Sauder is proud to have supplied seating for the merit award winning St. Mary's Cathedral, Lansing, Michigan. Architects, Mayotte-Webb, AIA, Lansing, Michigan.

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30th National Conference on Religious Architecture
St. Louis, Mo. • April 29-May 1, 1969

*Registration pending*
The emphasis of the 30th National Conference will be to define and plan for worship facilities that will meet the needs of differing worship patterns for congregations in the years ahead. The conference will also feature the finest architectural, religious arts and products exhibits available in the religious building field.

FOR FURTHER INFORMATION WRITE TO:
Conference Coordinator
P.O. Box 18214—Cleveland, Ohio 44118

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FOR EXACTING REQUIREMENTS OF COLOR AND FINISH SPECIFY...
1969 St. Louis Conference

The 30th National Conference on Religious Architecture will be held at the Chase Park Plaza Hotel, St. Louis, Mo., April 29 through May 1, 1969. Sponsored by the Guild for Religious Architecture in cooperation with national religious and professional organizations, the conference theme is to be: The Decade Ahead in Religious Architecture. The program will concern itself with the challenge to theologians and architects to anticipate the worship patterns and needs of the decade ahead, and to plan the facilities to house this worship and program. Featured speakers at the conference include: The Rev. Frederick R. McManus, Director of the Bishop’s Committee on the Liturgy, Washington, D.C.; Dr. Joseph Sittler, Divinity School, The University of Chicago, Chicago, Ill.; Charles Blessing, FAIA, Detroit, Mich.; and Percival Goodman, FAIA, New York, N.Y.

As usual, the conference will feature exhibits of current religious building design, religious arts, as well as a broad range of products available for the construction and furnishing of houses of worship. There will be workshops and seminars dealing with various aspects of the conference theme, and offering workshops and seminars dealing with various aspects of the conference theme, and offering opportunities for general discussion. Plan now to attend.

GRA Salutes Award Winners — Liturgical Conference

The Guild for Religious Architecture extends congratulations to its members for their award-winning projects at the recent Liturgical Conference in Washington, D.C. Those who were honored include: Schweikher, Taylor, West of Pittsburgh, Pa.; Merit Award for the Chapel at Carnegie-Mellon University, Pittsburgh, Pa.; Desmond, Miremont & Associates, Baton Rouge, La.; Merit Award for St. Joseph Cathedral, Baton Rouge, La.; Voigt & Foure’, St. Paul, Minn., Honorable Mention for Church of Saint James at Nassau, Minn.; Sövik, Mathre and Madison, Northfield, Minn., Honorable Mention for Saint Leo’s Catholic Church at Pipestone, Minn.

And the Guild salutes Robert Calhoun Smith, Washington, D.C., whose designs for chair and altar at the Church of the Holy Spirit, Annandale, Va. were accepted for the Cultic Arts Exhibit at the Liturgical Conference.

Minnesota Society of Architects-AIA Convention

For some time now there has been a general opinion that the architecture of religion has been lagging behind secular work in design quality. This may indeed be true; at least the religious organizations have not been supplying the opportunity for pace-setting monuments as they did in some earlier periods of history. Whether it would be good if they did again is another question. But it was a pleasure to learn that of the seven awards given by the jury at the recent Minnesota Society of Architects-AIA annual convention, three were churches and two were religious institutional buildings. The jury of distinguished California architects looked over more than ninety submissions and commented that they too were surprised that so much of the good work was church related. Three of the seven prize winning firms are represented in the Guild membership: Cerny Associates (Frederick J. Bentz), Hammel, Green & Abrahamson (Bruce Abrahamson), and Sövik, Mathre & Madison (E. A. Sövik and Sewell Mathre).

“The ultimate justification of any intellectual activity is . . . its effect in increasing our awareness or degree of consciousness. . . . This is obviously the case with art, the great artist, painter, poet, or musician makes us aware as we have never been aware before. He extends and subtilizes certain elements of our experience and so gives us greater knowledge and mastery of life. It is ever possible 

Continued on page 29
I remember once reading the account of an interview with Mies van der Rohe in which someone asked him whether he gave any forethought to the introduction of paintings and sculpture into his buildings. Mies replied that he never did. (Someone once commented, in talking about the Guggenheim, that Wright never did either — but this is surely hyperbolic.) Even the famous nude in the Barcelona Pavilion is reported to be a late introduction into the building. The remarkable thing is that Mies' buildings turn out to be extremely hospitable to the sculptor and painter. Perhaps what this teaches is not that architects should be careless of the artist but that the relationship between artist and architect in our architectural epoch is best when each preserves his autonomy. The circumstance in which architecture merges with sculpture as in medieval days or with painting as in the baroque may not be possible for us. If one conceives architecture as space, and not as mass, or as a group of related surfaces, the conceptual differences between architecture, sculpture and painting are to some degree illuminated. If we are committed to these distinctions in theory, possibly it is wise in practice also to keep the arts discrete.

In Nikko, Japan's most thorough merging of the arts occurs in the elaborately carved and polychromed temples. In contrast, the equally well-known and more treasured architecture of the Katsura palace in Kyoto is purer architecture. Here the building doesn't merge with the art but shelters it. It is the Katsura conception, not the Nikko architecture which has provided inspiration for the new era of architecture in the West.

These recollections were dredged out and these attitudes buttressed by the opportunity of going with some care through Louis Redstone's superb new book. There are many things to learn from such a book obviously, since it has hundreds of excellent photos of combinations of architecture and art, all carefully identified and well organized.

There is, I think, in this book further evidence that if the architect and artist try to live in the same skin the chance of success is less than if they keep their distance. The Picasso in Chicago is enhanced by and enhances the Civic Center behind it (the frontispiece is one of 62 color photos). The David Smith sculpture looks fine with Jones and Emmons' crisp work (page 15). And Nivola's great block of stone in the courtyard of Saarinen's dormitory at Yale (page 3) seems to become a paradigm of the architectural shapes, which it couldn't possibly have become as a bas-relief on the building itself.

Possibly one might only conclude from these examples that good sculpture goes well with good architecture. And there is doubtless some truth in this observation. But my earlier point is that I think demonstrable in a negative way from other photos in the book. Nivola doesn't seem to me to be of much consequence in the 1200 square feet of concrete mural in Kansas City (page 76). The 5000 square feet of sandblasted library facade on page 10 impress me as fraternity wasted. Sculptured concrete walls seem to me to work quite well when they stand free as at another library, page 25. I confess I am growing to have the same feeling about murals in building interiors. Tamayo's mural in Mexico City (page 179) is a most wonderous thing, not because it is integrated with the architecture but partly because it seems like a visitor in the room.

There is a minimum of text in Redstone's book, but there is some, and as I read along I found myself vindicated; I think, in a quotation from a sculptor, Berto Lardera:

"To my opinion, the relation between sculpture and architecture is possible only if they both keep their full individuality." (page 163)

All this is not to say that I think Mies' practice of taking no forethought for painting or sculpture makes a lot of sense; unless one designs buildings like his. And one of the nice things about Redstone's book is that as a sort of appendix, he spends some pages on the subject of what kind of fruitful agreements can be reached between artists and architect or owner. The book also has a foreword by R. L. Durham, FAIA, whose endorsement is more valuable than mine; and a fine, lively introduction by Jacques Lipchitz.
THE ARCHITECTURAL SETTING of the liturgy is visually reinforced by the selection of materials and their design. Working closely with architect, vestry and rector, Rambusch assisted in resolving design concepts which best relate to this community's need for worship. Rambusch offers stimulating interior space planning. Within your specific requirements, a totally integrated design is presented for church or chapel. Expert use of scale, light, structural materials, color, texture and furnishings enables our experienced staff to create environments suitable for the liturgy. Rambusch serves the complete needs of its clients, assuring constant supervision and counsel—from concept to completion.

