For operating room safety, specify...
ROMANY-SPARTAN CONDUCTIVE FLOOR TILE

Romany-Spartan ceramic tile, properly installed, completely satisfies exacting NFPA safety code.

With unglazed Romany-Spartan conductive tile, explosion hazards created by static electric sparks in anesthetizing areas can be almost completely eliminated. Dust-pressed with straight edges, Romany-Spartan tile has a moisture absorption factor of less than one-half percent by weight.

Two attractive, easy-to-clean colors blend harmoniously with all wall colors and equipment.

It's economical, too. 12¼" x 24½" sheets go down with maximum speed at minimum cost in conventional conductive mortar or new conductive adhesive setting beds.

For complete details, samples and specifications, consult your nearest Romany-Spartan sales representatives. If you'd like Technical Bulletin 261 covering specifications and installation procedures, write United States Ceramic Tile Company, Dept. 71, Canton 2, Ohio.

...how to dispel the illusion that marble is a luxury...
when you know that it costs no more than other substantial materials, and usually costs less when maintenance and upkeep are also considered?
Contact the MIA or any of its members for "Proof that marble costs less..."
or write Marble Institute of America,
32 South Fifth Avenue, Mount Vernon, N.Y.
Today's Lesson in THRIFT!

Use the NEW LOXIT PORCELAIN STEEL CHALKBOARD LOX-88 NU-SIMPLON designed for the modest budget

More and more architects and school planners are coming to the logical conclusion that porcelain steel chalkboards provide the utmost in economy in the long run. More school children are writing on Loxit porcelain steel chalkboards than any other board of its type on the market, a record achieved with NU-VICTORY and NU-IMPERIAL LOXIT MIRAVAL PORCELAIN Steel Chalkboards. Now, Loxit is offering a porcelain steel chalkboard in a thrifty price bracket. LOX-88 NU-SIMPLON is top quality—the same LOXIT MIRAVAL PORCELAIN STEEL sheet which has made its NU-VICTORY and NU-IMPERIAL boards such outstanding successes.

LOXIT SYSTEMS, INC.
1217 W. WASHINGTON BLVD., CHICAGO 7, ILLINOIS

Write today for complete details including samples and 16-page 4-color catalog
The American Institute of Architects

BOARD OF DIRECTORS
OFFICERS (Terms expire 1959)

*John Noble Richards, President
1600 Madison Avenue, Toledo, Ohio

Phil Will, Jr., First Vice President
Henry L. Wright, Second Vice President
309 West Jackson Blvd., Chicago 6, Ill.
2123 West Sixth Street, Los Angeles 35, Calif.

*Edward L. Wilson, Secretary, P.O. Box 9035, Fort Worth 7, Texas

*Raymond S. Kastendieck, Treasurer, 128 Glen Park Ave., Gary, Indiana

Edmond F. PurVES, Executive Director

REGIONAL DIRECTORS (Terms expire 1959)

*J. Roy Carroll, Jr., 6 Penn Center Plaza, Philadelphia 3, Penn.
Bergman S. Littler, 543 Fifth St., Louis ville 2, Ky.
John H. Pritchard, Tunica, Miss.
Donald J. Stewart, 219 S. W. Stark St., Portland 4, Ore.

Middle Atlantic District
Great Lakes District
Gulf States District
Northwest District

(Ofticial address of the Institute as a N.Y. Corporation, 115 E. 40th St., New York, N.Y.)

William Stanley Parker
John T. Carr
Lowe

George E. Pettengill
Arthur B. Holmes

Henry H. Saylor
Alice Graeme Korff

Walter Neil Letson
Joseph Watterson

Clinton H. Cowgill
Theodore W. Dominick
Eugene F. Magenau
Eric Pawley

Theodore Irving Coe
Walter A. Taylor

R. Max Brooks, 203 Perry-Brooks Bldg., Austin, Tex.

*Edward L. Wilson, Secretary, *Member of the Executive Committee of The Board.

W. Floyd Kibler, 2870 Wilshire Blvd., Los Angeles 5, Cal.

*J. Roy Carroll, President, Jr.

U. Floyd Kibler, 2870 Wilshire Blvd., Los Angeles 5, Cal.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.

Cheyenne, Wyo.
Better safeguard against
- excessive heating and cooling costs
- seasonal discomfort

Window Units and Monarch Weatherstrip, engineered compatibly, provide superior protection for your clients

All weatherstripped windows that open and close are not equally effective in keeping out cold, dirt and moisture. To obtain maximum interior protection, both windows and weatherstrip must be engineered together, with the weatherstrip designed especially for the windows to which it is applied.

When you specify Complete Window Units equipped with Monarch Metal Weatherstrip, you guarantee your clients the superior benefits of assemblies that have been "compatibly engineered"—windows that provide the greatest possible degree of weather-tightness, more economical heating and cooling, less cleaning and housework, more uniform temperatures the year round.

For more than 50 years Monarch weatherstrip has been the hallmark of extra quality in the finest windows built. Insist that it be a part of all window and door units you specify.

World's Largest Exclusive Weatherstrip Manufacturer

MONARCH
6340 ETZEL AVE. • ST. LOUIS 14, MO.
A Letter to Ralph Mitchell Crosby
from Hubertus Junius:
Dear Ralph, your verses on Abstraction
Gave me enormous satisfaction.
For I too, can never understand
This passion for distorting man.
I trust this but a passing whim in
This strange urge to change our women
Into angles, bumps and bubbles
Thus adding to our other troubles.
But then dear Ralph the cause might be,
You were born in ninety-four, and I in ninety-three.

My Dear Hubertus Junius:
'Twas very good, Hubertus J.
To have your message come my way,
And know that with a jaundiced eye
You share so sensitively my
Abhorrence of a female shape
Of bubbles, bumps and head like grape.
One thing's a mystery to me;
You say your birth was ninety-three.
But how in hell, Hubertus, dear,
Did you exactly pin my year?

Dear Ralph:
Dear Ralph, your curiosity
Has more or less astonished me
You asked me how I knew your age?
Remember son,
I am a sage.
Could it be that we have met?
Surely you would not forget
A loaf of bread, a can of booze
Across a bar in Vera Cruz,
A misspent night in gay Paree.
Now, do you remember me?
Now on the 25th you'll be
Sixty-five, the same as me,
But tell me if it's just the same
How in hell did you know my name?

P. S. If you need a rhyme for Hubertus Junius
An appropriate one is impecunious.

My Dear Hubertus Junius:
Oh my, here we go again:
Hubertus, you have pinned me cold;
Year, month and day that I am old!
But how, oh how, you rascal, you?
I know that I'm not in "Who's Who."
Alas, I must confess that we
Could not have met in gay Paree;
But Vera Cruz it might have been

Hubertus Junius, Friend:
Oh, simple stupid little me!
How naive can a fellow be?
I'll have to shamefacedly admit
I did not know my life is written
In that sage directory
For all the world and you to see.
The only mystery to remain
Is how in hell I know your name.
Ah me, I cannot compromise
The mutual friend who put me wise.
Hubertus dear, ask not in vain;
And so farewell, auf wiedersehn!

*Editor's Note: The letters of poets have long been considered priceless collector's items, so we think we owe it to our readers to share with them this rhyming lament between our own long-lost Hubertus Junius and that talented upstart, Ralph Crosby. (Oh, where are you, Elliott?) Fortunately for posterity, both poets have sent us carbon copies of their correspondences.
MODERN DESIGN USES WEST COAST LUMBER

Highly functional, this modern home was designed to utilize a steep hillside for maximum view at minimum cost. It is raised above the slope and supported by 11 rigid bent frames. The home's design eliminated grading, retaining wall foundation and drainage expenses...yet allows a completely unobstructed view to the west. The frames form the skeleton of the home while frame extensions, exposed, become the posts and support members. Frames were fabricated on the job.

When you design with wood your only limit is imagination. Function, interest, economy and adaptability are just a few of the plus factors in lumber construction. For dependable lumber, specify the West Coast species.

WEST COAST LUMBER
Douglas Fir
West Coast Hemlock
Western Red Cedar
Sitka Spruce
West Coast Lumbermen's Association
1410 S.W. Morrison
Portland, Oregon

Designed by
Noris M. Gaddis, A.I.A.
Oakland, California

ARCHITECT SPECIFIED MAINTENANCE

"...After 2 years, these HILLYARD-TREATED FLOORS look newer than ever!"

Specified for initial treatment, recommended and used for follow-up maintenance, Hillyard specialized treatments have preserved the "like-new" condition of the floors in this beautiful modern building. Times has served only to deepen the lustre, brighten the colors. "These floors have actually improved in appearance!"

WRITE FOR FREE AIA FILES

Product information, draft specifications, material for your recommendations on follow-up maintenance. One for each type of flooring.

After 2 years, Professional Building, Rockford, Ill.

Architect: Marshall T. Munz

WRITE FOR FREE AIA FILES

Product information, draft specifications, material for your recommendations on follow-up maintenance. One for each type of flooring.

WEST COAST LUMBER
Douglas Fir
West Coast Hemlock
Western Red Cedar
Sitka Spruce
West Coast Lumbermen's Association
1410 S.W. Morrison
Portland, Oregon

Designed by
Noris M. Gaddis, A.I.A.
Oakland, California

ARCHITECT SPECIFIED MAINTENANCE

"...After 2 years, these HILLYARD-TREATED FLOORS look newer than ever!"

Specified for initial treatment, recommended and used for follow-up maintenance, Hillyard specialized treatments have preserved the "like-new" condition of the floors in this beautiful modern building. Times has served only to deepen the lustre, brighten the colors. "These floors have actually improved in appearance!"

WRITE FOR FREE AIA FILES

Product information, draft specifications, material for your recommendations on follow-up maintenance. One for each type of flooring.

WEST COAST LUMBER
Douglas Fir
West Coast Hemlock
Western Red Cedar
Sitka Spruce
West Coast Lumbermen's Association
1410 S.W. Morrison
Portland, Oregon

Designed by
Noris M. Gaddis, A.I.A.
Oakland, California

ARCHITECT SPECIFIED MAINTENANCE

"...After 2 years, these HILLYARD-TREATED FLOORS look newer than ever!"

Specified for initial treatment, recommended and used for follow-up maintenance, Hillyard specialized treatments have preserved the "like-new" condition of the floors in this beautiful modern building. Times has served only to deepen the lustre, brighten the colors. "These floors have actually improved in appearance!"

WRITE FOR FREE AIA FILES

Product information, draft specifications, material for your recommendations on follow-up maintenance. One for each type of flooring.

WEST COAST LUMBER
Douglas Fir
West Coast Hemlock
Western Red Cedar
Sitka Spruce
West Coast Lumbermen's Association
1410 S.W. Morrison
Portland, Oregon

Designed by
Noris M. Gaddis, A.I.A.
Oakland, California

ARCHITECT SPECIFIED MAINTENANCE

"...After 2 years, these HILLYARD-TREATED FLOORS look newer than ever!"

Specified for initial treatment, recommended and used for follow-up maintenance, Hillyard specialized treatments have preserved the "like-new" condition of the floors in this beautiful modern building. Times has served only to deepen the lustre, brighten the colors. "These floors have actually improved in appearance!"

WRITE FOR FREE AIA FILES

Product information, draft specifications, material for your recommendations on follow-up maintenance. One for each type of flooring.

WEST COAST LUMBER
Douglas Fir
West Coast Hemlock
Western Red Cedar
Sitka Spruce
West Coast Lumbermen's Association
1410 S.W. Morrison
Portland, Oregon

Designed by
Noris M. Gaddis, A.I.A.
Oakland, California

ARCHITECT SPECIFIED MAINTENANCE

"...After 2 years, these HILLYARD-TREATED FLOORS look newer than ever!"

Specified for initial treatment, recommended and used for follow-up maintenance, Hillyard specialized treatments have preserved the "like-new" condition of the floors in this beautiful modern building. Times has served only to deepen the lustre, brighten the colors. "These floors have actually improved in appearance!"

WRITE FOR FREE AIA FILES

Product information, draft specifications, material for your recommendations on follow-up maintenance. One for each type of flooring.

WEST COAST LUMBER
Douglas Fir
West Coast Hemlock
Western Red Cedar
Sitka Spruce
West Coast Lumbermen's Association
1410 S.W. Morrison
Portland, Oregon

Designed by
Noris M. Gaddis, A.I.A.
Oakland, California

ARCHITECT SPECIFIED MAINTENANCE

"...After 2 years, these HILLYARD-TREATED FLOORS look newer than ever!"

Specified for initial treatment, recommended and used for follow-up maintenance, Hillyard specialized treatments have preserved the "like-new" condition of the floors in this beautiful modern building. Times has served only to deepen the lustre, brighten the colors. "These floors have actually improved in appearance!"

WRITE FOR FREE AIA FILES

Product information, draft specifications, material for your recommendations on follow-up maintenance. One for each type of flooring.
An Accounting System designed for your office...

Four years of intensive research by a Committee of the Institute has resulted in the completion of a Cost Accounting System which is adapted to the special needs of architectural offices.

Heart of the System is the Book of Instructions, available with each of the offers; or sold separately at $5.00 per copy. In it are all the necessary instructions, along with samples of most of the forms, filled out as examples.

The System can be purchased in three separate Offers. Each contains a year's supply of forms. Full information on the contents of each Offer, and prices of individual forms, may be obtained upon request.

