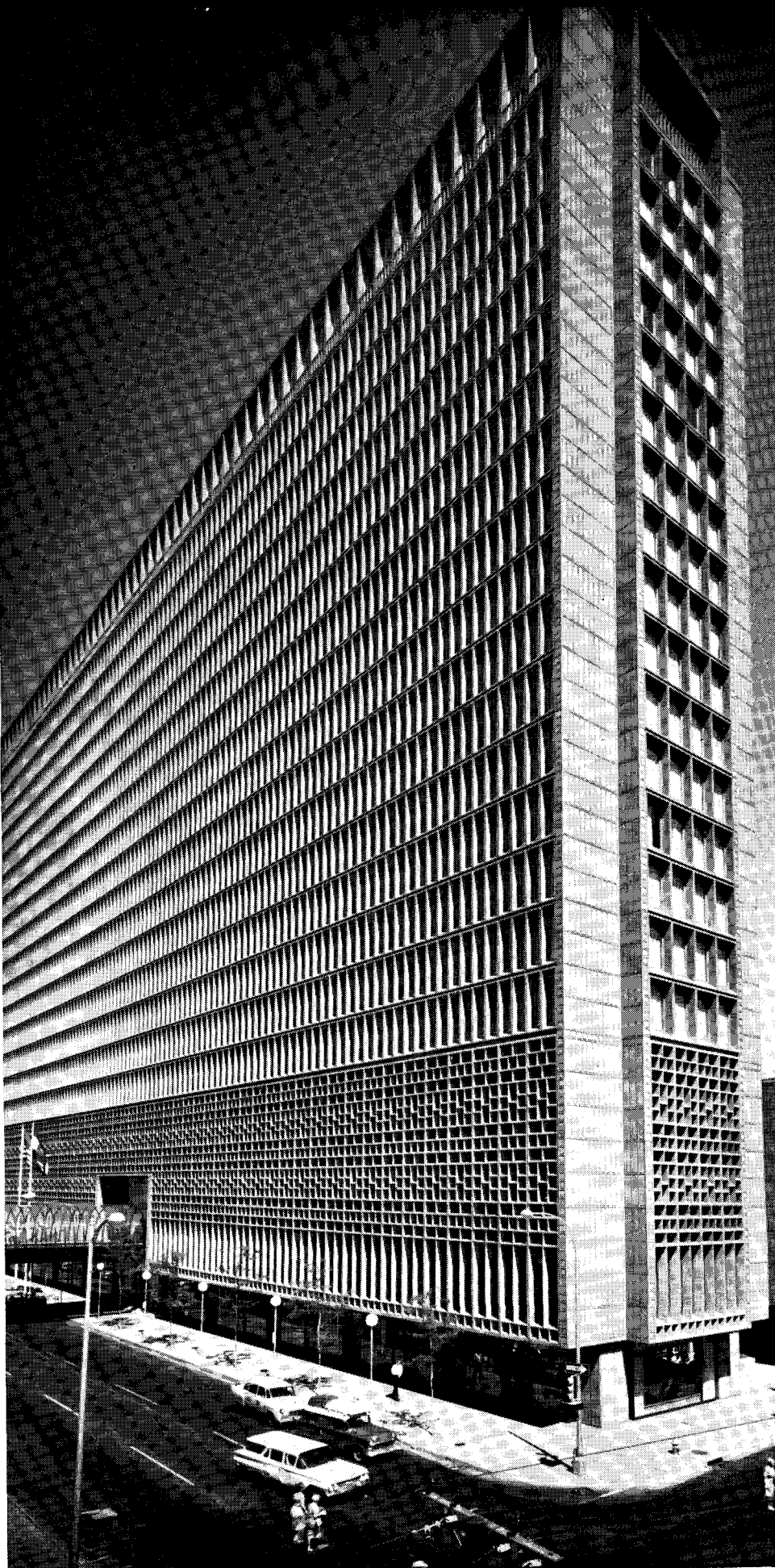
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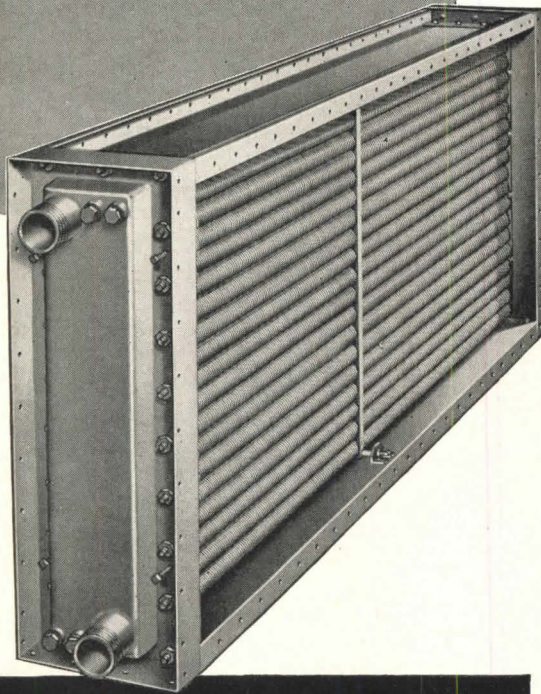
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Allied Arts