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LETTERS

EDITOR'S NOTE:

Following publication of the fourth issue of FAITH & FORM, the Guild membership was mailed a questionnaire asking their reaction to format and content of the Guild journal. The staff of FAITH & FORM appreciates the comments received—some of which are printed below—and the warm support of the Guild membership. Readers' reactions to articles and/or picture coverage are always invited. Your criticism and suggestions will help make FAITH & FORM a more effective instrument.

“We subscribe to something like 35 periodicals, personally and collectively, in this office. More than half of them deal with architecture, theology and the arts; most of them are specialized. I can do no more than glance at them and, here and there, read sparingly—but the last two issues of FAITH & FORM I read from cover to cover including the advertisements. I am not kidding.

“This publication is important to my business and I am anxious to see who is helping to make it the good thing which, to my delight, it is turning out to be. Please see that we receive 5 copies of each issue and bill us, of course, accordingly.

Edward S. Frey, Director
Commission on Church Architecture
Lutheran Church in America
New York, N.Y.

“Format and content fill the need for a media of communication between GRA and the professionals not allied with the Guild as well as with its own membership. If the standard of written and visual materials is kept high, it will serve well this need.

“Having been involved with the editorial staff of ‘Response,’ the quarterly of the Lutheran Society for Worship, Music and the Arts, I know how difficult it is to resist the temptation to over-commercialize such a publication in order to finance it. The advertisements in FAITH & FORM have been quite tasteful and appropriate. Keeping up this quality is important, though not nearly so important as maintaining the quality of the articles and photographs presented. In this area only the ‘best’ can possibly be useful to the people the periodical is to serve. Congratulations on a great beginning and best wishes for continued success.”

Sewell J. Mathre
Northfield, Minn.

“. . . We have received all four issues of FAITH & FORM and without question find it the best type of publication in its field. The graphics and format are superb and the articles most satisfactory. I would hope you would continue to be as selective as you have in the past regarding subject matter.

“I would like to make the following suggestions:
1. That you prepare some sort of form which might be used by persons such as myself in making gift subscriptions available to ministers and other interested persons.
2. That you include a small amount of technical data in each issue pertaining to liturgical requirements, organ data, etc., which practicing architects might be able to utilize as reference material.

“Again, you are to be complimented on the quality of this publication.”

Roger Johnson
Minneapolis, Minn.

“A very striking publication. The layout and photography are terrific. It seems to carry through to the art and photography in the ads. Its brevity is refreshing. Its articles are good no-nonsense commentary.”

Wm. Phillips Brown
Alexandria, Va.

“I believe that the format is excellent. The content, when the budget will permit, could be more comprehensive. On the whole the magazine is tastefully done, deserves to grow, and warrants support.”

Harry F. Anderson
The Perkins & Will Partnership
Chicago, Ill.

“The graphics and the excellent photographic reproduction in FAITH & FORM make this magazine by far the best publication for the architectural profession.”

Charles A. King
Hartford, Conn.

Continued on page 31
Since 1959 the Liturgical Conference has been sponsoring an annual awards competition in church architecture. The organization is described as "a national and voluntary association concerned with the celebration of the church's liturgy, with education for meaningful participation, and with the promotion of liturgy's renewal in contemporary forms."

Forty entries were submitted in the 1968 architectural competition; twelve were selected for exhibit during the recently concluded Liturgical Week at Washington, D.C., and nine received award certificates—seven Merit Awards and two Honorable Mentions. The jury for this year's competition was composed of: Thomas J. Biggs, Biggs, Weir, Neill & Chastain, Jackson, Miss.; George Rafferty, Progressive Design Associates, St. Paul, Minn.; the Rev. Robert Ledogar, M.M., Maryknoll, N.Y., and the Rev. Thomas Phelan, Rensselaer Polytechnic Institute, Troy, N.Y.

The projects submitted fell into four categories: I—preliminary plan for new church; II—preliminary plan for church renovation; III—completed new church; IV—completed church renovation. The following pages show the award winners, with excerpts from the jurymen's statements regarding them. Juryman Thomas Biggs, in a letter to the Rev. Robert W. Hovda, Managing Editor, Liturgy, revealed the values he looked for in the entries submitted. We extract the following, with permission:

"I think of a Church in its ancient definition as a body of God's people. A church is a building which houses an assembly in its corporate religious activity. Therefore a church is only a tool to serve larger purpose; it may be a sharp tool or a dull tool. This persuasion implies a humility on the part of those who have to do with building churches which is essential to an appropriate attitude in that enterprise.

"Religious/liturgical function is the first key to success in building a church. The functional purpose must be understood and shared by those who collaborate in church building. Form should grow from function in a simple, direct way. We should be intolerant of an attitude which arbitrarily imposes form on function or which undertakes to rationalize friction between the two.

"A large part of the substance of a church is composed of free, God-given elements—the space, light and dark, verdure, the rain, thunder and lightning, the color and texture of natural materials, the moods of weather, the green leaf and yellow leaf, the seasons, the leafy bough and the bare branch, lowering clouds, cool day and warm sun, color in the hills and haze in the distance—these things we need to view in wonder, as a child—and exploit to God's glory, as a man.

"There is a good tradition in building which should be respected. The great precedent examples were attuned to the societies and technologies of their times; they were inventive and innovative in being so. So it is with our time. Dealing with unfolding contemporary history has always been a risky undertaking. It appears especially so to us since the turn of this century because of the rapid turnover in information, technology, political and economic philosophies and social and religious values. Add to this the increasingly rapid acceleration in movement and communication—in time itself. All of these add up to a state of cultural indigestion, a malady from which we all suffer, in degree proportionate to our awareness that these phenomena are occurring.

"When we build a church we try to build a timely building which is timeless—the essence of our dilemma.

"This very dilemma, with its underlying causes, states the case for restraint and discipline in the church building endeavor. We can, for instance, become fascinated by McLuhanism and read in import for religion; we can engage in structural exhibitionism; worst, we can impose our personalities as 'creators!'. But in a building for worship there is only one loud and clear Message; the one Message is all a great church requires or permits.

"If we come to terms with the foregoing values, we are further persuaded that there is no place for applique or cosmetic adornment. Our efforts are directed toward searching for that concept which has integrity as its core. Likewise, economy of means becomes a virtue of high order.

"Finally, there is an aesthetic which is the catalyst to bring all these values into harmonic synergy—a strength of simplicity—a rightness of parts—an implied thrust—a church which has the potential of becoming a Church of God's people."
Photos by James Cook

MERIT AWARD — Category I
Chapel for Carnegie-Mellon University, Pittsburgh, Pa.
ARCHITECT:
Troy West
Schweikher, Taylor, West
Pittsburgh, Pa.
CONSULTANT:
Father Philip Walsh
Pittsburgh, Pa.
“... a knowledgeable and sensitive composition of slope, verdure, space, texture and light, organically executed in a disciplined and minimized pallete of simple, durable materials.

"... an imaginative and creative solution to an architectural problem. The whole thing may be a bit too much like a maze and have too mystical a quality to suit a pragmatic American approach to churches and chapels."