- **OFFER NUMBER ONE**
  Includes instructions, Accounting Forms, Owner-Contractor Forms, Binders, with names imprinted on Binders and certain Forms. $52.00

- **OFFER NUMBER TWO**
  Includes Instructions, Accounting Forms, Owner-Contractor Forms. $31.50

- **OFFER NUMBER THREE**
  Includes Instructions, Accounting Forms. $22.50

Direct inquiries to:
The American Institute of Architects
1735 New York Avenue, N.W., Washington 6, D.C.

CONSTRUCTION DETAILS for LCN Overhead Concealed Door Closer Installation Shown on Opposite Page

The LCN Series 500 Closer's Main Points:
2. Mechanism entirely concealed; arm visible on inside of an out-swinging door.
3. Hydraulic back-check prevents door's being thrown open violently to damage door, walls, etc.
4. Double lever arm provides maximum power to overcome wind and drafts.
5. Arm may be hold-open type, 90°—140° or 140°—180°.

Complete Catalog on Request—No Obligation or See Sweet's 1959, Sec. 18e/La

LCN CLOSERS, INC., PRINCETON, ILLINOIS
Canada: Lift Lock Hardware Industries, Ltd., Peterborough, Ontario
THE WALLS of this fine school building are made with Hope's custom steel Heavy Intermediate Classroom Windows installed in Hope's Pressed Steel Sub-frames with alternating rows of insulated panels and glass. The trim exterior shows good use of the complete freedom of layout offered by Hope's multi-story window-wall construction. Any desired relationship is obtainable between panels and glazed areas, whether fixed or movable. Ventilators, louvers and doors may be located wherever needed.

Hope's window-walls also provide structural advantages that are of great importance to the owner of the building. Your client gains the great benefit of low maintenance cost with permanent weather tightness and positive operation of the movable windows for the full life of the building. There are also construction economies. Components are light in weight in relation to their strength. They are convenient to handle and walls are assembled rapidly at lower labor costs.

Write for Bulletin No. 158

BY VICTOR A. LUNDRY, AIA

"Art Alone, Untiring, Stays to Us"

This thoughtful article by Mr. Lundy is based upon a talk he gave to the Monterey Convention of the California Council, AIA, and again to the Fourth Annual Student Forum at the Octagon in November. The illustrations are selected from the Author's color slides which were shown as he talked.
There are certain fundamental laws that will always have meaning for us and belong to all of us. Things that have been kept mysterious and precious are being added all the time to our tools of fact—tools that all of us can use—all the things we know and are finding out about human relations; these are all important and are all realities that form the program and not one of them can be ignored—plus the reality of the guiding architect, who is and what he brings to the problem. Every different situation produces a different set of circumstances and I feel strongly that there is close to a best answer in every case within the context of these given factors, and that the measure of the greatness of a building is how creative (perhaps the word is "godlike") men can become in the given circumstances—how high they can reach and accomplish.

And further—you cannot equate human beings. There is a danger in making too much of the group, a different kind of tyranny in a righteous attempt at the even-handedness of every single contributor to a total effect when it means the denial of the wonderful individual richness possible when creative artists can give the very best they are capable of as individuals.

The really great artist and architect cannot be restrained—he will fight clear. The very nature of his greatness will shine through and be exposed in his work for all to see, in its total actual reality of visual and sensory experience that will reach, surround and engulf all people.

Happily, architecture finally becomes a total physical reality, a thing of being—it stands there itself and it speaks to us, and surprisingly, the little details which may have been arguable enhance the work just as "flaws" or imperfections and variety, do in nature. A great work of architecture might not have seen the light of day if it had been discussed into the ground. A building is finally to be "in," to work in, sleep in, love in; to touch; to feel; to influence us and to be a part of our lives, affecting our tastes. The really great architecture passes this human test always—it reaches and has meaning to us all.

The dignity of the individual creative artist and individual human being is paramount. Great
teamwork is possible among creative artists only when each individual member of the team can feel free to give to the joint creative effort the very best of which he is capable as an individual, with all the background, enthusiasm, eccentricity and truths known and peculiar to him. One of the miracles of life is the endless variety, change and brilliance that

ways basic to their individual natures in what they have to offer individually to the creative efforts, to a point where they cannot give the very best they are capable of, wholeheartedly and in genuine truth, the result can only end up being a neutral, watered-down version of what it might have been.

Over-specialization, where it has reached into the arts, has become a serious disease of our times. True, human beings need one another to check and reinforce and work against, as well as with each other, but this seems to be a negative direction. it means leaning on one another equally and not digging as hard and deeply individually for the universal truths as if there were only oneself to count upon. The creative source must be unfettered and free. Great art cannot be accomplished by negative ideas or action. It is intrinsically involved in truth, in love, in the full passion of living—and in the last analysis the really great things one can produce will come out of oneself.

There is no limit to what creative artists can achieve working together from the design inception to the ultimate work; if they can give of themselves genuinely and without restraint—the very best they are capable of as individual human beings. For creation is a painful yet joyous experience—a passionate experience that cannot be curtailed or held back. If it is, by the negative effect of other men hanging heavily on one's shoulders, the artist must get away to do his work alone. There is so much beauty and good to be done in a labor of real love and dedication to truth, that there is no time for deterring influences.

I find an answer sometimes in almost reverting to a naive, childlike approach—if purposely not paying attention to what others are doing—of treating each problem as if it were the first—of trying to get to the fundamentals—the essence of architecture. Like being alone with only a forest of trees and your hands, and having the problem of building a shelter.

So, too, with the realities—the architectural facts of limited budget, site, available materials, regional problems—from these a wonderful personal architecture can be evolved that doesn't deny the soul.

Why should we be ashamed of buildings that are personal—individual—if they derive in their essence out of our culture today?

I refuse to accept the thought that an office building, home, school or church need all look the same. There is a necessity for creative symbolism. Probably by war experiences, I have learned to respect and value human beings. What I am trying to do is for them, and I am willing to

It takes a kind of relentless courage, a willingness to fight with dedicated effort and deed, a determination to avoid certain pitfalls, some less evident than others—like conformity, "groupism" and shallow popularity.

Creation is an adventure. Any suggestion of fear or of cynicism is against the whole spirit of adventure in creation. If you have something to say in architecture and it is important and has meaning to people, then say and do it in your own way. In this spirit of adventure, and if it is important enough, it will reach them. I am an optimist and I have faith in people, even though I
have felt the sting of most of the negative things they are capable of. But I have also found—at first hand, in wartime and later—that the humblest person can rise to peaks of great nobility, and that often he has to be led and shown. If the creative artist gives up and doesn’t lead, and he is looked up to for that leadership, he has only himself to blame for ugly environment and a soulless future to look forward to, where spirit will be denied more and more. Let us not dismiss all people with a wave of the hand and take refuge behind a precious snobbery of professionalism. They are untute and when a really great thing is done, they will see it—it will reach them.

I am convinced that unless an architect can develop a philosophy sooner or later in which he really believes and from which his creative effort and contribution will spring, he is lost. The giants of architecture can inspire and teach, but they can also crush and stifle if one isn’t careful to know where one is going—not through purposeful intent of course, but by the effect of the very bigness of their genius and their philosophies. So people who are learning or who haven’t yet found their way, can lean on them even though it is without real belief or inward conviction. But one can’t lean on them all one’s life. One must find out for one’s self. And there are no limits to what one can attain. If the individual doesn’t stand up and shout a little bit under the urgings of his own creativeness, during those rare times when the little spark of individual genius flares, because he is subdued too much by the shadow of a giant philosophy or some other negative reason, something very important may be lost. He can be discouraged because no one is listening or more likely because he himself gives in too easily.

If he starts on the road to his own philosophy—and he can find this in its deepest meaning only by himself—there is good hope always that it will crystallize into something that will make his contribution a very real one.

There is no choice for us, for the goal is our responsibility—that creation of great beauty out of our culture. “All passes—art alone, unifying, stays to us.”

Piazzetta, St. Mark’s Cathedral and Doge’s Palace. Venice.

FLIGHT FROM FUNCTIONALISM

ROBERT GARDNER-MEDWIN, FRIBA, MTP

Last summer in Milan I saw some of the challenging new buildings which have been having such startling effects upon my students, and indeed upon many of the younger groups of architects practicing in Britain.

From the magazines, which of course illustrate the most bizarre, one gets the impression that most of the Italian work since the war is of the kind which can be appropriately labelled “sculptural formalism.” In fact, I discovered that there were comparatively few buildings of this kind. Most of them were the works of Luigi Moretti, who is perhaps the most theoretical architect building in Milan today.

Even the youngest Italian architects and students, it seems, no longer feel the earlier enthusiasm for Moretti’s theoretical formalism; they are more deeply interested in the structural inspiration of Nervi, the rationalism of the early Rogers (I will explain the “early” later), the integrity of Giuseppe Terragni’s work of the late thirties and early forties, and, in general, the clear expression of plan and structure in the work of an able body of architects and industrial designers such as those who designed the Olivetti headquarters in Milan (Nizzoli, Fiocchi and others). Of course, there is great enthusiasm for Gio Ponti, but he is not so easily classified as formalist or non-formalist. In his industrial design he is certainly formalist (X-ray analysis of how a mouth negotiates a spoon; knives scientifically re-formed to resemble surgeons’ instruments); but in his architecture the functionalism is far from pure; it is often mixed with playful juggling with forms, though usually with forms which have functional origins.

It was easier to understand the abiding faith of the Italians in the functional tradition when one visited the architecture exhibition at the Triennale. This was the best-told story of the development of modern architecture that I have seen. After ascending a stepped hall in which were displayed structural models reminding us of the daring of Brunelleschi’s Duomo and of some of the Byzantine and Gothic cathedrals, we entered a gallery of structural pioneers which began with Telford and Paxton and ended with Maillart and Nervi.

The exhibition established the vital rapport between engineering and architectural thought in all that is significant and notable in a hundred years of development. The moral of the display seemed to be that the most compelling forms in architecture are significant forms; that functionalism (in its broadest sense) is not a phase through which modern architecture had to pass, as some would have it today, but an expanding intellectual force, nourishing the creative mind and leading on, through scientific discovery, to new and unexpected forms of expression.

Every building or project in this exhibition was illustrated not only by photographs or drawings of its outward appearance (we have seen too many exhibitions like this), but by admirably clear plans and sections by which one could assess the analysis of the solution almost at a glance. The more obviously formalist works of the Italians (buildings in which modern forms are exploited for the sake of modern forms) were conspicuously absent. I suspect that most of them would not have survived the revealing photo-transparency exposure of their plans and spec-

Professor Gardner-Medwin read this paper to the Architectural Association of Ireland in January 1958. Since it contains both a lively discussion of contemporary architecture in general and a critique of contemporary Italian architecture in particular, we found it of great interest. We are indebted to the author and to the Editor of the Journal for their permission and their assistance in inserting the material together.
tions. Frank Lloyd Wright’s Falling Water and Le Corbusier’s Ronchamp, which might seem to belong to the category of sculptural formalism, were given places of importance; but these masterpieces have the integrity of “organic” architecture; they are poetic declarations of the nature of their materials.

However, the inter-war Dutch formalism of Du, Dok and others (inspired by Frank Lloyd Wright but lacking his organic character), and the more sculptural post-war work of the Brazilian formalists, were ignored. In the pioneer section, Eric Mendelsohn’s early expression was shown, perhaps for the same reason as Wright’s and Le Corbusier’s; and looking at his famous drawings one asked oneself if the latest realizations of Moretti—powerful, monumental, expressive—have anything more important to say than the prophetic projects of the young Mendelssohn. These two have much in common: Both, for example, love drama and monumentality. But while Mendelssohn’s projects anticipated the potential of modern methods, Moretti’s realizations have nothing of this prophetic quality and seem to have been arrived at without any particular reference to methods which already exist.

Moretti was in fact represented in the Exhibition by an earlier building, his 1935 Academia di Schorina in Rome, in which Fascist dictatorship seems to have demanded a classical facade which gives the lie to the dynamic cantilevered shall section behind it. The showing of this building seemed to be an exception to the exhibition policy. Another exception, perhaps, was the showing of an early Terragni building. Giuseppe Terragni (who died in 1954) was one of the few outstanding Italian architects who refused to follow the Fascist line—a line which of course was also formalist, but in a rigidly derivative classical straight-jacket. He and Pietro Lingori were represented by a building of this period. The dramatic assembly of solids and screens which enfold an ingenious plan and result in a thoroughly human and personal expression of an art gallery which somehow simultaneously satisfied the Fascist program—probably because of its suggestion of classical monumentality.

After following the story of the early pioneers one entered a darkened room in which more recent achievements sparkled from back-lit transparencies. The approach was through the triumphal arch of a model of Nervi’s most famous space-frame hangar, which somehow simultaneously satisfied the Fascist program—probably because of its suggestion of classical monumentality.

This was a building that was large enough to stand up inside and, by crowding, to get an impression of its structurally inspired but deliberately proportioned, elegantly modulated vaulting, which links it to the traditional functionalism of Gothic.

Here is the source of a much more important, deeply rooted influence on Italian architects, and indeed on architects in all parts of the world. If we are to give it a label we might call it “free functionism”; or “structural expressionism” might be more accurately descriptive of some of the buildings which fall into this category, with their concern for logical planning and their passion for structural adventure. Such buildings are certainly in the traditional, but they have freed themselves from the strict prose of the early puritanical creed. They exploit the possibilities of their structural material and seem to express a poetic delight in it.

I have made a list which gives a fair idea of the types of recent buildings, other than housing, chosen by the Triennale architects from international sources to illustrate the theme of the architecture exhibition; the scheme, as I interpret it, of greatness in architecture born of plan and structure.