Capital Gallery Guide—I

by Mary Sayre Haverstock

There's more to see in Washington, DC, than harrassed government officials, your busy Octagon staff and marble columns. For your next visit clip this guide by a budding young art critic who reports on the Washington scene for "Art in America." WVE

► Washington, DC, is a haughty hostess, throwing open the formal reception halls but reserving the private parlors only for intimate friends. Too many of her guests can be seen driving restlessly up and down the avenues, bent on appeasing some appetite which marble alone cannot console.

Consider the case of the visiting art-lover. Unless he arrives in town on the first Sunday of the month, when the *Post's* art calendar is published, he may never stumble across the color and excitement of the capital's unofficial artistic life. Quite apart from such conspicuous stops as the National, Phillips, Smithsonian and Corcoran Galleries, there are dozens of excellent private art establishments here, and although they are broadcast at random throughout the city, when they are brought together on paper they add up to an artistic community of considerable size and stature.

The visitor could find in Washington a good sampling of the big names of the day. He could also, if more adventurously inclined, seek out the unknown artists who are making a name here in the provinces before moving into the national limelight which, as we all know, shines brightest on New York. Ken Noland and Morris Louis, two who have graduated from Washington galleries, recently earned from Clement Greenberg the grudging admission that "Washington is the painting capital of the United States today because Louis and Noland are here."

Morris Louis shows only in New York these days, but Noland's latest work can be seen at the Jefferson Place Gallery, an artists' cooperative where eleven leading Washington painters and sculptors of the avant-garde show regularly. This Connecticut Avenue gallery is a good starting place for a tour of the city's art facilities, not only because it is geographically central, but also because its members exert such a profound influence on Washington art as a whole, chiefly through teaching the city's best art classes. While a classic simplicity mitigates Noland's gaze-riveting canvases, most of the work on view at the Jefferson

Place is markedly exploratory. Notable exceptions are the disciplined patterns of Shelby Shackelford, who studied with Leger in Paris, and the "space boxes" in plaster and metal by William Calfee.

The next stop for those in pursuit of discovery might well be the bustling Franz Bader Gallery, located a stone's throw from the Octagon. Mr Bader, who led the artists of Washington when there were literally no places for them to exhibit, is patron, nursemaid, father confessor and impresario for some thirty local painters who, through his efforts, are now well-known to Washington. For the most part, the Bader artists are best in the semi-abstract vein; there is usually that sense of contact here with the real world which is so reassuring to those of us with lingering old-fashioned habits of "art appreciation." And there must be plenty of us still at large, for Bader's is a major source of supply for many art collectors.

Another kind of showplace for rising local talent is the new Artists' Gallery of Georgetown. Walter Thrift, the owner, and himself a painter of no little talent, concentrates here on the work of the art faculties of colleges and schools in Virginia and North Carolina. It is in galleries like this one that you may meet an artist who is already well-known in New York circles for a certain genre of work, but who prefers to save his experimental attempts—his pioneer work—for a trial run out-of-town. Such an artist is Charles Sibley, head of the art department at William and Mary. At the Artists' Gallery, Sibley's best paintings are non-objective, yet only his figurative work shows up in the magazine illustrations. His essays in pure structure, executed in blacks and grays, should definitely be getting more widespread notice.

The Artists' Mart caters to a variety of interests, from oil paintings by Washingtonians to ceramics to teakwood sculpture and enamel jewelry. Every once in a while an astute collector finds a bargain here, so this gallery must be included on the itinerary for the sake of those who have money to spend on art. Across the street is the Galerie Réalité, a much more professional place. The young owner, José Núñez, has his eye out for new talent in many parts of the world, and his eye is sharp indeed.

One of the pleasantest environments for works of art in Washington has been created by Mercedes Draiser in her Collectors' Gallery. If you like to look at competent watercolors and oil paintings by broad daylight be sure to stop here. Mrs Draiser has no hard and fast policy: She simply shows what she likes and believes in, be it Washingtonian or Pakistani. ◀

(Part One of a two part article which will continue in the next issue.)