DESIGN SOLUTION:
The rough circular exterior wall encloses gardens, water, and gives privacy. Openings in this ivy-colored wall monitor sunlight into the interior spaces. An opening in this outer wall leads into a forecourt. A narrow slit cut in this wall produces a moving pattern of sunlight on the curved surface of the apse wall. From the forecourt a wide ramp carries one past water to the main entrance space. Smooth concrete walls structure the space and extend out from a thirty-six foot central cube to form an entrance, side chapel spaces, and an apse. To the north are a still pool of water, grass slope, a grove of birch trees, and a shaped evergreen hedge covering the existing steep bank. A maze with private outdoor spaces is cut into the hedge. An existing stone wall borders the site. An existing grove of trees to the west completes the privacy of the place.
MERIT AWARD—Category IV
St. Mary’s Cathedral
Lansing, Mich.
ARCHITECT:
Mayotte-Webb
East Lansing, Mich.
CONSULTANT:
Robert E. Rambusch
New York, N.Y.
"... appears to be an excellent renovation. Skillful selection of painting of all areas in one color value, good use of artificial lighting, well-integrated and designed appointments.
"... the Blessed Sacrament Chapel solution is especially well done; a square altar is very useful for concelebration."
MERIT AWARD — Category I

Newman Center at Southern University
Baton Rouge, La.

ARCHITECT:
Environmental Design Collaborative
Julian T. White
Tuskegee Institute, Ala.

“... allows for maximum flexibility and encourages interrelationships between the sacred and secular which can only reflect one on the other to the advantage of both. An active plan and spatial form which really moves, even swings—symbolizes involvement with complex modern life in spirited architectural form.

“The idea is youthful—as it should be in University environment, but much too complicated. This one is the opposite of most of the others in that it gives far greater prominence to the Liturgy of the Word than to the Eucharist.”
MERIT AWARD — Category IV

St. Joseph Cathedral
Baton Rouge, La.

ARCHITECT:
Desmond-Miremont & Associates
Baton Rouge, La.

"... an important project because it is prototypical of many since Vatican II, and because it deals with the total problem rather than merely sanctuary rearrangement/remodeling. Entry has further importance since the pseudo-Gothic-Victorian form is perhaps the most difficult of all—a form moreover which has no indigenous roots in the region in which this example is located. Architect exercised commendable restraint in dealing only and totally with important issue, avoiding temptation to redo the whole character of the building.

"Well conceived in terms of cathedral functions. Principal defects: remoteness of the Eucharistic table from the nave. The bishop’s throne is too massive. Regrettable that the episcopal chair should be more prominent than either the place where the Word of God is preached or the place where it is enthroned."

Photos by David Cleason
MERIT AWARD—Category III

Church of the Holy Spirit
Webster, N.Y.

ARCHITECT:
Levatich and Miller
Ithaca, N.Y.

"... an exercise in the use of simple, inexpensive materials in a house of worship. Challenge becomes one of extreme care in disciplined concept, detailing an innovative means of integrating the structural, mechanical and electrical elements required in a modern day building.

"... one of the very few entries that takes the 'spoken word' seriously and gives the liturgy of the Word its proper place. The relation of the different elements (sacristy, chapel, meeting rooms, library, etc.) is good. Good use of simple materials."
MERIT AWARD — Category I

Church of St. John the Baptist
New Brighton, Minn.

ARCHITECT:
Shifflet, Hutchison & Associates
Minneapolis, Minn.

CONSULTANT:
Frank Kacmarcik
St. Paul, Minn.

"... an extraordinarily good church. Everything is where it should be. An excellent plan handling many people, with an ample and well-defined circulation system. All liturgical functions are clearly and logically located.

"Granting the need for a large church, the design for this building was approached radically and with a magnificent result. Structure, natural lighting and the vigorous and disciplined vernacular of exterior design are totally organic and consistent with the central architectural idea."
MERIT AWARD—Category III
St. Joseph's Parish Church
Roseburg, Ore.

ARCHITECT:
Wolff, Zimmer, Gunsul, Frasca, Ritter
Portland, Ore.

CONSULTANT:
Pietro Belluschi
Cambridge, Mass.

"... a warm, rich building, apparently well lighted and speaking well outside as well as inside. A very knowledgeable association of art and architecture—all appointments restrained and handled with great dignity.

"... project shows that a basilican plan can be made to work without necessarily fracturing the assembly into three parts—accomplished by opening, substantially, the interior corners at the four crossing junctures. Stained glass windows—although handsome—may because of their brilliance, compete with the sanctuary."
HONORABLE MENTION—Category III
Church of Saint James
Nassau, Minn.
ARCHITECT:
Voigt & Fourré, Inc.
St. Paul, Minn.
"... good solution for small community with very limited budget. Unpretentious, simple direct plan and space form; local, durable materials. Good use of limited space relating hall and church.

"Problem of small church with limited funds needs further and continuing study. Great potential in this type of plan for many small communities, but is this a village hall, fire station or church?"
HONORABLE MENTION—
Category 1

Saint Leo's Catholic Church
Pipestone, Minn.

ARCHITECT:
Sövik, Mathre & Madson
Northfield, Minn.

CONSULTANT:
The Rev. Aelred Tegels, OSB
Collegeville, Minn.
Frank Kacmarcik
St. Paul, Minn.

"...special commendation for making the break from center line rigidity, and consequent frustrations of trying to equate inequitable elements. Movement from narthex to nave along an implied diagonal which acts as a desirable linkage to the asymmetry of seating plan.

"...box-like form acceptable, with excellent propositions to structured framing. Double row of columns adds a simple but necessary refinement to project; identifies circulation and liturgical functions—the stations and also the place of reservation."
Lighting Systems for Houses of Worship

M. W. Terkel, President
NL Corporation, Cleveland, O.

The changes which have appeared in technology and architecture, in the understanding of men and human communities, and in the concepts of worship have stimulated the need for lighting techniques and designs to fulfill the required functions of the lighting system. One cannot prescribe the direction which an architect's imagination may take in concept and design, and this often creates a challenge to the engineer as well as to the architect to develop a lighting system that will satisfy the basic requirements of the project.

The shape of the structure might be conventional in square or rectangular configuration; it might be circular or it might be sections of a hexagon or octagon—many styles are emerging from the drawing boards. There is still the need to complement and reveal the numerous architectural features of the interior with highlights and shadows, to provide ample light for seeing and reading, and to create an atmosphere of warmth, dignity and solemnity conducive both to group prayer and to quiet meditation.
The public has become increasingly “light conscious” during the past 15 or 20 years as a result of the increasing lighting standards, which represent the advances made in the field of illuminating engineering. As lighting standards and levels increase in school, office, factory, etc., so must the lighting standards and levels of illumination in houses of worship provide for the wide variety of activities offered by churches and temples today. Lighting appropriate for one project may be inappropriate for another. The problems of each structure must be considered independently to determine the type of lighting system and style of fixture design that will best serve the need of the individual congregation.

Let us consider a specific project—any design concept—and analyze some of the basic requirements involved:

**INTERIOR LIGHTING**

As one enters the narthex, adequate lighting sources can be used either by means of recessed lighting, or by pendant fixtures to provide a bright, cheerful atmosphere with a light measurement of approximately 30 to 40 foot candles for this area.

Lighting in the nave or auditorium requires an interesting solution to satisfy both the architectural and illumination requirements. For many years, the major consideration given to nave lighting was the aesthetic effect—the design of the lanterns blending with the architectural design and spirit of the interior. This is just as important today, but in addition, modern church lighting must provide lighting efficiency. Church lighting differs from other types of lighting in that it must also consider the greater interest and awareness of how light is used to create a psychological mood, to provide aesthetic pleasure, and to draw attention to what we want to see.