The climax of the architectural exhibition was a great model of the Pirelli building, the twenty-five story pentagon-shaped skyscraper, then half-way up, which promises to be the most distinguished commercial building in Milan, if not in all Italy. The Nervi-Ponti partnership should produce a building in which powerful structural expression is associated with elegant detailing and industrial design. I shall return to this building later when I compare it with the Milan buildings of Luigi Moretti.

Still in industrial design is reflected in the detailing of many Italian buildings, and high respect for the nature of materials seems to be keeping most Italian architects on a steady course. Their buildings are often and thereby finished as the Germans’, but not always so precisely constructed, one suspects. Although more of them have a gay flourish, it would be easy to mistake many buildings in Milan for buildings in German cities. The Grattecielo (skyscraper), so exciting in photographs, is one of these, but it is disappointingly mechanical in quality at close range and lacks the convincing precision of a good German commercial building.

Here and there in Milan the Italian zest for life rebels against the strict and orderly and becomes happily inventive and original. This can be seen in many shops and shop-fronts, in the new Gallery of Modern Art (by Gardella), in the work of Ponti and Moretti, and most vividly, perhaps, in the design of glass and ceramics. When one sees the late Fascist legacy of harsh, unbending monumentality in Italian cities, one is ready to understand the passion to break away from stern discipline of any kind and to play freely with the Fascist forms which have been unlooked at and lies strewn about the nursery of modern architecture.

Baffling rather than terrifying, and certainly provocative, is the latest building by Ernesto Rogers, the Torre Velasca. This is a tall office block in which the six top stories project from the stem of the tower on concrete brackets, giving it the silhouette of a very Big Ben, or an absurdly blown-up version of the bracketed top of the central tower of the Palazzo Foschia—the medieval stronghold which commands the main axis of the city. Apart from the fact that this could be explained as a cunning method of gaining more leasable space on upper floors without loss of daylight to neighboring buildings in the lower regions, the modeling of the brackets is gauche, and far from convincing as structural form; the surface modeling of the facade is arbitrary, and the “pinacle” forms which crown the tower strike an incongruously romantic chord.

It is rash to criticize this building before it is finished (when I saw it in September 1957, it was still hidden behind the bamboo screens of scaffolding with which all new construction in Milan is mysteriously sheathed), but the combination of what could be seen then and the perspectives of what is to come, was enough to make one anxious about the latest de
24 days, produced an exquisitely graceful architecture-famous monument to Italians who died in German evocative; it symbolized the self-generating dynamic canvas geodesic dome which housed the American concentration camps—the symbolic cage which re-landscape setting among the gigantic, writhing me­morials massed so startlingly in the Cimitero Monu­ments, developments of Rogers and his group who, in the early which I regard as having affinity with Mendelsohn's 20th century, are interesting contrasts with the Ponti-Nervi Pirelli building, which belongs to my "structural expressionism" group. But while I am dismayed by the new Rogers I cannot help being excited by the new Moretti, although he be­longs to the "sculptural formalist" movement which I regard as leading us up a backwater away from the main river of architectural progress. Moretti's two earlier buildings in Milan, the Al­bergo Americano and the Casa Albergo, are the ones which I regard as having affinity with Mendelsohn's early projects. They are stern drama; powerful de­clarations of the "spit slab" principle by which Moretti likes to surmount the boredom of a great mass punctured by an infinity of hotel bedroom wind­ows. The narrow ends of the slab have deep slits corresponding with the width of the corridor (an ab­solutely logical expression of the plan); but not con­tent with this, Moretti divides his slab longitudinally with another narrow slit, thus separating his plan, above the ground floor, into two distinct closely adja­cent parts. In the Albergo Americano there is a second smaller slab in which one end is narrowed by a slight chamfering of one of the side walls (another favorite sculptural device), and the two slabs are joined together by public rooms disposed under a butterfly roof. Over the entrance there are his char­acteristic suspended slabs with twisted curves, which make one feel that the builder has literally copied the modeling of such a building as a whole, one can­not escape the impression that one is not looking at modern architecture but at a dramatized abstraction of modern architecture, consciously; indeed, the impression is so precisely dramatically dramatized modern architecture itself. The essential na­ture of sculptural formalism is an affection of forms which, instead of being a derivation of the plan and structure of the building as such, is an assembly of abstract images suggestive of modern planning and structural techniques in general. Obviously this thesis cannot apply to every part of the building: The form of a window, for example, is bound to reveal its actual method of construction. But if one examines the modeling of such a building as a whole, one cannot escape the impression that one is not looking at modern architecture but at a dramatized abstraction modern architecture would lose its directive power, its missionary role, and become discredited as a play­thing. In any event, baroque came to full flower some two hundred years after the beginning of the Renais-

But the movement known as sculptural-formalism is not only has dangers for students; it has dangers for the progress of modern architecture... which perhaps, after all, is really the same thing. I have suggested that I regard this movement as a dulling exploration of a delightful backwater, off the main river of modern architecture. I hope I am right about this, for if instead it proves to be a change in the course of the river itself, I think it will be dis­astrous.

This sculptural formalism in Italy and Brazil, and when it occasionally occurs in Britain, has been likened to baroque; but it is a doubtful analogy. The renaissance of functionalism in Germany in the nine­teen twenties was a very different proposition from the classical Renaissance in Italy in the 15th century. Baroque was the exuberant climax or decadent end, if one clings to the teaching of the twenties, of an architecture essentially formal and non-functional in concept. Sculptural formalism is exuberant, too, and it has some affinity with baroque in its relaxation of strict disciplines; but fundamentally it is a reaction against functionalism itself, whereas baroque was by no means a reaction against the Renaissance. If it has a creed, it is "go your own way and play to your heart's content." This is fine freedom for a handful of brilliant designers, with a flair for architectural opera; but it is a chaotic creed for a movement. My fear is that if it were practised by architects at large, modern architecture would lose its directive power, its missionary role, and become discredited as a play­thing.

In any event, baroque came to full flower some two hundred years after the beginning of the Renais-

The temptation to "play" with architectural forms is dangerous, particularly among students in schools of architecture who inevitably develop a facility for pattern-making long before they have mastered the language and techniques of design. This is apt to cause despondency in all egotistic minds; but at least it is a healthy phenomenon. As soon as I regard this movement as a dulling exploration of a delightful backwater, off the main river of modern architecture. I hope I am right about this, for if instead it proves to be a change in the course of the river itself, I think it will be dis­astrous.
sance, while modern architecture had scarcely begun to take hold in Europe thirty years ago. Even allowing for the increase in the pace of life today, it seems a little early for either a splendid climax or a decadent end to modern architecture. We are surely only on the threshold of our new renaissance: we should not be impatient for a new baroque, even if we have any reason to anticipate such a repetition of history; which I doubt.

Thirty years ago, as Lewis Mumford puts it in one of his New Yorker “Sky Line” articles, the lines were clear and the direction was obvious; the tide of historical imitation had ebbed, and the turn towards a clean, bright, austere, efficient modern form had begun. The modern was then easily defined; it was that which did justice to the virtues of the machine—the precise, the calculable, the economic. . . the great cylinders of an American silo were the Doric columns of a new age.

It was inevitable that there should be a reaction against such an icy philosophy, and I think most of us who felt the enthusiasm of polar pioneers for the new architecture in its early days, knew that a warmer front was bound to come. New freedoms have been explored since the war, and by no means all of these have abandoned the functional creed: They have simply made new interpretations of it, finding new freedoms in its truths.

There are many brilliant young architects today who can design in perfect freedom and yet still adhere to that doctrine, simply because they feel an instinctive need for a discipline of this kind.

What the sculptural-formalists have to guard against is that they do not drift so far from functionalism that they approach the “accidentalism” of action painting. The “method” of one action painter was described by an Ark critic recently as one who “makes his pictoral and spatial drama in terms of color patches created part by accident, and part by conscious effort after cognizance of the significance of the accident.” I hope, if only for our clients’ sakes, we shall be spared this method in architecture.

One of the dangers of the present formalism is that it tempts young architects to think of buildings in terms of sculpture and painting, a habit of mind which can lead to more successful results on the drawing board than on the site. If we allow form to become detached from function we lose what Le Corbusier calls the truth and Frank Lloyd Wright the organic in architecture. These two temperamentally opposite masters are at one in recognizing that the art of architecture emerges from the nature of the program, of the materials, of the site.

I may well be reminded here that the new architecture had formalist tendencies from its very beginnings. This is true, particularly if we recall the work of Mies van der Rohe, from his Tungestu house to his Illinois Institute of Technology. The formalism of van der Rohe is akin to the strictly disciplined formalism of the Renaissance. His work has been admired because it provides two simultaneous pleasures for us: It provides in purest essence what is described in terms of sustenance. We find this combina

his structure to suit his pre-conceived pattern of functional formalism—a phrase which I think we can apply to the work of van der Rohe and some others to distinguish it from the sculptural formalism of the Italian and Brazilian schools.

All interesting architecture has what is described as “formal qualities,” regardless of the extent to which function influences the form. The distinction to be made is between two opposing modern tendencies: The one in which form is exploited for its own sake in a manner which can be regarded as formal rather than architectural “sculptural formalism”; the other in which form is an expression of the structural solution of the program (“structural expressionism” or “free functionalism”). The first seems to me an abandonment of the functional tradition in modern architecture, the second an extension of it. Both have exciting possibilities, but if our most promising architects abandon the functional tradition in its youth, I believe that the vigor of the movement will decline and wither for lack of sustenance.

I now want to describe two buildings—one in

forms a podium for the tower. The scene down in these depths, with the engines of construction still in evidence, had the superhuman scale and drama of a Piranesi drawing.

The lozenge shape of the tower, with its Montessori-like deep slits at the ends, might be taken for a footed form of the structural expressionism. The folded slab has been applied not only to the roof but to the inward-sloping supporting walls at each end, where it is boldly expressed externally and internally with direct simplicity and with a sense of scale and drama most appropriate for the occasion. This building is a magnificent example of the power of architecture to move men's minds. Breuer, left alone, is often tempted to play with his materials in a gaily illogical fanciful way, though at his best he moves in the organic tradition of Frank Lloyd Wright. In partnership with Nervi, he has allowed himself to be at once disciplined and inspired by the mathematics of structure.

These two buildings are a marvellous reminder of the endlessly developing potentialities of structure, and of the powerful influences of scientific method on architectural form. They are a reminder, too, of the affinity of architecture and structural engineering, of science and art. They should inspire us to a greater comprehension of structure and a keener scientific attitude to design. If we are to produce great architecture in a world now on the threshold of still more startling scientific and technological advance, this is the worst moment to take flight from functionalism.

If we indulge in form for form's sake, retreating into an architect's architecture, our work will cease to have any significance for our age, and soon, in payment for our irresponsible independence, we shall find ourselves forced to surrender the poetry of architecture to the trade catalog of technology.

To be functional in the purely practical sense is an important part of an architect's responsibility, but in this scientific age we shall do well to remember that the secret of greatness in architecture lies deep in the roots of the functional tradition.

Italy, the other in France—which I believe are examples of free functionalism, although at first sight they have a joie-de-vivre that makes one suspect sculptural formalism. One is the Ponti-Nervi Palazzo Pirelli; the other the Breuer—Nervi Unesco building. Both were under construction when I saw them, but they were near enough completion to judge their character.

The concept of the Pirelli tower is evident at once from its plans and sections. It was good to start working with Nervi, he has allowed himself to be at once disciplined and inspired by the mathematics of structure.

The Museum of Modern Art, the Architectural Forum, and the National Trust for Historic Preservation collaborated last fall in the production of a photographic exhibition, first shown at the Museum's November opening and now traveling around the country as one of the Museum's circulating exhibitions. This show, entitled "Architecture Worth Saving," points out that much of America's architectural heritage has already been destroyed; that the last generation perhaps thirty percent of our historically and architecturally significant buildings have gone. Still more of our heritage stands as in danger. The exhibition shows tragic examples in many categories. But there also has been a number of important structures saved from destruction, and a program exists for the salvation of many more.

Unfortunately the cause of preservation has been sometimes clouded by sentimentalists, seeking to save everything old. The National Trust has published its criteria for preservation, which state frankly that mere antiquity is not sufficient basis for selection of a structure for permanent preservation. Preference should be given to structures where there is a preponderance of original material or other physical remains which have retained their integrity. Integrity may be defined as a composite quality derived from original workmanship, original location, and intangible elements of feeling and association.

Repair or restoration of original elements or reconstruction of a building long destroyed demands high professional standards of historical and scientific techniques. Generally speaking, it is better to preserve than repair, better to repair than restore, better to restore than reconstruct.
The buildings featured in the exhibition are significant structures of the nineteenth and twentieth centuries, representing important work of architects whose genius influenced their age, including Mills, Richardson, Wright, Adler, Sullivan, and McKim, Mead and White. The earliest building is the United States Capitol, which has now lost its historic east front for an improvement of doubtful value and fabulous cost. The new extension will destroy a unique and historic space, the forecourt of the Capitol, and interrupt the dramatic cascade of row upon row of columns from dome to portico.

Among important buildings that have been destroyed in recent years, the exhibition features Belle Grove, in Louisiana, with its two superb Corinthian tetrastyle porches, burned by careless picnickers in 1952. Its heavy classical details are in sharp contrast to the slim iron columns and piers of the Harral-Wheeler house, after a long and valiant struggle to preserve it on the part of national and local groups. Designed by Alexander Jackson Davis, the structure was an important issue in a local mayoralty campaign, although the successful candidate, after attributing his election in part to the support of the preservationists, was the leader in the campaign to raze the mansion.