In the selection of lighting for the nave of the church, one must constantly keep in mind the following objectives:

1. Soft light, next to music, is the best means of creating an atmosphere of warmth and solemnity, which one seeks and anticipates upon entering a House of Prayer. The twentieth century church must meet the spiritual and religious needs of the individual as he makes the transition from the turbulence of the outside world to the calm of the church interior. There is also the factor of a clear and growing consciousness among worshipping congregations that the events of worship are corporate, not private events; objective rather than subjective; active not passive; and appropriately joyfully serious rather than somber.

2. Lighting systems must be functional and flexible to meet the various needs of the church services and uses of the church building. Engineered lighting should be conditioned to conform to today’s illumination standards, while maintaining glare-free comfortable brightness levels.

3. If hanging lanterns or lighting equipment are used, they should complement the architectural style of the building, harmonize with the details of the interior design, and contribute to its beauty and dignity. Lanterns should be located on or very close to the center line of each section of pews for appearance purposes. It is suggested that the lantern selected be of a physical size proportionate to the area in which it is going to be suspended. The width of the nave and the height of the ceiling must also be taken into consideration in the church which has an unusually high ceiling or is exceptionally wide. The lanterns may be scaled to incorporate both a horizontal as well as a vertical element in its over-all design. The mounting height is determined by the spacing between outlets to assure an even distribution of illumination throughout the pew areas. For a quick, rough calculation, it is comparatively safe to figure approximately 4 to 5 watts per square foot of the area to be illuminated to provide approximately 15 to 20 foot candles as an average level of illumination at pew height.

In many of the new church design concepts being created by architects, lantern equipment cannot be used. It is then necessary to design an engineered lighting system which will provide adequate down lighting for comfortable reading at pew levels, and a side distribution of illumination—or possibly indirect lighting—to reveal and accentuate the details of the interior. Whatever the lighting scheme, it should harmonize with the interior architectural styling of the church, thereby becoming an integral part of the whole.

Many churches today are using both suspended units and indirect or direct downlight units with pleasing and attractive effects.

The calculation of wattage per square foot indicated above is based upon a lighting system where the source of light is approximately 14 to 16 feet above the floor. Where higher ceilings are involved, and indirect or direct downlight systems are used, the relationship of wattage required per square foot can increase substantially. The type of lighting systems used will, of course, affect the initial installation costs as well as the operational costs over the many years for which it will be used.

Because of the many factors which occur in the nave of the church, it is recommended that the wiring be on at least two circuits so that the main source of illumination can be turned off during a sermon or during ceremonies where a high intensity of illumination over the pews is not required. A dimmer system could also be considered to help create the flexibility which is so desirable in the church lighting system. Advantage should be taken of new lamp developments. There have been many advances in design and performance for wider distribution from the lamp with greater intensity and longer lamp life.

Maintenance and relamping are also problems which must be considered. In many cases, it is necessary that the custodian climb stairs, ladders and catwalks to reach the fixtures for relamping. Quite often this climb is equivalent to three or four stories, and experience has shown that over the course of a few years such a lighting system often becomes ineffective due to the reluctance of the caretaker (generally an elderly man) to make the tedious climb aloft until three
four fixtures require servicing. This is a specific reference to recessed lighting, when it is used as the only source of illumination in the church. Where hanging fixtures are used, consideration should be given to lamps which have a longer lamp life, 2,000 to 4,000 hours. If the fixtures are suspended much over 14 or 15 feet above the floor, hand-operated or electric power winches for lowering the fixtures, allowing easy access for lamp replacement and cleaning, may offer a solution.

Attempts have been made to use fluorescent lighting in the nave of the church; however, experience has shown that it is not too acceptable because its coldness and consequent color loss are generally unsympathetic to the proper psychological effect desired in church lighting. This is not to say that fluorescent lighting does not serve its own function when properly used, but only to suggest that it is not conducive to the proper atmosphere in church interiors. Occasionally fluorescent lighting can be used as supplementary illumination from side coves. Care should be taken in using coves to avoid bright streaks on the ceiling fading off rapidly. Undesirable shadows can result where the light hits purlins or other protrusions on the ceiling.

CHANCEL LIGHTING

The climax of the interior architecture of the church is found in the chancel area, which should be softly illuminated yet highlighted from concealed sources. Accent lighting is given to religious art objects, enhancing their beauty and symbolic meaning in the ceremonies and service. Accent lighting is also given to the altar, the lectern and the pulpit. Approximately 40 to 60 foot candles are recommended for this area, though this may be higher. Approximately double the lighting intensity is recommended for these areas in contrast with the moderate lighting intensity in the nave. This will hold the worshippers' attention and will also bring out the colors and inherent beauty of the altar, chancel furniture, decorations, robes, etc. Adjustable flood lighting reflector fixtures, using both flood lamps and spotlamps can be concealed behind beams or projections to provide controlled illumination for the chancel area. In some cases, color filters can be used with the floodlamps to create the desired effect. Lighting of the pulpit and lectern should be pleasing and attractive rather than theatrical.

Supplementary illumination could also be considered for the choir area, if it is included within the confines of the chancel. In many cases, provision should be made for separate lighting for the choir for practice sessions. For other areas in the church building, such as the narthex, balcony, under balcony, sacristies, etc., ceiling type fixtures, recessed or pendant lanterns can be selected to match or harmonize in design and detail with the fixtures used in the main areas of the church. These generally can have the same ecclesiastical finish so that there is a continuity of fixture design and appearance throughout the entire building. Similar types of fixtures or fluorescent fixtures should be selected for the Fellowship Hall, classroom areas, etc.

While we have concentrated primarily on new church design up to this point, many of the items referred to apply just as strongly to the church which is remodeled and requires new lighting. Whether one is planning the lighting for a new church or for the remodeling of an older one, consideration must be given to the wiring which is to be used with the new lighting system. Care must be taken to insure adequate wire load capacity with consideration for future expansion of the lighting system. The average life of a church lighting installation should be between 25 and 35 years. We speak in terms of 20 foot candles as being adequate for lighting in the nave today. However, as lighting standards continue to increase, it is conceivable that in ten years the recommended practice for church lighting will call for 30 to 35 foot candles. If the lighting system which has been selected is in keeping with the architectural design of the interior—if it is properly sized for the area in which it is used or suspended—it should be possible merely to increase the lamp wattage or lamp size to increase the level of illumination required in order to have an up-to-date lighting system. It is much less costly for the engineer to specify more wire capacity in the ceiling today to allow for future expansion of the lighting system than it would be to replace the wiring completely 10 or 15 years hence.

All lighting fixtures should bear the Underwriter's Label of Approval. This indicates that the fixture has been manufactured to comply with the high standards of the Fire-Underwriter's Code for the church's protection.

The selection of the finish on lighting fixtures or the color of glass to be used (if hanging fixtures are considered) will depend entirely upon the interior decor of the church. The finish of the fixture should blend with other colors in the building. Proper preparation of the metals, such as electro-copperplating before applying hand-toned ecclesiastical finishes and quality materials used in the finishing process will assure durability and long life. A wide selection of glass is available and consideration should be given to the windows in the church, the colors and lighting effects desired. In many cases churches use colored art glass in the windows; these can be repeated in the lighting fixtures. Where faceted glass is used, fixture designs incorporating faceted glass panels can also be considered. The selection of materials is indeed a very important matter if one thinks in terms of the longevity of a church lighting system. While plastics may have certain decorative values or weight factor considerations, serious consideration should be given to their use 10 and 15 years from now with respect to increased lamp wattages, durability, etc.