Many notable buildings today are in danger of destruction. The exhibition notes H. H. Richardson's courthouse and jail in Pittsburgh, which the architect considered his finest work. Its fate today is uncertain. In Chicago, Roosevelt University is seeking support for the Auditorium Building, Adler and Sullivan's great achievement, finished in 1889. The great room of McKim, Mead and White's Pennsylvania Station has already lost its magnificence by the intrusion of a non-conforming canopy over the ticket facilities that negates the spatial concepts of this area.

Fortunately a sizable number of significant buildings have been saved, delivered by the wise action or counsel of thoughtful owners, energetic organizations, or crusading individuals. The monumental Doric simplicity of Robert Mills' Old Patent Office will remain, thanks to congressional action that will insure its future as a national portrait gallery. Wright's Robie House in Chicago has been bought by Webb and Knapp for office use in connection with their construction of the Hyde Park redevelopment project. After completion of this mixed housing scheme the Robie House will be given up and maintained by a foundation. In Owatonna, Minnesota, the Security Bank and Trust Company renovated rather than destroyed their bank building, designed by Louis Sullivan in 1908.

The exhibition, during its presentation at the Octagon in Washington in late April and May, includes an auxiliary show of local Washington buildings selected by a committee headed by Seymour Auerbach, AIA. Here are a number of less well-known edifices deserving protection for the future, as well as celebrated monuments like Renwick's Smithsonian Institution and the old State, War and Navy Building. Few visitors to Washington are aware of the excellence of the Richardsonian house of the Motion Picture Association of America at Sixteenth and I Streets, or the subtlety of proportions and brickwork of its opposite neighbor, maintained as a Christian Science Reading Room.

Architects worth saving exists in all parts of the country, and there are now means for noting significant buildings. Efforts can be made on behalf of notable buildings, although success cannot come to all. The Institute has a Preservation Committee, headed by Earl H. Reed, FAIA, 343 South Dearborn Street, Chicago 4, Illinois. Every chapter of the Institute has a Preservation Officer, in direct correspondence with Mr. Reed, who can be helpful in local situations. To promote interest and action in preserving worthwhile buildings that meet its criteria, the National Trust for Historic Preservation, at 2000 K Street, N. W., Washington 6, D. C., maintains a national clearing house and information center on preservation matters. The National Trust is a private organization, chartered by Congress, with a wide membership open to individuals and to organizations, among which one of the most valued is The American Institute of Architects.
Few projects afford the architect as much fun and frustration as do those in which he attempts to visualize what his own particular community might, and should, be ten to twenty years from now. In planning his own environment the architect works on a community scale. If this sounds simple it isn't meant to, for in so doing he encounters all the problems with which he normally deals plus a few more with which he seldom comes in contact.

Assuming that the architect-planner evolves a practical and stimulating solution, he still faces many obstacles before he can perceive any tangible results. Private and governmental reaction to his plan may be gratifying initially, but these do not guarantee implementation. This is a case history of how just such a plan was born and how it has fared since birth.

In the spring of 1957, the Mayor, other public officials, and members of the Central City Committee of the Nashville Chamber of Commerce attended a regional planning meeting held in Arkansas. There they saw an exhibit, prepared by members of the Arkansas Chapter, AJA, visualizing Little Rock of the future. The Nashvillians returned impressed and anxious to have a similar project undertaken for Nashville, and for the same fee—gratis. It would be gratifying initially, but these do not guarantee implementation. This is a case history of how just such a plan was born and how it has fared since birth.

In the spring of 1957, the Mayor, other public officials, and members of the Central City Committee of the Nashville Chamber of Commerce attended a regional planning meeting held in Arkansas. There they saw an exhibit, prepared by members of the Arkansas Chapter, AJA, visualizing Little Rock of the future. The Nashvillians returned impressed and anxious to have a similar project undertaken for Nashville, and for the same fee—gratis. It would be gratifying initially, but these do not guarantee implementation. This is a case history of how just such a plan was born and how it has fared since birth.

In the spring of 1957, the Mayor, other public officials, and members of the Central City Committee of the Nashville Chamber of Commerce attended a regional planning meeting held in Arkansas. There they saw an exhibit, prepared by members of the Arkansas Chapter, AJA, visualizing Little Rock of the future. The Nashvillians returned impressed and anxious to have a similar project undertaken for Nashville, and for the same fee—gratis. It would be gratifying initially, but these do not guarantee implementation. This is a case history of how just such a plan was born and how it has fared since birth.

In the spring of 1957, the Mayor, other public officials, and members of the Central City Committee of the Nashville Chamber of Commerce attended a regional planning meeting held in Arkansas. There they saw an exhibit, prepared by members of the Arkansas Chapter, AJA, visualizing Little Rock of the future. The Nashvillians returned impressed and anxious to have a similar project undertaken for Nashville, and for the same fee—gratis. It would be gratifying initially, but these do not guarantee implementation. This is a case history of how just such a plan was born and how it has fared since birth.
Plan of downtown Nashville

To preserve the flexibility necessary to accommodate future changes and development, the committee decided to generalize its suggestions for land usage in redeveloped areas. Certain suggestions had to be made, of course. But we wanted to avoid solutions dependent on the creation of specific structures for the proper function and interrelationship of the overall plan. Having established basic objectives and some rules for achievement, the committee turned its attention briefly to mechanics. Only a certain number of bodies could be employed efficiently in doing the planning and the physical work. The committee would have to take the lead in programming and tentative planning. Individual Chapter members would be given assignments coordinated and directed by the committee. As a group, the Chapter would be asked for suggestions and would contribute ideas and criticisms to the basic plan. Finally, the committee made its recommendations for land use after the committee had first-hand knowledge of the City Engineer's office; the Real Estate Board; the Retail Merchants Association and local government agencies. At the same time, the committee became personally involved in Investigation. Traffic was tested by experiencing examinations in peak hour traffic jams. Parking facilities were checked for percentage and type of occupancy. Loading areas were timed, and service access ways and areas observed. We tramped the streets and alleys from one end of our compact city to the other. Days later, the committee had first-hand knowledge of all parts of the Central City. Then certain projections were accepted and approved certain portions to study and develop in detail. These developed portions were then combined into a finished overall plan. Those areas to be visualized in the presentation were photographed. Using the photographs, the committee made rough sketches for the delineator and the cartographers. These showed the items to be emphasized and established the scale and character of the architecture proposed. When the delineator submitted linear perspectives for approval, he was asked to submit a palette of proposed colors. These colors were used in preparing the maps and so contributed to the unified presentation.

While the physical exhibits and slides were being prepared, the committee worked on the report. From this report was to be given at a special evening meeting of the Chamber of Commerce, it was presented as an illustrated talk edited to a twenty-five minute delivery time. Statistics were minimized and used only for impact. The reaction of the audience, and later of the public, vindicated the decision to perform this civic service. The report and accompanying exhibits were widely publicized by the press and radio and television. In the eleven months since its initial presentation, the report has been repeated for more than twenty interested groups including the Planning Commissions, local and neighboring civic clubs, special committees and AIA meetings. The exhibits formed part of the Chapter's entry in the Nashville Arts Festival, were exhibited by the American Society of Planners at their Southeast Regional Meeting and were on exhibit at the meetings of the Tennessee Society of Architects and the Gulf States Regional Conference. The Chamber of Commerce instructed its Central Committee to study ways and means of implementation. City officials have evinced interest in trying some of the suggestions advanced. The Nashville Arts Festival, the American Society of Planners, the Tennessee Society of Architects, and the Gulf States Regional Conference. The Chamber of Commerce instructed its Central Committee to study ways and means of implementation. City officials have evinced interest in trying some of the suggestions advanced. The

View of Main Street looking east toward the River.
SCULPTURE

Design is the basis of architecture; so is it too of all the arts, and perhaps most clearly of the art of sculpture. In all the arts there is a oneness and a unity in design concept, proper use of materials, and the organization of all the parts into the aesthetic statement. Design therein excels in order, clarity, simplicity, as good design denies the trivial, the imitative. Therefore, a great similarity exists in the arts; there is a mutual universality. The language, the goals, the means all relate to design. This unity, often quite evident, should be more encouraged between architecture and sculpture for certainly architecture can be more plastic, more sculptural, more colorful.

We readily note that in its function sculpture today relates itself to the new architecture much as it has in history, although perhaps it is now used more in all types of buildings, including the commercial, rather than only in monuments and churches. This relation can be expressed in the following three categories.

Architecture still uses sculpture as a focal enrichment; a necessary spot in the composition, a contrast, a relief. Architecture in this sense often is a background for sculpture.

Secondly, architecture sometimes fuses with sculpture; often to a point where it is difficult to tell where architecture begins or where sculpture ends. Sculpture in this relation can be an enriching, warming and humanizing agent, colorful and decorative in a fully integrated manner.

Thirdly, and in a broad sense, architecture may be sculpture, or more sculpture than architecture, where functional aspects of a building defer in great measure to the aesthetic. In this sense, form in a building is purposefully achieved for more purely visual impact.

However, these relationships must be restudied and re-evaluated in terms of recent developments in both these arts. Architecture and sculpture have changed tremendously in their admission of new techniques. Architecture in particular is criticized for its adherence to vestiges of previous techniques and expressions not germane to the new available facilities. In this relation we can well present a quotation by Einstein: "Perfection of tools and confusion of aims characterize our times."

Now these tremendous changes are related to the impact of advanced technical and industrial production, an impact which leaves actual building techniques quite static in relation to those of the airplane and automobile producers. What is happening is happening fast! A swift panorama is rushing past. We have watched the last ten years advance many potential and actual contributions to architectural techniques in the fields of plastics, sheet metals and
other veneers, light structural sections, thin shells, air-conditioning, electronics, atomic power, science of city planning, etc. Entire centuries in the past did not develop as much in techniques. However the artist and the craftsman excelled!

It is essential that the artist excel today—for he is more needed today—and that he emerge from this industrialization of everything, this mass production that is required by economics and by developing science and technology. New techniques of building present new problems, which must be solved—usually by additional scientific and technical compensations. The glass wall with its many attributes always poses the problem of insulation, condensation, convection currents, acoustics, bleaching, privacy, etc. These are solved in part by the architect, but the esthetic remains a question. Here we require the artist.

In the present day, and in conformance with its structural basis and the available technical production, design in architecture is planar, respectful of the simple enclosing planes of structure. These planes, I submit, might become still more plastic, more sculptural, through the use of balconies; expressions of structure; elements used for climatology control such as sun shields, louvers, etc.; material textures; color; and even setbacks and projections, which might exist purely for esthetic reasons.

These enclosing planes, pure or adorned, present in the new architecture a new concept of space with certain abstract qualities. A more three-dimensional aspect of the transparent enveloping planes is in evidence. Interiors become exteriors as interior colors and displays are more readily seen from the outside. Interior organization becomes part of exterior plastic design. Space is free of weighty definitions or barriers.

This new space concept is also related to less material weight, less mass, as well as more transparency and a preference for expressions of volume. Buildings today weigh less, are sound structurally and are much more comfortable than ever before. Achievement of weight should not be an end in itself, nor does one condone the false sense of security it might suggest in a building which is built of cage construction. Lighter materials are easier and more economical to transport, store and manipulate. Solidity, however, may be developed in a different way in sculptural or similar architectural expression. Vestiges of previous wall-bearing design are still applied to the load bearing of buildings, and effort is now made for "structural effect" when actually the load is much less at these points. For instance, the corner column carries one-fourth the load of interior columns, one-half the load of the exterior columns. The shedding of these obsolete forms, and others, is indeed a slow process. It is difficult to progress in any art without dragging anchor with obsolescence.

Too, it has often been pointed out that as more areas and countries in the world (Africa, China, India, Indonesia, etc.) come to desire technical improvements, appliances and gadgets, there will be a tremendous increase in manufactured material. At present the bulk of this material is handled by the housewife. They may not be enough material to be used by all products. Industrially, there is a need for more pre-fabricated component parts, i.e., wall sections, windows, panels, etc. A modular repetition is stamped out because of the process involved, and accepted because of economics. As pre-fabricated components are repeated and refined and increased in use, a great uniformity occurs—and should occur. An orderly quality is inherent in this process, and is respectful of the architectural planes and functions; presents an effect of geometrical correctness in the space divisions of the planes. The future will need to make available more pre-fabrication of components, for poor management of labor and materials at the job makes costs well-nigh prohibitive—the ghost of "M. Blundings Builds His Dream House" still stalks about ruthlessly.

The function of sculpture in this progressively materialistic culture, where technical correctness is so valued, is related to the need for other enrichment as a most essential and integral part of architecture. It is related to the aesthetic quality of the building element, to the effective expression of a structural or technical development. Satisfaction does not necessarily come from the ability to do things. Mass production and prefabrication techniques per se can supply only quantity if not of the delight of the craft. Nor is the solely economic answer a real solution.

In his philosophy of clear, articulated elements rather than superfluous pattern, and in his pursuit to technical expression, Mies van der Rohe has been a leader. The recent interest of buildings treated with artistic care, such as housing, shopping centers, etc. On Long Island, the Roosevelt Field Shopping Center, now practically complete, is a good example of a commercial group of buildings treated with artistic care.

There is a newly-earned freedom available in terms of spatial concepts, materials and techniques, feasible planning, town planning, and so on—a freedom, however, immediately disciplined and constrained by a lessening of craftsmanship in favor of the calculation, efficiency, flawlessness, simplicity, of the product of the machine with its ever faster and deeper production.