There is no limit to the life expectancy of a church structure. Under normal circumstances—due allowance for population shifts, etc.—it continues from generation to generation. Church architects and lighting engineers have the knowledge and experience to work together to install a church lighting system which will be effective and functional. It can be more than a symbol; it can be a definite part of worship and a significant one. Since lighting is important not only to the architect of the building, but also in its functional aspect of "light for seeing and atmosphere," every sensible step should be taken to insure a good lighting installation. The architect should review the engineer's recommendations to see that they fulfill his requirements. Consider the lighting system; consider the maintenance problems; and give some thought to 5 or 10 years hence. The ultimate cost is less and the satisfaction is greater when the lighting in the church is designed and engineered objectively. Utilize the knowledge and draw upon the experience of the qualified manufacturers of church lighting equipment to resolve not only the simple, but also the very complex lighting requirements of the church. Lighting manufacturers have had broad experience, have seen a great deal of what is being done, know where the errors have been made, and are skillful, cooperative, and trained co-workers with the architect.
The Restoration of a Sense of Place*

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“I want somewhere, oh somewhere, Somewhere, O Lord, Somewhere, oh somewhere To lay my head.” (Negro Spiritual)

As this is written a lively discussion is raging in Boston about what to do with the hoary old name “Scollay Square” now that it is quickly being replaced by a shiny new complex of government buildings. Since the streets themselves have been rearranged and some of them actually eliminated, certain planners contend that Scollay Square simply does not exist anymore. Like the lost continent of Atlantis or that prehistoric dinosaur called the pterodactyl, it is simply gone. They have already succeeded in getting the name of the subway station changed to “Government Center.” There are other churls and curmudgeons, however, who insist that simply changing the layout and architecture of a place does not abolish the place. Regional planners are not alchemists. Scollay Square, argue the traditionalists, despite its massive face-lifting, has not been vaporized. It has a right to its name.

True enough, the final years before its renewal (or elimination as the case may be) were hard ones for Scollay Square. It was the favorite locus for tawdry bars, slot machine emporia, tattoo artists and dimly-lit striptease joints. It was the lonely sailor’s surest hunting ground and an embarrassment to the civic fathers. It is said that when its most famous building, the old Howard Theatre, was being jolted by the relentless wrecking ball, knots of men from all stations of life gathered at the site and wept. Once a legitimate theater and music hall, the Old Howard had finished its days as a burlesque house.

There can be no gainsaying the fact that in those last years before the bulldozers, Scollay Square had become a gawdy, seedy place. But, still it was a place. It had a certain character and ethos. It had a name. The disappearance of a sense of place, of the significance of particular spaces and locations, is one of the deplorable characteristics of our time. It is deplorable because just as our own personal identity is fixed for us in part by our feel for our own bodies and our names, our sense of identity as a society is mediated to us through the names of the places and occasions associated with the history of our people.

There is good clinical evidence to suggest that when an individual is deprived, even for a short time, of sense perception and environmental objects, he quickly loses his touch with reality and degenerates into a quasi-cataleptic state. He becomes confused, frightened and bewildered, unable to deal successfully with threats or challenges. This astonishingly rapid disintegration of personality has been observed for example in the so-called “sensory deprivation” laboratory of Dr. Abraham Maslow of Brandeis University. His experiments with many subjects seem to indicate that the normal functioning of personality depends on the subject’s half-conscious awareness of a background of sensory items of orientation. Ordinarily, a person is not aware of this background, but when it is taken away or markedly altered, his perception of reality is dangerously undermined.

Naturally, it is not possible under laboratory conditions to subject whole groups of people to systematic sensory deprivation or to severe alterations in their total environment. However, we are beginning to notice some disturbing changes in the behavior of groups when this happens outside the lab.

In our era of urban renewal, as whole landscapes are erased and new configurations replace them it is important to try to understand what role the sense of

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space and the continuity of relationships to places plays in the life of a human group. When dozens of families are suddenly moved from a so-called “slum” into a high-rise housing project, the personality derangement and pathology are frequently intense. There are people who never fully recover. Likewise, I have seen in families whose homes and neighborhoods have been leveled by the urban renewal bulldozer the same symptoms Maslow describes in his subjects. I can recall quite vividly a conversation I had two years ago with one of the women who had survived the Nazi destruction of the tiny village of Lidice in Czechoslovakia. The Germans had arbitrarily picked this hamlet to be the example of what would happen to other villages if deeds like the assassination of Heinrich Heydrich recurred. They came into the town, shot all the men over twelve, then shipped the wives to one concentration camp and the children to another. They burned the village completely, destroyed all the trees and foliage and plowed up the ground. Significantly, they demanded that on all maps of Czechoslovakia the town of Lidice must be erased. The woman survivor confessed to me that despite the loss of her husband and the extended separation from her children, the most shocking blow of all was to return to the crest of the hill overlooking Lidice at the end of the war—and to find nothing there, not even ruins.

There is a new Lidice now, perhaps because Europeans preserve more of a sense of the importance of places and their names than we seem to. I've recently been reading The Dog Years (NYC: Harcourt, Brace & World, 1965) by the young German author Gunther Grass. His sense of the meaning of the Vistula and of places along it for the Poles and Germans who live there comes through very strongly. But the same could be said for nearly every first-rate writer. True, the names of streets are changed there, too. I was in East Berlin two years ago when the square in front of the theater used by the Berliner Ensemble was officially changed to Berthold-Brechtl Platz. But when this happens the change is usually designed to enhance the historical connotations related to a place rather than to eliminate them. There is a growing resistance in Germany to changing the names of streets and institutions to keep pace with political developments. Even in East Berlin I once saw a sharp cabaret satire condemning this practice. The skit poked fun mercilessly at an imaginary school in Kopenick which had been called successively the “Kaiser Wilhelm School,” the “School of the Republic,” the “Adolf Hitler School,” the “Joseph Stalin School,” and the “Karl Marx School.” The parody was not lost on the audience. Many of them had gotten lost, as I had more than once, by following a map made in the West on which streets in the East, now renamed for Communist heroes, were still listed with their old designations. There is something almost instinctively revolting about the Nazi and Communist attempts to rewrite history, a tendency which appears in the renaming syndrome.

But the sense of continuity of place necessary to people’s sense of reality is not merely a matter of naming. In some ways to call a totally new place, or a place so radically altered as to be unrecognizable by the same name, is even more disorienting. Warsaw provides an incomparable example of the symbolic role a place with a name plays for a people. When the Poles began to rebuild Warsaw, ninety per cent destroyed by the Germans, they began with the ancient Stare Miatro, the “Old City,” a tiny core of buildings, monuments and churches at the center of the city. Although the Stare Miatro was not terribly useful in any practical sense, it provided an indispensable symbolic focus. The rebuilders, using detailed paintings by Canelletto and referring to yellowing floor plans and drawings, reconstructed the Stare Miatro brick by brick as it had originally stood. The Germans believed they had wiped Warsaw from the map, and so did many Poles. But once the Stare Miatro was reconstituted, the rest of the enormous task of reconstruction seemed worthwhile. “Warsaw” was once again something, some place. Life could go on.

Let me make it clear that I have no desire whatever to be identified with those reactionaries and romantics who oppose the removal of any edifice, however dilapidated, or the construction of any new building, however necessary. I am merely suggesting that in the massive rebuilding of whole sections and cities, one of the tests of any renewal plan should be the extent to which it incorporates the continuity of those objects of visual orientation, the pre-perceptive background which provides the people of a city with a sense of style and ambiance. This has to do not just with the preservation of worthwhile architectural monuments, but also with the perceptual field created by the relationships between buildings, streets and open spaces. The acid test of any good city planner should be his capacity to detect such spatial relations and preserve them while other things are changed. To do this he will surely have to listen intently to the people who live and work in the area, describing how they feel it.

There are places where this is being done. To take another example from Boston, historic Fanueil Hall, standing in a certain spatial relation to the old Sears Crescent, has created an axis of orientation within a section of the city for generations. Wisely, the redevelopment of that area will not only preserve Fanueil Hall, as could be expected, but will also preserve the Sears Crescent, not only for its inherent interest, but partially in the interest of the space it helps frame. An effort will be made to include this venerable “place” within a series of buildings in the area. Whether the plan will succeed remains, of course, a question, but the intention is certainly commendable.

It is probably true that the present erosion of our sense of place has resulted in part from the secularization of our culture with its divesting space of any sacral significance. It has arisen also from our high mobility, always accompanied by less reverence for place, and by the technological mentality of our time which allows man to rearrange the material world freely and without undue deference to some presumed inherent significance intrinsic to it.

Architecture is always one of the most reliable indices of our attitude toward space. This is noticeable first of all in our church buildings. The cathedral used to be the most prominent edifice in any city. Today, few skylines are dominated by church towers. But secularization has pushed more than just churches into the background. It has lessened our deference and awe for all authorities. Consequently, we no longer need massive public buildings to foster and express our awe. The “impulse to monumentality” has been lost. However, this should not be a matter of regret. Sir John Summerson writes in Progressive Architecture (June, 1965, p.144), of the things secularization has eliminated:

The corporate or social importance of religion was one of them. The sense of the dominance of a class—of the exclusive possession of certain privileges by certain groups of people—was another. Monumentality in architecture is a form of affirmation; and affirmations are usually made by the few to impress the many. Today, the few are becoming increasingly merged in the many and there are no groups within the community (possibly excepting the churches) who are anxious to express their corporate identities by gestures as costly and conspicuous as the erection of monumental buildings.

I have argued elsewhere (The Secular City, NYC, Macmillan, 1965) that this whole desacralizing and deconsecrating movement is due in large part to the impact of the biblical faith on Western culture. From the nomadic history of Israel, through the exile, the destruction
of the Temple and up to the conversa-
tions to allow these places themselves
sharp questions about sacral space. The
Judaeo-Christian tradition has raised
places are radically relativized by his
this same motif. One is the story of
transcendent freedom.
Two other biblical incidents confirm
same motif. One is the story of
Moses and the burning bush. God first
tells him to remove his shoes, for “the
ground on which you are standing is
desacralization of space is, I
believe, a necessary prelude to its hu-
manization. It delivers man from the
demons and banshees and renders the
world “mere world.” The earth is man's
garden, his responsibility, not a fitting
object of religious awe. Man is to wor-
ship God, and God alone. Freed of its
sacral aura, the world can now be re-
created by man. This desacralization
becomes negative only when its purpose,
the liberation of man for the service of
God and fellow man, is lost from sight.
Space is freed from magic so that it can
be thankfully used and delighted in by
man.

The process might be seen in four
stages corresponding to three meanings
of space and place theoretically:
1.) The first is magical space. Here all
space and place have an ambiguous de-
monic/benign character. Man cringes
before the world. He is the object of
demons. He must placate them and
be careful not to offend them.
2.) The second is sacred space. Here
the sacred places are distinguished from
the secular ones. Man moves back and
forth between the two. His world has
places, loaded with terrible signifi-
cance, but the world is dichotomized.
The relation of the holy places to the
secular ones becomes problematical.
3.) The stage of secularist space
comes next. Here all space is homogen-
ized and every place becomes inter-
changeable with every other place.
Locations, like the airports of big cities,
become indistinguishable and life be-
comes monochrome and lacklustre.
4.) The stage of human space, in
which both animism and abstraction
have been transcended now begins to
emerge. Space is experienced neither
as malevolent nor as infinitely malleable.
Space is for man, and places are un-
derstood as giving space, variety and orien-
tation to man.

This understanding of the human sig-
nificance of spatiality is given support by
two influential theologians of our era.
Karl Barth built his multi-volume Church
Dogmatics around the central motif of
the Covenant in the Bible. He contends
that the Covenant actually precedes the
Creation. God determines to be God-for-
us and God-with-us (Emmanuel) “before
the foundation of the earth.” For Barth,
therefore, the whole biblical epic—the
creation, the calling of Israel, the sending
of Jesus, the appearance of the Church—
all constitute the outworking of God’s
determination to be for man. Barth’s
theology supplies the basis for a sweep-
ning kind of Christian humanism. The
whole world, the place where man is not
is for him. It is man’s world, not in an
abstract or vacuous way, but through the
divine intentionality.

Likewise, Teilhard de Chardin empha-
sizes the evolution of the cosmos as a
humanizing process. The world becomes
more and more “Christic” and at the
same time increasingly man’s world.
Man becomes progressively more re-
 sponsible for its growth and guidance
and while assuming this station he par-
ticipates in the deepening and refining
of his humanity. Thus, the entire cosmos
is a place for man’s fulfillment and en-
hancement. The universe is neither
malevolent nor mechanical but “Christ-
ic,” i.e., the spatial dimension of God’s
concern for man.

The influence of Christianity on West-
culture has moved it from the magical
through the sacral stages of under-
standing space and place. But that
influence will be aborted if we now settle
for an abstract, geometric view of place,
deruded of its human meaning. We
should be very clear here about what
lack the Church and theologians should
take in moving us away from the flat and
anemic sense of place which now
plagues us. Naturally, theologians are
tempted to call us back to a sacred sense
of space, to add variety by extolling the
ruminous character of the holy places.
I do not myself believe this is the wisest
course. I believe we should remedy the
present erosion of the sense of place not
by a return to sacrality but by an empha-
sis on the human significance of space.

This leads us to a very important theo-
logical issue centering on the signifi-
cance of the Incarnation. It has a direct
carining on our philosophical view of
space. Although Eastern theologians of
the Incarnation have often interpreted it
as God’s effort to divinize man and sac-
racify the world, the Western and Augus-
tinian tradition seems more apposite
here. It views the Incarnation as the nor-
mative sign of God’s irrevocable com-
mitment to the humanization of man and
his milieu. Salvation is understood not as
making man into god, but as man’s being
saved from the false gods so that he can
be a true man.

Curiously, it is an architect and city
planner with a Greek background who
seems to exhibit best what this kind of a
theology of place might mean in the
building of cities. I refer to Constantinos
Doxiades, whose dialogues with the
Protestant theologian Truman Douglas
have recently been published under the
title, The New World of Urban Man
(Philadelphia and Boston: United Church
Press, 1965). In his contribution to the
dialogue, Doxiades refers to what he
calls quite aptly “the human scale,” as
the essential dimension of any city. He
means more than the fact that we usually
build doors and stairways on a scale
which comports with the physical di-
ensions of the human individual. He
means that there are also certain psy-
chological and sociological aspects of
human beings which need to be taken
Continued on page 30
"Art is man's nature, Nature is God's art"

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All architects are well aware that the design of a new church or other building requires recognition of the many complex problems and requirements involved, followed by the achievement of a satisfactory compromise between them. There is always some measure of conflict between factors involved, and a successful building, organ, ship, or other man-made product, can only be designed by clear recognition and study of all facts in the initial stages of the conception.

It is fatal to successful design if one major requirement is not fully recognized at this initial stage. It is worse still if others are also neglected as being of minor importance until the building is completed. The client then usually finds it impossible, or expensive, to rectify initial design faults.

All this is obvious, yet it is a fact that the vast majority of new churches built in Britain in recent years are musically unsatisfactory in major or minor degree, most frequently the former.