This should not be accepted as apparent paradox, because the constant run of new materials and techniques is exciting and fascinating, and, in the hands of the artist, can be made to vitalize and humanize the environment. Recently, there has been some discussion about the development of structural plastic wall panels that will support the floors and ceilings above, that will enclose space, and that will serve as window walls so that where a window is not desired the plastic sheet may be rendered opaque by mounting wallpaper on the inside. In some form or another this type of change may come sooner than we expect. The esthetic may be jolted, but what good fun it really is to be practicing in a time of such rapidly evolving techniques.

Now design in architecture and sculpture will move ahead or die. Its new life must come from the tremendous changes in the social and technical fields. We should be optimistic enough to believe that the twentieth century can properly solve its design problems with a real understanding and appreciation of the merits and facilities of this century; and that these problems will encourage and embrace the proper interdependence of the facilities of the arts.
FAVORITE FEATURES OF RECENTLY ELECTED FELLOWS

ROBERT I. CARSON, FAIA


Studio 6-D, National Broadcasting Company, Rockefeller Center, New York City.


Below. Lobby of Esso Building, Rockefeller Center, New York City. Photo by Ezra Stoller.
The long and incredibly productive career of Frank Lloyd Wright ended just two months before his ninetieth birthday. Many eulogies will be written, many books will be printed, many judgments will be passed. But his place in history has long been obvious and secure—as he himself well knew and often said. Here was the man who, fifty and sixty years ago, before many of his critics and admirers were weaned, did most of the basic thinking for the whole modern movement in architecture. He had his teachers, of course, but he synthesized the late nineteenth century philosophies of architecture into a working gospel, which he preached and practiced—against the most fearful odds and hardships in his early years—until he won almost undisputed acknowledgment of the rightness of his thinking. Even his detractors have had to admit the great fertility and creativity of his genius—and genius he truly was, our great architectural genius of modern times. Never a joiner, always the magnificent non-conformist, the Institute paid Mr. Wright its highest honor in 1949, its Gold Medal of Honor. The American Institute of Architects joins the world in respectful homage to a very great man.
It was a bright and chilly Sunday afternoon. Taliesin East appeared saddened, the smoke from its massive chimneys curling hazily up to the sky, as the famous house looked out over and guarded the Wisconsin valley. Two beautiful horses stood resting in the courtyard, hitched to a little red dray, which was to carry Frank Lloyd Wright to the chapel and his final resting place. Friends and neighbors gathered, shortly before five o'clock, at the old chapel, which is located on a dirt road about three-quarters of a mile from the entrance to Taliesin East. They assembled quietly and talked in hushed voices. The walls and roof of the chapel are covered with weather-beaten shingles, mellowed to a warm gray. It nestles in a grove of tall and stately pine trees, which seemed to give forth a saddened tune as they moved in the late afternoon breeze. The interior of the chapel is extremely simple and plain. It was decorated with pine boughs on either side of the platform. Large candelabra with yellow candles flickered in the twilight. The chapel seats about a hundred and fifty in its mellowed to a warm gray. The pine trees swayed gently in the twilight, as the relatives, friends and associates of the great man moved slowly away from the chapel toward their homes. His place in history is secure. His continuing influence assured. This century's architectural achievements would be unthinkable without him. He has been a teacher to all of us.
I

For many years prior to the war, while we were living in Washington, D.C., I thought it might be an interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.

You see, there was no architect at that time in this entire area, and I found I had to undertake quite an educational program, not only as far as potential clients were concerned but also to assure all sorts of people—like manufacturer's representatives and engineering establishments—that we were in a real interesting experiment to try the practice of architecture in an area not yet served by the profession—to be exact, a rural agricultural area between Memphis and Greenville and Greenwood, Mississippi, on the Mississippi River approximately forty miles south of Memphis. I am sure that when I thought of these things I never dreamed that they would ever come to pass. However, when the war was over, I found that I must re-establish myself some place, and so it happened that we finally decided to move back to Mississippi and to Tunica, where I have had the opportunity to put my ideas into practice.
From the Executive Director's Desk:

Last summer the President of the Institute, John Noble Richards, FAS, accompanied by Mrs. Richards, Mrs. Shackleton and the Executive Director went up to the Hill to testify on behalf of Representative Thompson's bill—the initial step toward obtaining for the nation's capital what immediately and unhappily had been designated as a "Cultural Center."

The bill was designed only to make it possible to secure a certain piece of ground for the purpose. Funds for the realization of a cultural center are apparently to be raised by any means other than an appropriation from the Congress of the United States.

The hearing was friendly, almost jocular at times, and nothing untoward happened to our representative Thompson's bill—the initial step toward appropriation from the Congress of the United States.

The word "culture" has an unhappy and disconcerting ring. We are all for culture, but why do we have to use that ungainly word with its connotations of a more pedestrian pursuit of arts and letters and music? Culture has meanings which I am sure the Congressman never contemplated. For instance, a cultural center could mean a laboratory for the production of fungi and bacteria, or it could mean even a commercial mushroom house in Chester County, Pennsylvania.

Years ago when the parkway was first cut through Philadelphia from City Hall Square to Fairmount Drive, one of the earlier of the drastic city planning performances antedating by several decades the freeway network and other contemporary major developments determining people of the United States and of the world. I am not talking only about the Congress, I am talking about the innumerable associations that have their headquarters here and the major societies such as the National Science Foundation, the National Geographic Society, the American Council of Learned Societies and, if you want to look at the conservative side, the United States Chamber of Commerce which is still a potent factor in perpetuating the American way of life. The labor unions have been moving in here one after the other, building enormous marble and limestone palaces, and, by so doing, creating another facet of the capital structure.

This movement, so to speak, has the American Association of Architects which has just completed a handsome new building for itself and other organizations, is following suit.

It can be assumed that within the foreseeable future any profession, vocation, or persuasion which seeks to have its organization maintain its prestige in the competitive world of today, will endeavor to locate itself in Washington, if it has not already done so.

So it remains for Washington to assume its rightful place in the world of arts, letters and science, as befits the leading city of the great continent and, incidentally, in that important adjunct to any democratic government—the home of the American association, professional, trade and labor. It is here that the associations congregate to know each other, to work and deal with each other.

I should like to emphasize to all of you again that the foremost among those organizations which lead the economy in their respective spheres is The American Institute of Architects. It is housed in a structure which it is fast outgrowing. Unless emergency or tragedy strikes us, it will be incumbent upon The American Institute of Architects to increase its facilities and to add to its immediate entourage those other organizations most properly identified with it. So we too may find ourselves forced, not altogether unwillingly, to realize for the architectural profession a setting and an association which of itself will form its own cultural center and thus will contribute to the prestige of our capital city.
**Library Notes**

**Landscaping and Gardens**

**At the time of writing it is spring and the lovely Octagon garden is nearly ready for its annual display of color. What more natural than a list of books on gardens and landscape gardening? The present list includes the more recent books on the subject with a selection from the older titles in the Library's collection. All are available to corporate members of the Institute on the Library Loan Service—fifty cents for the first volume, twenty-five for each additional.**

**G.F.P.**

**Ammann, Gustav**


**Brown, Glenn**

&

**Bloxfield, Sir Reginald Theodore**


**Brown, William**


**Cane, Percy Stephen**

Garden design of to-day. London, Methuen & co. ltd., 1934. 222p.

**Church, Thomas Doliver**


**Colek, Gerard**


**Dustan, Alice L.**


**Eckbo, Garrett**


**Gothier, Marie Luise (Schroeter)**


**Howard, Edwin Laclede**


**Hubbard, H. V. and T. Kimball**


**Inn, Henry**

Nichols, Rose Standish


**Root, R. B. and G. E. Kelley**


**Shepard, Peter**


**Tunnard, Christopher**


**Eckbo, Garrett**


**Eckbo, Garrett**


**Fauré, Gabriel**

The gardens of Rome. New York, Brentano's inc., 1924. 100p.

**Fitch, J. M. and F. Rockwell**


**Von Erdberg, Eleanor**


**Von Erdberg, Eleanor**


---

**BOOK REVIEWS**


The never-say-die Henry Hope Reed, Jr., has really done it this time—a full-fledged book preaching his gospel of the return to classicism. And, in spite of his absurdities, this reviewer cannot help but agree with some of his criticisms of contemporary architecture ("Picturesque Secessionism," he calls it). Yet much of the book is beating a dead horse, talking about a phase through which contemporary architecture passed ten years ago, such as the following:

> "The rules of the game call for sequential obedience: first the execution of construction, plan and materials, each one fixed in a special context. Construction must be revealed, the plan must determine the elevation or 'expression' on the exterior, and its materials can be employed only in their nature. If some insist on being ornamented, it must be timidly present and have no reference to the fact, instead of being in harmony with the whole. It is a game which is played under the closest supervision of editors of architectural magazines, museum officials, art critics, professors or architects, and successful Modern architects."

The thoughtless reader cannot help but agree with his appreciations of some of the buildings of the first quarter of the century—Grand Central Terminal, the Cunard Building and the DuPont building—of those by the buildings of Arthur Brown, in Washington and San Francisco. There was a willingness to spend money on those days on sculpture of mural painting—in fact the architect conceived his design from the very beginning as including these decorative arts. Now there is a big move toward the inclusion of a lot of bas-relief or a mosaic mural.

It isn't just a matter of money, it's a matter of point of view.

So we give Mr. Reed credit for a few good comments; his thinking is good, even though in the wrong direction—"wrong-way Corridors" navigation. But now for his absurdities: He has designs all ready for New York, Washington and San Francisco (apparently the only cities worthy) in the grand Roman manner. Columbus Circle surrounded by a great arched Roman structure, full of galleries and grand staircases, thronged with people with nothing else to do, apparently serving no purpose but to make work for stone carvers, ornamental plasterers and decorative painters (which the unions couldn't furnish now anyway).

The Grand Opera House has a proscenium swiped from Bernini's baldachino over the altar in St. Peter's—and fully as high. The housing project sketched for West 125th Street is fully twenty-five stories high, with fifth-floor engaged columns of courtyards like deep pits. The whole conception is monstrous, not human—truly ancient Rome reincarnated.

He includes a 46-page history of "Picturesque Secessionism," tracing its beginnings from Viollet-le-Duc, which is pretty good—from the Roman point of view.

The book jacket says "A Pictorial Argument in the Raging Controversy Over 'Classical' vs. 'Modern' Fashion in Architecture and Other American Arts." No, Mr. Reed, I'm afraid you are not very aptly you are "raging"—although you are "raging"—although your pleasant and well-manered way. And there has been no controversy for many years.

"The advent of the classical is not far off, and we would do well to prepare for it." Devoutly, Mr. Reed, we would warn you to prepare for the second coming.

It is a handsome book, with good typography and plenty of clear offset illustrations. It is to be regretted that the author's style leaves something to be desired. His pronouns often seem to have no antecedents, and he is given to rambling as thoughts come to his nimble mind. But read the book; it may stimulate your thinking, it may also heighten your appreciation of the "American Renaissance"—certainly it will irritate you, which is a stimulus to something. But don't let yourself be persuaded to put your money on Mr. Reed's Roman horse. It'll never finish.

J. W.


Some months ago "Brigdes and Their Builders" came my way for review, but favoring pedantic tone and technical jargon, both incredibly tiresome to one who barely scraped through calculus (with considerable aid from the professor), I kept the volume on the back of the desk and never took time to read it. But read the book; it may stimulate your thinking, it may also heighten your appreciation of the "American Renaissance"—certainly it will irritate you, which is a stimulus to something. But don't let yourself be persuaded to put your money on Mr. Reed's Roman horse. It'll never finish.
Rogers, from his intimate knowledge of his friend, states that "... he is an artist against his will". ... under the illusion that some of his most brilliant solutions have been made solely by the disciplined and precise mind of an engineer ... and that he mistakenly believes himself neutral where esthetics is concerned. We know little about the process of the design of beautiful things. Nervi himself believes in an integration firmly based on knowledge. This fine collection of all his work is evidence.

There is a structural elegance in some of these buildings: the six great hangars, the Turin exhibition halls, various roofing systems, the stairway of the UNESCO secretariat—an involution of design which is almost unique today. Perhaps it comes from the fact that in his most characteristic work the great form can be analyzed. It is a synthesis of meticulously designed repetitive precut units, visually interesting in themselves but subordinated to the total form, making it exciting and possible and eminently buildable. Torroja, the great Spanish engineer, who works principally with the concrete, and this synthesis is not so evident. Another of Nervi's characteristics reveals itself in the structural form-following-form of the UNESCO conference hall—those concrete waves—and in several structural patterns made by weaving and lacing of filaments into self-supporting shapes—this is how our earliest ancestors first learned concepts of volume and intermembranous. A few centuries of practice and theory intervene. Pier Luigi Nervi's structural architecture stems from the concepts expressed in the plastic form of concrete and his marvellous sense of patterns based on forces—basketry of noble quality—and mind.

From Nervi's brief, significant preface, Ernesto Rogers, editor of Concret and with no small reputation as an architect himself, picked out the identical sentence that appeared to this reviewer as the key—Nervi speaking: ... "... My belief in the inherent esthetic force of a good structural solution was never shaken. ..."

---

* From Nervi's brief, significant preface, Ernesto Rogers, editor of Concret and with no small reputation as an architect himself, picked out the identical sentence that appeared to this reviewer as the key—Nervi speaking: ... "... My belief in the inherent esthetic force of a good structural solution was never shaken. ..."

---

* From Nervi's brief, significant preface, Ernesto Rogers, editor of Concret and with no small reputation as an architect himself, picked out the identical sentence that appeared to this reviewer as the key—Nervi speaking: ... "... My belief in the inherent esthetic force of a good structural solution was never shaken. ..."
There are two lessons to be learned from Beacon Hill. First, it is always the whole which is important, never the individual part; and secondly, great variety can be achieved by very simple means.