It also clearly shows that few church architects are sufficiently aware of the musical problems of church design (in which I include organ design, acoustics, the siting of musical instruments, choirs, and congregations, etc.), to be able to recognize that a problem exists at the initial design stage. Many a practicing pipe organ architect and builder try to encourage and help those designing new churches to recognize the problems when they are first encountered. Once there is recognition the major danger of complete or partial neglect is over. One can then seek specialist advisors and study the relationship of the problem to the concept of the proposed building and the particular client's needs.

Denominational differences of musical emphasis in worship are widely recognized. The Church of England and Roman Catholic Church use their buildings musically as a liturgical and musical concert hall to offer prayer and praise through the best of all the arts to God. To read the Word of God and to expound the Word of God, and to offer prayer, often extempore, by the Minister. Music is largely confined to congregational singing, with or without choristers.

There should be no real difficulty in designing a new church of small or quite large size, to be entirely suitable for the former. To be musically and spiritually elevating, while still remaining suitable for reading and preaching. But why is it so seldom achieved?

The difficulties of designing for non-conformist usage are undoubtedly greater, but why are the same mistakes made?

It must be remembered that there is only one Christian religious denomination, the Society of Friends, which uses no music in worship; and only one other, the Orthodox Church, which uses music but not the organ. The architect starting to design a new church must therefore at once recognize that, as well as designing a building, he is also designing a musical instrument, for any building or room in which music is performed is itself a musical instrument that can enhance or mar the pleasure of performers and listeners. Most of us know that we can sing solo with pleasure in the bathroom, but would never dare to do so elsewhere! Thus, before the internal shape of a new church and the positions to be occupied by priest or minister, congregation, choristers, and organ can be decided, we should first consider the building acoustically as a musical instrument (or in a special sense as a concert hall), as well as a lecture theatre.

There has been far too much tendency to regard the problem as one in which speech is always of prior importance and music may be neglected. To design the building entirely on concepts of architectural shape and siting of congregation and other components. To keep the ceiling fairly low to minimize construction costs. To add absorbent acoustic tiles to the ceiling and walls which may cause reflections, and thus ensure a very low reverberation time. To leave consideration of floor and other surfaces till last. Perhaps to make a convenient corner of the plans "Organ Chamber." To regard the advice of an Acoustic Consultant and an Artist Master Organ Builder as unnecessary and largely irrelevant. To assume that an electronic instrument (or so-called "organ") will be used for musical accompaniment and that even if it is, that it will never be replaced by a real pipe organ. Not all of these faults are always incorpo-

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rated in one church building. Most of them, and sometimes others, are however incorporated in far too many instances! It is hardly surprising that in such buildings it is often found that not only are conditions musically unsatisfactory, but also that even speech is lost or unintelligible at the back of the congregation!

It is high time that architects and church building committees realized that these advisors are always essential for a successful church building, and to realize that although acoustics is an inexact science, there is no need to sacrifice musical needs to those of speech. Both can be provided for. This conflict can now always be resolved satisfactorily. Even if satisfactory musical conditions in a large church involve unacceptable conditions for speech reception in some parts of the building, we now have electronic aids to reinforce speech and overcome these difficulties. Such aids are relatively inexpensive and should always be accepted in preference to compromising seriously the use of the building for singing and other music. This is not because music is claimed to be more important than speech, but because electronic aids for speech have reached a high standard of general acceptance while electronic aids for music have not, and probably never will.

Satisfactory acoustics for singing and other music in a church or concert hall are not solely those of total reverberation time. Nor is audibility of speech or music at the far end of a building a question of providing correctly positioned reflective surfaces to transmit sound like a light beam. Many recently designed concert halls and churches in which too much emphasis has been laid upon these and certain other factors have not proved wholly acceptable to many musicians or organ builders.

It is again becoming recognized that a church or other auditorium must have a musical presence of its own. In other words it must itself be regarded as a special form of musical instrument.

The participants in a church service may be regarded as a musical group or ensemble. Any musical performance requires all taking part to be as close to each other as reasonably possible, just as a conductor must be close to his orchestra, and the orchestra close to the singers it is to accompany and lead. The reason is obvious and well known; the relatively slow speed at which the pressure waves of sound travel. So here we have several more serious problems. What principles may be followed in arranging the positions of priest, choir, accompanying instrument, and congregation? How can the participants in a service be musically co-ordinated? How can the organ or other accompanying instrument lead a substantial congregation many of whom must necessarily be placed at an appreciable distance?

In designing a new church it is musically essential for the choristers and accompanying instruments to be placed where they are close to each other and reasonably close to

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the congregation. The choristers and organ or other instrument can only be placed near to the priest and to the altar if this does not involve divorcing them from their function of leading the congregation. Thus unless the church is quite small, it will be impossible to adopt the solution of having all participants in the service grouped around or near the altar.

We have already seen that except in the smallest buildings it is never musically satisfactory to place choristers and organ facing at 90 degrees to the longitudinal center line of a church. The penalty for doing so is too much volume of sound near them, too little at a distance, and attenuation leading to lack of rhythm and musical clarity for leading the congregation.

It is here that musicians and organ architects and builders come into head-on collision with many congregations, priests, and liturgical reformers. Usually in Britain it is the musicians and organ builders who have to bend and to accept musically unsatisfactory and mediocre results. In many other European countries, Protestant and Catholic, with higher musical standards and culture never wholly broken by the Reformation, the clear facts of musical church design are always accepted without question. When will our church authorities and congregations learn to accept them too?

It is too often assumed that an organ is the only musical instrument that will be used in a new church. Why not! It would also take this opportunity of suggesting that if the electronics organ is to be taken seriously by musicians as an alternative instrument to organ, piano, or small orchestra, its makers and users should stop trying and expecting it to imitate the pipe organ. They should instead concentrate upon producing really musical sounds naturally amenable to electronic production, and that having created a real electronic musical instrument they should give it a name of its own.

Thus, in considering the accompanying instrument for use in a new church we should bear alternatives in mind and also remember that if a piano or other solution is used at first, it is quite probable that another instrument will be used later on. Usually architects would be wise to assume (whatever their clients may say) that a real organ is likely to be installed eventually, and therefore to make provision for a suitable site or sites where one may be placed within the body of the building. This need not occupy a very large area.

It might also be remembered that a small orchestra has often in the past been used to accompany services in parishes that could not afford an organ, or contained nobody able to play a keyboard instrument.

I hope that the above will serve to give British church architects and church people a small glimpse at the close co-ordination of the arts of architecture, interior acoustic design, organ building, interior design, stained glass, etc., so often achieved in continental Europe, yet so rarely even attempted here. It is clear that the whole design, building and furnishing of a church should be conceived by the architect; that from the inception of each commission, he should gather around him a team of collaborators consisting of all the advisors and artists proposed to carry out the different parts of the work, and that having told them of the general concept of the design, they should work together to overcome the difficulties and changes that will be required before the final design is reached. Then each artist must be given complete freedom to present the outline sketches of his proposals for the organ, the glass, etc. The whole should then be approved by the church building committee.

The committee and architect should not demand exact details of organ or other artistic designs at this stage for the best work cannot be done in this way. They must satisfy themselves however that each artist can produce the sort of work they want and that it will be sincerely in sympathy with the complete building. Then we shall begin more frequently to see in Britain the new flowering of the arts of church and musical design which started in Denmark thirty years ago.

Of great importance in every organ installation is the location of the console. A time lag, caused by the speed sound travels through air, becomes apparent if the distance separating console and pipework exceeds 25 or 30 feet, and this makes it difficult to play with precision.

For the same reason the console must be located near the choir or other musicians. If the organist is also the choir director on occasion, he must be located so that the choir members can see him without resorting to mirrors. And it is very helpful to the organist if he can observe the chancel from his post.

The photograph illustrates a convenient arrangement where the organist does not direct the choir. A skilled organ builder will have helpful suggestions on this subject. We invite your inquiry.
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that he acquaints us with radically new experiences and if he be a great artist, we feel that these experiences are not freakish, but significant because in the main line of man's development.

"He voices:

The prophetic soul of the wide world
Dreaming on things to come.

"This is the life-giving quality of art, and the added comprehension so bestowed is, as we have said, an essential element in what is called the aesthetic emotion."

J.W.N. Sullivan, Limitations of Science Mentor Books, p. 175

GRA BOARD MEETING,
Washington, D. C.

At its regular fall meeting, twenty members of the Guild for Religious Architecture Board heard President Walther J. Wefel, Jr. (Shaker Heights, O.) report on the steady growth of Guild membership and the healthy activity in all aspects of the Guild program.

The Board reviewed the questionnaires on FAITH & FORM which had been returned by GRA members, as well as AIA members replying to the brief format in the AIA Memo. It was agreed that the response to the first four issues of the Guild journal, in its initial year of publication, had been generally enthusiastic. Readers had commented favorably upon graphics and editorial material. Guild members—and AIA members as well—indicated that they felt FAITH & FORM fulfilled a definite need in the publications field—and hailed its debut as being worthy of support.

Since the GRA has taken over the responsibilities previously assumed by the AIA National Committee on Religious Architecture, it is hoped that these can be implemented through Regional Conferences jointly sponsored by the Guild and local AIA Chapters. In anticipation of this effort, a Manual on Religious Architecture is being developed.

The annual National Conferences on Religious Architecture, sponsored by the Guild in cooperation with national religious as well as professional organizations, have now been scheduled through 1973. The GRA Board reviewed plans for the St. Louis Conference, April 29 through May 1, 1969, with the expectation that the central location of the Conference city, the vitality of the theme: The Decade Ahead in Religious Architecture, will result in a record attendance.

1968-69 Design In Steel Award Program

Complete details and entry forms for the 1968-69 Design In Steel Award Program are now available in a brochure published by the sponsor, American Iron and Steel Institute.

Copies may be obtained from the Institute's offices, 150 E. 42nd Street, New York City, or from the National Design Center, 415 E. 53rd Street, New York City, coordinator of the program.

The program, fourth to be sponsored by the steel industry through the Institute, will offer recognition to architects, engineers, designers, and—for the first time—artists for their imaginative use of steel.

Deadline for entries is midnight, January 17, after which they will be judged on January 23 and 24 at the National Design Center by a team of twelve leading professionals.

Following are the categories in which awards will be made: consumer products; industrial products; commercial equipment; transportation; residential construction; low rise commercial, industrial or institutional construction; high rise commercial, industrial or institutional construction; public works construction; and art in steel.

"Where the Action Is"

The World Center for Liturgical Studies, in collaboration with St. Joseph Magazine, announces publication of a provocative and timely series of essays by Dr. Trevor Wyatt Moore. The three essays—"A House for the People of God," "Where the Action Is," and "The Ministry of Art"—were originally published in St. Joseph Magazine, and are being reissued in a single brochure by the World Center for Liturgical Studies, Inc., with a foreword by the Rev. Canon Don H. Copeland. The essays provide a penetrating analysis of the liturgy, and the architectural and artistic perplexities facing it today. Single copies are 50c, and rates for bulk orders are available.

For further information write: The World Center for Liturgical Studies, Inc. P.O. Box 369 Boca Raton, Fla. 33432

The Center also announces two "Worship and Unity Dialog Weeks": January 13-17, 1969: The Expression of Ecumenical Space, co-sponsored by The American Society for Church Architecture with a team of architects and theologians participating.


The conferences are held at the Seminary of St. Vincent de Paul, near Boynton Beach, Fla. For registration information, write The Rev. Canon Don H. Copeland at the World Center address given above.

UNFOLD, a communication from the Department of Church and Culture of the National Council of Churches, 475 Riverside Drive, New York, N.Y., Room 510, is available to interested persons. Send your name to UNFOLD and you will be put on the mailing list. The Department was two years old in September and has an impressive record of activities. UNFOLD presents news and listings in the area of church and arts. It is published every two months except during the summer.

I think that, as life is action and passion, it is required of a man that he should share the passion and action of his time at peril of being judged not to have lived.

From THE MIND AND FAITH OF JUSTICE HOLMES

NOTES & COMMENTS Continued from page 3
into consideration in our building. For example, the relation between the height of buildings and the distance between them should take into account the angle of vision within which it is comfortable for a man to see the tops. If they are too high or too close, a boxed-in feeling develops. It is also possible to gauge to some extent how many visual signals can be added to a field of perception before a point of diminishing returns sets in, how high the decibel level of sound can reach before we really hear nothing. We can even begin to tell how long a street should run before a break or corner occurs so that it seems neither endless nor chopped up.

There is much more we could find out if we wanted to take the space-for-man idea seriously, with man as the crucially basic dimension. We could find it out by observing people accurately and also by questioning them carefully about their perceptions of the city and its parts, as Kevin Lynch did in *The Image of The City* (Cambridge: MIT Press, 1962).

This sounds like deriving what ought to be from what is, deciding how cities should be constructed from how man experiences space. But it is this only if we make the prior judgment that man and his experience should be placed at the center of our concern. This is clearly a value assumption shared in different ways by humanists, Christians and others. As a Protestant, coming from a tradition which has traditionally spurned most ideas of natural law, I must say that the idea of the "human scale" might provide a kind of natural law in which I could become interested.

Still, the "human scale" must in no sense be seen as changeless or unvarying. It is really an historical rather than a "natural" phenomenon, strictly speaking. All sorts of things influence and modify the way man perceives place and space. Jean C. Rowan writing in Progressive Architecture (June, 1965) quotes Moholy-Nagy in "Vision of Motion" as saying that "every great period in human civilization organically creates its particular space conception." Rowan asks how the astounding technology of our day will influence our perception and appreciation of space (p. 139):

> "Today, we have many spatial experiences that did not exist before. Air travel, for instance. After a jet flight among the clouds, can one be really stirred by the architectural space within the terminal building? Or, assuming that there is a church on top of a skyscraper, how will a worshipper react to it after a thrilling ride up into the sky in a glazed, exterior elevator? Is looking down 500 feet from an upper floor of a high-rise tower a greater spatial experience than looking up 100 feet at a domed ceiling? And in the not-too-distant future, when man will be floating through the vast spaces of the celestial void, how will he react to earth's puny architectural spaces, however great they might be in the traditional sense?"

But even though man's feel for place, and therefore aspects of the "human scale" are changed through history, still as we rebuild our cities today, we should be more conscious that it is for men that we are rebuilding—God, as St. Paul says, "has no need of temples of wood or stone," but man does need a place in which to be a man. He needs spaces in which to live and these spaces should be constructed with the conscious recognition that they are for man. There is nothing irreverent in this, since if the Christian Gospel is correct, God himself is for man, for his complete humanization and fulfillment. In the new human environment we are now constructing, should we settle for anything less?
In tune with the times

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Robert Calhoun Smith
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"In our office we find a great deal of pleasure in reading each issue of FAITH & FORM. I personally find the heading (FAITH & FORM) a bit hard to read; I think it should be made more readable, especially for the layman. The book reviews are interesting. The July issue has a wonderful report on the CCA national awards. I know advertising is most important, but let's keep a balance between articles, pictures, and advertising."

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