In another direction, I shall now quote Grady Clay (Gazette of the Arts in Louisville, January 26, 1959). What he says of Louisville will go for any city:

I have a theory about artists and architects. They are at their most effective when they're doing what they're trained to do—design, paint, create. But there are too few of them to go around. When decisions are being made which shape the whole future design of a portion of the city, that's that man with the pencil. He's the missing man on development and building committees; he's the missing man when a budget committee starts talking about allocation of funds for this or that building; he's not there when some talkative lawyer, or some whiskey executive, begins sounding off about 'this thing we're gonna build.'

Louisville building committees, as a rule, are visual illiterates. (Occasionally, a more prescient chairman will insist on an architect's presence; but these are exceptions.) Down the list of most important committees you know. They will spend hours discussing the future shape of a medical center, or a civic center, without once exposing themselves to the catalyzing influence of a skillfully-drawn impromptu sketch.

Thus Grady Clay. I commend to all, sight unseen, the results of his labors of the past few months—editing the proceedings of the University of Pennsylvania-Rockefeller Foundation Conferences on Urban Design Criticism.

And finally, I quote from the report of the winner of the 1957 Paris Prize, Robert P. Burton, Jr., as it appeared in the Bulletin of the AIA—his impressions after visiting England, his first stop in Europe: "I began to understand upon viewing these ancient buildings the real history of architecture which an academic course can never teach. The term had been taught, the lessons of history I never quite understood better, clearer and more alive when I was able to experience the buildings of different centuries side by side and observe their many relationships.

Modern architecture too frequently faces all of the problems at once. Did the Gothic, too often attempts to solve each problem individually without regard for an integrated whole. We indulge in structural exhibitism with little concern for the architectural aspects; we make an apogee logic to ornament by placing a single sculpture in front of a slab building, thereby impoverishing rather than enriching the architecture.

Yes, travel in Europe—or anywhere with a culture older than our own—is still an essential for the young architect who can carry his scepticism with him, and not fall too hard for the romance (not that the romance of ancient architecture doesn't have its place too). To study the old buildings objectively, clearly, to begin to understand their frequently brilliant technical achievements, grasp the meaning of their forms from an understanding, right on the spot, of an extension on the scale. There is an abundance of literature on the subject. A bibliography is given which, with references to other bibliographies, is reasonably complete. Abstracts of technical discussions and treatments of accepted principles are included, but special attention is given to ideas in the public library system, it is generally agreed, should be in the heart of the retail section, but possible changes in the character of the area and availability of automobile parking facilities should be considered. While a location which is inconvenient for patrons should not be chosen solely in order that the library might be a part of a civic center, its location in a civic center may be both convenient and architecturally effective. For cities under 50,000 in population, in a high school, the main library might well be located near the senior high school. Branch libraries, ideally, should serve areas with populations of 50,000 to 60,000 with common interests, and be located near the

The Library Building

Clinton H. Cowgill, PA
and George E. Pettengill

The AIA Building Type Reference Guide (BTRG 3-3)

in which special libraries occupy separate buildings their relation to the master plan is similar to that of college and university libraries—their location is related to the institutions which they serve. Storage libraries may have direct relations with other college or university libraries or public libraries, and they usually serve large areas—too large to be included in master plans of cities or metropolitan regions. Relations to urban planning, therefore, are generally pertinent only to the public library system and school libraries. The location of school libraries (usually units of school buildings) should be considered by the proper authorities when schools are located.

The main library of a public library system, it is generally agreed, should be in the heart of the retail section, but possible changes in the character of the area and availability of automobile parking facilities should be considered. While a location which is inconvenient for patrons should not be chosen solely in order that the library might be a part of a civic center, its location in a civic center may be both convenient and architecturally effective. For cities under 50,000 in population, in a high school, the main library might well be located near the senior high school. Branch libraries, ideally, should serve areas with populations of 50,000 to 60,000 with common interests, and be located near the
senior high school serving the area, the shopping center and adequate parking facilities. Libraries for children should be much more accessible than this, perhaps as accessible as their schools. Young people's libraries may be housed in junior high school buildings, and children's libraries in elementary school buildings. This would be economically feasible, generally, only if these facilities replaced (or were combined with) school libraries. This is probably the most practicable when the administration of the library system and the school system is one. According to Kenneth Gibbons, AIA, cooperation between library schools receive from 25% to 50%; of adults use public libraries, 50% of school library should not be expected to take the place of public library facilities, he says, and it is unnecessary to locate public libraries near schools. A community library should be located where it will best serve the people of the community. The cost of library service, including interest on the investment in the land, should be related to the use made of the service. Location on high-priced land may increase use of the services sufficiently (because of accessibility) to reduce unit costs below what they would be on low-priced land. The location of a community library (as well as the location of schools) may be a strong influence leading toward the development of desirable community loyalties.

In addition to considering the relation of a proposed library building to the master plan of the community, city or region, it may be advisable to survey the habits of present patrons in order to determine the best location. Questions might be directed regarding the proportions who:
- come in for school work
- are under 12 years of age, 13 to 15, 15 to 18, and older.

Program Requirements:

Before a library building may be designed, there must be a program. Typical elements of libraries are discussed briefly below and classified in the outline of plan elements. The outline may readily be developed into a check list for estimating appropriately the required floor area by providing columns headed Number, Factor, and Area. For convenience, it is suggested that 25 ft be allowed for each seat in reading and reference areas, and 7 ft per 100 volumes. These factors are liberal as may be seen from the diagrams below. It is not expected that each of the elements will occupy a separate room. Most of these elements are needed for public libraries and very few of them for some of the other classifications. The capital letters following each element in the check list indicate the library classifications in which it will most likely be needed. See Classifications of Libraries on page 55.

The John M. Olin Library, Washington University, St. Louis, Mo. Murphy and Mackey, Architects.

Reference and reading areas are frequently combined, and in small libraries spaces for adults, young people and children may be in the same room. In large library buildings, there may be separate rooms for:
- general reading
- adults
- young people
- children
- periodicals
- newspapers
- one or more rooms or spaces, each for a different field of knowledge:
- documents
- archives
- pictures
- maps
- music
- special collections
- lounge
- outdoor reading spaces
- facilities for the blind.

Only in college and university libraries are reserve book rooms commonly found. In cities, the newspaper room should be near the entrance or have a separate entrance. It is desirable to maintain only one complete card catalog, and it should be located conveniently to the reading and reference areas, the circulation desk, the technical services department, and the bibliography department.

Many of the books may be kept on shelves in the reading and reference areas, but where the number of books is large in relation to the number of readers, the use of stacks is indicated. Open stacks commonly have reading tables, carrels, conference rooms and seminar rooms interspersed. Whether or not the principal stacks are restricted in use, locked stacks may be provided for rare or expensive books, or little-used items. Many libraries have books which must be kept even though they are little used.

For the circulation of books and other library materials (the loan department), the main desk is the center, although separate desks may be
be provided for registration, charging, and return, as well as desks for readers' advisors. Other parts of the loan department are night depository, bookmobile, and quarters for extension service to schools and branches.

Among the numerous facilities which may be provided for the public, and which should if possible be supervised from the main desk are public toilets, public telephones, display cases, and emergency first-aid equipment. Less closely connected with the main desk are the audio-visual room, microfilm readers, and the bibliography department. In some libraries, also, an art gallery and space for library training classes are included.

The work areas for the librarian and his staff and for custodial services are listed in the table which follows.

To make a check list of requirements for a proposed library building, appropriate items may be selected from the outline. For a check list for school libraries, items followed by a capital A should be selected, etc. See Classifications of Libraries on page 55.

For public libraries spaces needed may be approximated by use of the diagram shown below. For a public library in a city without branch libraries, the total population may be used as a basis. The allowance to be made for branch libraries when computing the area needed in the central library is debatable. It is claimed by some that the establishment of a branch stimulates the use of library facilities in general enough to offset the service rendered by the branch. It is to be expected, of course, that technical services (which would be performed in the central library) would be increased by the expanded use of the libraries.

Outline Plan Elements

Reading Areas

- General BCD: staff
  - seats
  - volumes
- Adult AC: staff
  - seats
  - volumes
- Young people AC: staff
  - seats
  - volumes

Catalog Areas

- Stacks
  - open
  - closed

Other Areas

- Archives
  - staff
  - seats
  - volumes
- Archives

Parking Facilities

- Outdoor reading

Building Service

- Mechanical equipment
  - heating
  - fuel storage
  - cooling

Auxiliary Units

- Auditorium
  - C:
- Library training classes
  - BC

Work Areas

- Technical services
  - ABC
- Acquisitions
  - order
  - staff
- Cataloging
  - department
  - cataloging
  - staff
- Processing department
  - cataloging
  - staff
- Other services
  - ABC
  - photostat
  - stencil
  - printing
  - binding
  - book repair
  - staff
- Offices
  - librarian, ABC
  - assistant librarian, ABC
  - board room
- Purchasing
  - department
  - heads
  - purchasing
  - BC
- Accounts
  - BC
- Statistics
  - BC
- Public relations
  - BC
  - secretaries
- Stenographers BC
- Conference rooms BC
- Vaults BC
- Staff facilities

Circulation

- Main desk
  - ABC
  - charging
  - return
  - registration
- Catalog
  - Readers' advisors
- Pages
  - do not duplicate staff
- Stacks
  - ABC
- Night depository

JOURNAL OF THE AIA
lacking subject to taxation, and in- terest charges should be calculated only if there is a bond issue. The number of persons engaged (professional, clerical, and service) may be influenced by the efficiency of the plan as well as by the amount of service offered. These items, together with supplies, book purchases, etc., are listed below. If the total exceeds the appropriation or allowance, it may be necessary to revise the program.

**Capital Building:**
- Total area: unit cost
- Product: architect's compensation
- Carrying charges: contingencies
- Equipment:

**Operations:**
- Personnel: professional service
- Clerical service
- Fixed charges: insurance repairs (minimum)
- Depreciation
- Maintenance: electricity, fuel, water, telephone
- Telecommunication
- Supplies
- Book purchases
- Other

**Population:**
- The number and status of the area population, if recorded for the present and future, gives a basis for estimating demands upon the library:
  - Urban adults
  - College
  - School high school
  - College (stud. & faculty)

**Library:**
- For estimating demands upon the area population, if recorded for the
- Exceeds the appropriation or allowance, etc., are listed below.
- The number and status of the
  - Professional, clerical, and service) may be influenced by the efficiency of the
- Carrying charges
- Architects compensation
- Building reconditioning
- Fuel
- Other

**Preliminary Decisions:**
- Finally, the preferred location of units should be considered:
  - Must be on the main floor, which may be on a second floor, which may be on a ground floor or in a basement, which could be on upper
- Floors, and which may be in a basement.
- Also the desired quality of construction and finish should be noted and finally the assignment of staff during rush hours and non-hour.

A basic decision which may affect the planning importantly is the hiring and with controls. The current system continues to favor making books and other library materials and services available and appealing to the potential reader rather than the preservation of properties. A few libraries have obvious advantages, but some supervision is always desired with proffered help.

**Conclusions:**
- While every library presents its own problems, a theoretical exploration of arrangements of spaces which might be supervised by the smallest number of persons during quiet periods may have value. The maximum area supervised by one person may be assumed as the area of a circle with a radius of 55 feet—approximately 9500 square feet. For adequate supervision, the supervisor should be responsible for spaces not more than 55 feet of the station. All libraries require everyone to leave the main entrance. This means, and without obvious checkout, the library may be prevented or detected. Some libraries prefer undisturbed routine checking as in a supermarket. If secondary exits are necessary, automatic bell may be employed to warn the unauthorized use, and some person should be stationed nearby.

Even with most stacks open, it may be prudent to lock zero shelves, cases, stacks or rooms, permitting use of them only under supervision. Another possibility is the use of uniformed guards (art museums) or detectives (as in supermarkets). Strategically placed mirrors are helpful, and the use of closed-circuit television may some-day be a practicable means of increasing the area which may be observed from a single point.

In order that a library building may be manageable under the most adverse conditions which may possibly develop in the future:
- Establish central control at strategic points
- Provide for future installation of turnstiles or other aids to checking at exits

**Supplemental:**
- Collection of data for the program is usually undertaken by the client for specialized buildings, such as libraries. Assistance may be needed from the architect or a consultant.
- With complete data at hand, the architect is able to explore design possibilities.

All of these arrangements would require daytime electrical illumination. The theoretical maximum number of readers per floor of a compact plan is 1400 using octagonal units, 1100 using square units, and 660 using rectangular units. If five floors is considered as a maximum, 7000 readers would be the top limit total for octagonal units, 5500 for square units, and 3300 for rectangular units.

Well-staffed libraries would have staff members situated so as to be able to supervise smaller spaces during rush hours, at least. The areas indicated above as supervised from a single station may be subdivided with low cases or with glass partitions as illustrated on page 63. It is seldom that large spaces are used exclusively for one purpose. For purposes of analysis, areas using 50% or more for any of these purposes are indicated as supervised and stacked, or circulation. Work areas and stacks are not differentiated in the diagrams because neither are generally subject to supervision. Offices and staff facilities are indicated as work areas.

If the size of the site dictates a building of several stories, it is desirable to have the principal story midway between top and bottom, as in the Lamont Library at Harvard, the library at the University of Virginia, and the John M. Olin Library at Washington University in St. Louis. Since it is also desirable to have the main door near street level, a site which slopes down from front to back is advantageous.

If no attempt is made to supervise reading areas, or if it is not necessary that the maximum area be supervised from a limited number of stations, it may be desirable to place shelves so that patrons will be forced to pass between them to reach reading areas, or to arrange shelves to form alcoves with reading tables. Stack for little-used books may be placed in a basement (or a floor above or below each of the reading areas) thus reducing the number of books to be brought to the attention of patrons. The circulation area is dominated by the main desk (or desks) where patrons register, books are checked out and returned, and visitors are given directions and information. It is usually the principal control point. It is desirable to have space for the technical services as near as possible to catalog.

**Mechanical Equipment:**
- Basic arrangement of a library building may be determined in part by its location. If the climate is hot for long periods in the summer or humid, air-conditioning may be almost necessary. If periods of heat are not extreme and cool breezes are prevalent, natural ventilation may be employed, and it may govern the location and shape of the principal units. In cities where the air carries much sulphur dioxide (which is damaging to paper), air-conditioning may be especially desirable. To prevent molding, books should be stored loosely for air circulation. Relative humidity should be controlled at 50%, temperature 70°F.
means, the designer "is freed from mental to natural lighting. By this illumination, at least as a supple-
wall as possible. This may lead to a decision to rely upon electrical conditioning. However, buildings should not only be efficient, but windows should be low and small—just large enough to give visual contact with the outside. A low proportion of glass to opaque wall produces the greatest savings on the south, west and east walls. With a high proportion of glass in these high, shading devices, such as low-slung canopy, or grilles will reduce cooling costs significantly.

If a building is not to be cooled mechanically, either immediately or later, natural ventilation should be given attention. The direction of prevailing summer breezes at the site should be determined and the larger axis of the building should be perpendicular to it. If possible the long axis should also be in an east-west direction or within 30° of it. The length along the long axis should be great in relation to the depth along the short axis, and cross ventilation should be insured.

One problem that deserves special attention in libraries is sound control. Sound isolation is most important where street noises are prevalent. To accomplish this it is advantageous to have only a small number of small windows, but other considerations may lead to the use of many large windows. Heavy masonry or walls with air spaces and quilts may be combined with double or triple glazing. Sounds originating within the building may be absorbed by acoustical ceilings, wall coverings and resilient floors.

The acoustical design of listening rooms (and also audio-visual rooms) involves much more than isolation from external sounds. As in an auditorium, sounds originating in the room should not be absorbed except on surfaces from which sound reflections would be disturbing. Too much sound deadening may destroy listening pleasure. For isolation, light-weight partitions, floors and ceilings may be designed through which little sound will be transmitted.

Library Types:

Discussions regarding the different classes of libraries which follow are arranged so as to lead from the simple to the complex. Thus children's divisions of public libraries are followed by libraries in elementary schools, and young people's divisions of public libraries are followed by secondary school libraries. Material on college and university libraries, which comes next, is followed by material on public libraries, book storage buildings, and special libraries. Finally, material peculiar to library buildings which also serve as memorials is given.

Children's Libraries:

Children's departments of public libraries may be considered supplemental to libraries in elementary schools, serving students through the eighth grade. Services of librarians

Limited in depth and enabled to design in larger blocks than was feasible a generation earlier when 50 feet was the practical limit of width of building wings with windows on both sides and ordinary ceiling heights.

Electrical illumination and air-conditioning has also led to lower story heights. Except for appearance (and psychological effects), a large room with a ceiling height of only nine feet is comfortable. For aesthetic and psychological reasons, however, a room 40 feet by 80 feet should have a clear height of at least 12 feet or even 15 feet. With intermediate floors for stacks, ceiling heights of 15 feet in the larger rooms of a library are not extravagant.

If planning is modular, and provision is made for the use of interchangeable units, the design of both book storage buildings, and special libraries. As memorials is given.


Library Types:

Discussions regarding the different classes of libraries which follow are arranged so as to lead from the simple to the complex. Thus children's divisions of public libraries are followed by libraries in elementary schools, and young people's divisions of public libraries are followed by secondary school libraries. Material on college and university libraries, which comes next, is followed by material on public libraries, book storage buildings, and special libraries. Finally, material peculiar to library buildings which also serve as memorials is given.

Children's Libraries:

Children's departments of public libraries may be considered supplemental to libraries in elementary schools, serving students through the eighth grade. Services of librarians

Limited in depth and enabled to design in larger blocks than was feasible a generation earlier when 50 feet was the practical limit of width of building wings with windows on both sides and ordinary ceiling heights.

Electrical illumination and air-conditioning has also led to lower story heights. Except for appearance (and psychological effects), a large room with a ceiling height of only nine feet is comfortable. For aesthetic and psychological reasons, however, a room 40 feet by 80 feet should have a clear height of at least 12 feet or even 15 feet. With intermediate floors for stacks, ceiling heights of 15 feet in the larger rooms of a library are not extravagant.

If planning is modular, and provision is made for the use of interchangeable units, the design of both book storage buildings, and special libraries. As memorials is given.


Library Types:

Discussions regarding the different classes of libraries which follow are arranged so as to lead from the simple to the complex. Thus children's divisions of public libraries are followed by libraries in elementary schools, and young people's divisions of public libraries are followed by secondary school libraries. Material on college and university libraries, which comes next, is followed by material on public libraries, book storage buildings, and special libraries. Finally, material peculiar to library buildings which also serve as memorials is given.

Children's Libraries:

Children's departments of public libraries may be considered supplemental to libraries in elementary schools, serving students through the eighth grade. Services of librarians

Limited in depth and enabled to design in larger blocks than was feasible a generation earlier when 50 feet was the practical limit of width of building wings with windows on both sides and ordinary ceiling heights.

Electrical illumination and air-conditioning has also led to lower story heights. Except for appearance (and psychological effects), a large room with a ceiling height of only nine feet is comfortable. For aesthetic and psychological reasons, however, a room 40 feet by 80 feet should have a clear height of at least 12 feet or even 15 feet. With intermediate floors for stacks, ceiling heights of 15 feet in the larger rooms of a library are not extravagant.

If planning is modular, and provision is made for the use of interchangeable units, the design of both book storage buildings, and special libraries. As memorials is given.


Library Types:

Discussions regarding the different classes of libraries which follow are arranged so as to lead from the simple to the complex. Thus children's divisions of public libraries are followed by libraries in elementary schools, and young people's divisions of public libraries are followed by secondary school libraries. Material on college and university libraries, which comes next, is followed by material on public libraries, book storage buildings, and special libraries. Finally, material peculiar to library buildings which also serve as memorials is given.

Children's Libraries:

Children's departments of public libraries may be considered supplemental to libraries in elementary schools, serving students through the eighth grade. Services of librarians

Limited in depth and enabled to design in larger blocks than was feasible a generation earlier when 50 feet was the practical limit of width of building wings with windows on both sides and ordinary ceiling heights.

Electrical illumination and air-conditioning has also led to lower story heights. Except for appearance (and psychological effects), a large room with a ceiling height of only nine feet is comfortable. For aesthetic and psychological reasons, however, a room 40 feet by 80 feet should have a clear height of at least 12 feet or even 15 feet. With intermediate floors for stacks, ceiling heights of 15 feet in the larger rooms of a library are not extravagant.

If planning is modular, and provision is made for the use of interchangeable units, the design of both book storage buildings, and special libraries. As memorials is given.

may be either to children directly or to those who work with children, or both. Books may be used in the building or in schools or homes. The ideal room for this purpose is on the first floor with north or east exposure. A large window facing a street may attract patrons. On sloping sites, a basement location may be acceptable. A separate outside entrance is desirable. A low charging-desk should be near the entrance so that there should be room for a waiting line to form inside. Catalog and reference material should be nearby. Visual control may be attained by use of glass partitions and low shelves. Children's toilets (near the center of the space) should be under control of the supervisor. A work room may double as an office. Ample storage space is essential. A nook for story telling (for 35 listeners), perhaps with a small stage and a puppet stage could be an interesting feature. Much use can be made of displays in glass cases, and a large globe is useful.

Elementary School Libraries:

The few books which may be placed in each class room of an elementary school are of little value, are no longer sufficient. Library extension service is a valuable supplement, but a library in charge of an elementary school is now regarded necessary. A nook in a corridor or assembly room or a storage space for books, under control of the principal or teacher, may be a beginning, but a separate room, 50% larger than a class room, is a minimum requirement except for small schools. A reading room may possibly double as a cafeteria lunch room. Pupils may serve as assistants under supervision, if glass apertures in an adjoining room for peripheral supervision are provided. The room should be near upper classes—if it is expected to serve the community, it should be near the entrance of the building. A separate entrance is needed.

Carl Koch recommends facilities for 1/6 of the student body. He claims that record-playing is not distracting to readers. He suggests a room for films and slides. For reference and collateral reading and for recreational reading a reading room atmosphere is desirable—low windows, furniture in child's sizes (many children like to read sitting or lying on the floor) and light in color, warm floors, and a variety in illumination (different night and day). Colors should neither be distracting nor taken for granted. For flexibility, the card catalog may be movable.

Opinions of those having experience with school libraries are recorded below in abbreviated form:

There should be a work alcove (where it may be supervised) with equipment of size suitable for children. A conference room should have a glass partition. For flexibility, as much equipment as possible should be movable. The atmosphere should be friendly and inviting. Picture books and other books on similar subjects should be grouped together. Students in the 5th and 6th grades use the catalog.

Elementary school libraries should be on the first or second floors and have no steps at the entrance. Acoustical treatment and light colors for furniture are desired—also for storage for audio-visual materials, an office, and a conference room.

Trained library personnel is essential. Of the 351 elementary schools in Chicago, 345 have libraries, 235 full-time trained librarians, and 110 of them share the services of trained librarians.

The American Association of School Librarians gives useful data regarding elementary school libraries, of which the following are most pertinent:

Small schools may combine work room and storage in a room 200 to 250 square feet in area, office and conference room in area of 150 square feet. Typical tables, 3' x 5' seat 6 and room tables are 4' in diameter.

Young People's Libraries:

The planning of a public library especially one serving a community is seldom practicable. Even though school library facilities are adequate. Complete segregation of the young in a public library is seldom practicable. Even though teenagers are noisy, and may use the library as a trysting place, they generally need to use the catalog and other facilities in various parts of the building.

Opinions of those having experience with school libraries are recorded below in abbreviated form:

A young people's library is a means of bridging the gap between the children's department and school libraries. It involves consideration of students, even though school library facilities are adequate. Complete segregation of the young in a public library is seldom practicable. Even though teenagers are noisy, and may use the library as a trysting place, they generally need to use the catalog and other facilities in various parts of the building.

Young people's libraries are noteworthy:

34. Acoustical treatment.
42. Acoustical treatment.
44. Acoustical treatment.
47. Acoustical treatment.
52. Acoustical treatment.
60. Acoustical treatment.
64. Acoustical treatment.
70. Acoustical treatment.
75. Acoustical treatment.
77. Acoustical treatment.
82. Acoustical treatment.
86. Acoustical treatment.
89. Acoustical treatment.
and patron control from the main circulation desk.

During the design process, consultations were held both with librarians and architects. The lobby, circulation desk, catalog, reference room, periodical room, one reading room, office and work space are on the principal floor; a room for archives, a rare book room, and other reading rooms are on the second floor; and conference rooms, student-lounges, audiovisual room, book store, and additional reading room and service areas are on the lower level (which, due to the slope of the site, is largely out of the ground). The modular plan has columns spaced at 13'-6". The building cost $600,000 and accommodates 375 readers.

An unusual example is the library at Florida Southern College. The reading room and stacks are completely separated, but the periodicals are in the rear of the stacks. A single reading room has narrow tables with chairs on one side only, arranged in concentric circular arcs, each successive row raised one step, and all facing the main desk. The librarian's office is some distance from the main desk.

Quite in contrast with the previous example is the library for the Centenary Junior College at Hackettstown, New Jersey. Like the previous example it has one story and basement. It has a glass wall to the north and a glass partition between lobby and reading room. Its contemporary character is made to harmonize with older buildings by use of the same materials, and it is placed some distance from the nearest building. Charm results from a domestic scale and unpretentiousness. It seats 146 and houses 41,000 books.

The following comments are offered by J. Russell Bailey, AIA. "For college libraries it might be well to point out that in locating a new library building with respect to the total campus, the planners should carefully consider the flow of students after classes as well as during classes. Since the college library is used to a much greater extent during evenings, the flow of traffic would be largely from the dormitories, eating places, Unions, etc. Therefore having the library exactly in the center of the academic group might not be altogether necessary or particularly good.

"The matter of departmental libraries in the smaller schools is often a problem. It might be mentioned that for liberal arts education it would be better to have the main library absorb all of the library functions on the campus rather than spreading them out to science, art, etc., as well as having a main library. The theory in this case, of course, is to get those who are specializing in one field to read more broadly in the other disciplines." 17


Part II of this article will appear in the June issue.

The complete article will be available in reprint form, which will include a Bibliography. Copies will be mailed to all members and subscribers requesting them.
The Producers' Council Roofing Seminar has been enthusiastically endorsed by architects in the eight cities visited.

The day-long program will be held in Milwaukee on May 7, in Indianapolis on May 15, and in Dayton on May 21. After a summer recess, the nation-wide tour will resume in September with a schedule including cities with Producers' Council chapters in the west and south.

The Roofing Seminar, second in a series initiated at the request of the Institute through the AIA-PC Joint Committee, is a comprehensive review of the latest developments in the roofing field. Eleven separate twenty-minute lectures include information on all aspects of roofing construction. Each type of deck is treated, as well as insulation, vapor barriers and surfacing materials.

At the Kansas City premier in February, John T. Murphy, AIA, immediate past president of the local chapter, said, "The entire program was well done and well named a seminar from the educational point of view." He praised the practical tenor of the roofing review and the value of the group discussion.

Also speaking at the opening session, H. Dorns Stewart, National President of Producers' Council, emphasized the producers' responsibility to make quality the watchword in products and materials available to architects. He advised members of the profession to check claims of quality with an eye to the manufacturer's research and marketing efforts as well as production costs.

The first seminar, on curtainwall, visited 30 cities, ending in May 1958. Planning conferences are underway for the next seminar, beginning with an intensive review of the latest progress in the roofing field. Eleven seminars will be held in the eight cities visited.

Besides Kansas City and Washington, D. C., the program has already appeared in Pittsburgh, Baltimore, Boston, Buffalo, Chicago and Minneapolis.

Shown in the photograph above are participants in the AIA-NSF (National Science Foundation) Conference on Architectural Research, held in Ann Arbor, Michigan, in March. Proceedings of the Conference are now being edited and condensed for later publication in the Journal. Reprints will be available. Seated—Left to right: Eugene F. Magenau, AIA Staff, Washington; Walter E. Campbell, AIA, Conference Chairman, Boston; Burnham Kelley, AIA, City Planner, M. I. T.; Myle J. Holley Jr., Professor of Civil Engineering, M. I. T.; Donald L. Foley, Professor of City Planning & Architecture, U. of California; Herbert H. Swinstead, AIA, Philadelphia; M. Allen Pond, Department of Health, Education & Welfare, Washington; Albert H. Hastorf, Psychologist, Dartmouth College; Yaake, AIA, Waunaut, Wisconsin; Alfred S. Alchuler Jr., AIA, Chicago; Turpin C. Bannister, AIA, Dean, School of Architecture & Allied Arts, U. of Florida; Standing—Left to Right: Eugene George Jr., AIA, Instructor in Architecture, U. of Texas; Gene M. Nordby, Instructor in Architecture, U. of Arizona; Henry W. Ecken, Representative of National Science Foundation, Washington, D. C.; Ed Paulley, AIA Staff, Washington; Robert S. McLaughlin, FAPA, Director, School of Architecture, Princeton University; Walter A. Taylor, FAPA, AIA Staff, Washington; Fred N. Sevad, Engineer, New York; Douglas K. Lee, Scientist with Quartermaster Research & Engineering Command, Natick, Mass.; L. P. Herrington, Director of Research, Pierce Foundation & Dept. of Public Health, Yale University; George B. Cressy, Geographer, Syracuse University; Harold D. Hauff, AIA, Dean, School of Architecture, R.P.I.; William H. Ittelton, Psychologist, Brooklyn College; Glenn H. Beyer, Housing Research Director, Cornell University; Albert G. H. Dietz, Professor of Building Engineering, M. I. T.; John Lyon Reid, AIA, San Francisco; Ezra D. Ehrenkrantz, Research Architect, U. of California; Harold Horowitz, Technical Secretary, Building Research Institute, Washington; C Theodore Larson, AIA, Professor of Architecture, University of Michigan; Byron Bloomfield, AIA, Director, Modular Building Standards Association, Washington.

GLASS—the enduring substance!

You may be sure of this: Other building materials may corrode or deteriorate, but not a modern, durable glass product. Advanced processing techniques produce glass with remarkable, diamond-like purity and the necessary strength to protect it from damage. Glass is the immutable substance that never causes maintenance problems. And occasional cleaning preserves its luster indefinitely. PPG's Architectural Representatives would be pleased to help you select and apply the glass products best suited to your needs. This service is reserved exclusively for architects—learn more about it by phoning any Pittsburgh Plate Glass Company office.

See Sweet's Architectural File—Sections 3e, 7u, 15e, 16a, 16d, 21.

PITTSBURGH PLATE GLASS COMPANY

Points • Glass • Chemicals • Brushes • Plastics • Fiber Glass

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

This advertisement to appear in A.I.A. Journal, December 1958.
May 1-7: Annual Convention, Royal Australian Institute of Architects, Brisbane, Queensland.

May 10: Closing date for projects for Idea Contest for Belgian Congo Cultural Center. Additional information from Centre Culturel du Congo Belge, 28 Avenue Marnix, Brussels, Belgium.


May 11-21: BRI Conference on Building Illumination, Statler Hilton Hotel, Cleveland, Ohio.

May 22-27: South Atlantic Regional Conference (Cruise to Nassau), Charleston, South Carolina.


June 18-20: Library Buildings and Equipment Institute, College Park, Maryland.

June 19-26: International CIDI Congress, Rotterdam, Holland.

June 22-26: AIA Annual Convention, Roosevelt Hotel, New Orleans, Louisiana.

June 30: Tile Contractors Association Convention, Chicago, Illinois.


September 21-25: International CID Congress, Rotterdam, Holland.


September 29-October 2: Producers Council Annual Convention, Chase Park Plaza Hotel, St. Louis, Mo.

October 7-9: Central States Regional Conference, Des Moines, Iowa.

October 7-14: California Council Convention, Hawaiian Village Hotel, Honolulu, T.H.

October 9-11: Western Mountain Regional Conference, Western Skies Motel, Albuquerque, New Mexico.

October 13: Fourth Annual Architects’ Tour of Japan. For information contact Kenneth M. Nishi, AIA, at 263 South Los Robles Avenue, Pasadena, Calif.

October 14-16: Texas Society of Architects Annual Convention, Austin, Texas.

October 20-30: Annual Convention, Institute of Japan, Kyoto and Osaka.


BASSHAM, T. E., Fort Smith, Ark.

BAUMGARTEN, WILLIAM L., Raleigh, N.C.

FRANZHEIM, KENNETH, FAIA, Houston, Tex.

HEBBARD, JEAN, FAIA, Ann Arbor, Mich.

MARTIN, HUGH, FAIA, Birmingham, Ala.

McDOUGAL, MARSHALL, Houston, Tex.

WINN, RICHARD J., New York, N.Y.

He pushes a button to adjust temperatures 10 floors away!

Honeywell’s Selectographic Supervisory DataCenter® enables one person to do the work of crews in supervising a building’s year-round air conditioning system. Simply by pushing a button, he can adjust temperatures on the floors in front of him. At the same time, control buttons are switched so that they regulate the control valves for the floors shown and not those indicated are for that floor. By selecting a single set of control buttons—any one compact unit—can regulate the entire air conditioning system of any size building. Additional control functions or future expansion can be handled by adding standard size modules grouped around the central unit.

Instruments on the panel continuously indicate the operation at all critical points throughout the system. Boiler pressures, fan system temperatures, steam and water flow and humidity readings are all included. Utility consumption can also be recorded by area, floor or department for cost accounting. Honeywell’s Selectographic DataCenter is easy to operate, requires no special training. And its maintenance can be handled by a low cost agreement with Honeywell. In addition, Honeywell’s modular, building block concept gives you complete flexibility in incorporating the Selectographic into your designs. Even at your early planning stages, a Honeywell systems specialist can submit proposals for your evaluation.

For more information, call your local Honeywell office, or write: Honeywell, Dept. JA-6-01, Minneapolis 8, Minn.
Quality K-LATH SPANDREL WALL CONSTRUCTION

New Los Angeles International Airport administration building and control tower. The 162 foot tower is to have stucco and aluminum exterior with wings of K-LATH spandrel wall and ceramic tile. A joint venture of architects Pereira & Luckman, coordinating architects; Wilmot Backer & Assoc.; Paul R. Williams & Assoc.

GALVANIZED, WELDED WIRE K-LATH PAPER-BACKED, ONE-THIRD LIGHTER, 78% STRONGER, GALVANIZED FOR LIFE, AND DESIGNED FOR MECHANIZATION.

Approved by all agencies including the Uniform Code.

Write for illustrated booklets and the name of your nearest distributor.
more...

Ellison doors

CARRIER CORPORATION
Dewitt, N. Y.

Architect:
Schmidt, Garden & Erickson

10 ELLISON BALANCED DOORS
in the entrances to this modern building

The door that lets TRAFFIC through QUICKLY

ELLISON BRONZE CO., INC.
Jamestown, New York

representatives in 72 principal cities in U.S., Canada and Puerto Rico

the BALANCED DOOR

Outstanding value has made OTIS the accepted word for elevator quality in the U.S. and throughout the world.

High speed passenger elevators

No elevator installation is too large or too small for OTIS: Autotronic® or Attendant-Operated Passenger Elevators, Escalators, Trans-O-Lators, Freight Elevators, Stairwells, Elevator Modernization and Maintenance, Military Electronic Systems, Gas and Electric Trucks by Baker Industrial Truck Division.

OTIS ELEVATOR COMPANY
260 11th Avenue, New York 1, N.Y. Offices in 301 cities around the world.
In one handy volume the first issue of AIA's new annual Building Products Register will tabulate the properties and test data of more than 1,300 product listings by over 600 manufacturers for direct pre-selection analysis. But the Register itself is only part of this unique, new AIA service. It also will include periodic reports on product behavior on completed installations, a field inspection service, and reports on new products and uses prior to the next publication in the Register. The 1959 Register, commencing the service, is scheduled for distribution June 15. Be sure to receive it by mailing your subscription check now: $25.00 for AIA members.

NOW—a second major break-through in fire-safe acoustical ceilings

FOUR-HOUR RATING given to new Armstrong Acoustical Fire-Guard ceiling tile by Underwriters' Laboratories, Inc. Eliminates expensive fire-stops, cuts construction time.

In January, Armstrong announced the first two-hour time-design rated acoustical tile—a revolutionary first in the building industry. Now Armstrong announces the fastest in time-design rated ceiling. A new ceiling system with a four-hour rating. This new Armstrong Acoustical Fire-Guard ceiling completely eliminates the need for costly fire-stops, even under the most rigid building codes.

SAVES MONEY
Armstrong Acoustical Fire-Guard saves the expense of costly intermediate fire-stops. Previously it was necessary to (1) use reinforced concrete construction, (2) spray steel structural members with an insulating material, or (3) suspend a lath and plaster fire-stop ceiling to which the acoustical tile could be applied.

SAVES CONSTRUCTION TIME
Armstrong Acoustical Fire-Guard ceilings are applied by a completely dry method. There are no costly "wet" operation delays. No extra moisture is introduced into the building.

AVAILABLE IN THREE DESIGNS
Armstrong Acoustical Fire-Guard can be specified in any of three attractive designs: Fissured, Classic, or Full Random.

For complete information about Armstrong Acoustical Fire-Guard, call your Armstrong Acoustical Contractor, your nearest Armstrong district office, or write to Armstrong Cork Company, 4205 Sage Street, Lancaster, Pennsylvania.
New Bissell, Inc., plant features durable, hand-crafted vitreous china by Briggs

Vitreous china plumbing fixtures, superbly hand-crafted by Briggs experts, will add both stylistic beauty and functional efficiency to Bissell's new Grand Rapids plant. Architects J. & G. Daverman Company sought fixtures that more than met the codes, found them in the extensive, carefully coordinated line of Briggs Beautyware. Balanced design, functional features, pure eye-appeal all led to their selection of a total of 84 Briggs fixtures. In your own industrial, commercial and institutional work, you too will find decided advantages in this easy-to-work-with line. Styled by Harley Earl, Inc., for Briggs, in high-density vitreous china, it is manufactured under the strictest standards of quality control.

For fixtures that can make a beautiful difference, specify Briggs Beautyware, the brand that makes the difference.
NEW Smooth-Fin Aerofin Coils for Greater Capacity Lower Resistance

Aerofin extended-surface heating and cooling coils now offer you an even greater area of effective surface — even greater capacity — per square foot of face area. Airway resistance is lowered; higher air velocities can be used. The result is extremely high heating or cooling capacity in a given space.

Compact, sturdy, standardized encased units arranged for simple, quick, economical installation.

Write for Bulletin 5-S5

AEROFIN CORPORATION

The new Aerofin smooth fins are tapered, with wide base that conducts sufficient heat between fin and tube to make the entire fin effective transfer surface.

Aerofin is sold only by manufacturers of fan system apparatus. List on request.

INDEX TO ADVERTISERS

Aerofin Corporation .......................... 60

American Art Metals Company
Batten, Barton, Durstine & Osborn, Inc. 65

American Brass Company
Kenyon & Eckhardt

Armstrong Cork Company
Batten, Barton, Durstine & Osborn, Inc.

Blumcraft of Pittsburgh

Briggs Manufacturing Company
MacManus, John & Adams, Inc.

Ellison Bronze Company
Griffith & Rowland

Hillyard Chemical Company
Fardon, Miller & Fardon

Hope's Windows, Inc. ........................ 14

The Moss-Chase Company

K-Lath, Inc.
R. W. Webster, Advertising

LCN Closers, Inc.
D. K. Morrison

Lotix Systems, Inc.
Brindley-Roth, Inc.

Marble Institute of America
Moore & Company

Minneapolis-Honeywell Regulator Company
Fotie, Cone & Belding

Monarch Metal Weatherstrip Corporation
Charles W. Bolan, Inc.

O&is Elevator Company
G. M. Batzold Company

Pittsburgh Plate Glass Company
Batten, Barton, Durstine & Osborn, Inc.

Sylvania Lighting Products
Sullivan Advertising Agency

U. S. Ceramic Tile Company 2nd Cover
The Griswold-Eshleman Company

Ware Laboratories, Inc. 3rd Cover
Hume, Smith, Miller, Inc.

West Coast Lumbermen's Association
Cole & Weber