Peachtree United Methodist Church
Atlanta, GA
Completed 2002

Architects Jova, Daniels & Busby
Art Director E. Crosby Willet
Designer C. Z. Lawrence
Liturgical Consultant Donald E. Saliers, Ph.D.

Willet Studios
Where Light Learns to Speak...

800-533-3960
www.willetglass.com
10 E. Moreland Avenue
Philadelphia, PA 19118
Welcome to the last issue of Faith & Form’s 37th year of publication. This issue’s feature articles invite us to consider sacred architecture in guises very new and very old. The photographic essay of Hagia Sophia by architect and photographer Ahmet Ertug presents the splendors of this ancient building and its integration of sacred art and architecture.

In a sequel to his fascinating article on architectural quality in sacred spaces, multidisciplinary researcher Steven Orfield reports on the use of a technique to determine what congregations really want (compared with what they say they want) in the design of a new sacred space. Orfield’s article might be upsetting to architects and liturgical design consultants who rely primarily on their own past experiences with sacred spaces to determine what kind of design might best suit a congregation’s stated needs, but his findings suggest a way of working with congregations that architects and designers can benefit from.

In line with the theme of IFRAA’s recent annual conference in New York City, “Places of Transcendence,” Jon Bohlander writes on landscapes and outdoor spaces that provide spiritual sustenance in settings such as hospitals and retirement homes. Bohlander’s article is a good guide to the design of these spaces, and considers the links between contemplative environments and the healing process (giving further context to recent research into the links between prayer and healing).

The role of the arts in the education of the clergy is the subject of Jaime Lara’s article on the Yale Institute of Sacred Music. This journal has been a tireless promoter of the role of arts and architecture education for future clergy members, and Editor Emeritus Betty Meyer has explored this subject in a number of her columns. Dr. Lara, who serves on Faith & Form’s board of editorial advisors, writes about how exposure to architecture, art, and music becomes a critical part of the training of those who will tend to the spiritual needs of future congregations. It is an excellent example for other seminaries and theological schools to heed.

This issue is, I am sorry to say, the last one that will benefit from the involvement of Douglas Hoffman, AIA, Faith & Form’s out-going Managing Editor. Doug has been involved in the design of sacred architecture since the early 1970s, when he became a denominational architect for the United Methodist Church, and joined IFRAA. He served on its Board of Directors in the early 1980s, and in 1984 he helped manage the magazine as part of his board duties.

A decade later Doug became Managing Editor and since 1994 he has been responsible for securing advertising for the journal. He served as the IFRAA chair from 1997 to 1998, and last year Doug was the lead organizer of IFRAA’s fall conference in Cleveland, the theme of which was “The Treasures Within.” A few months ago, the first installment in Faith & Form’s Sacred Landmarks Monograph series, Sacred Meaning in the Christian Art of the Middle Ages, rolled off the presses. Doug led the efforts to create this new publication.

Working with Doug has been a pleasure (actually, one the greater pleasures of being part of this magazine), and although he is giving up his duties as Managing Editor, we’re looking forward to his continued involvement in IFRAA and Faith & Form. We also hope that Doug will find time to contribute an article now and then.
Lamberts Glass

Made for the possibilities of light.

Be sure the medium you use is as sublime as your message. Lamberts, one of the few remaining producers of handcrafted, mouthblown sheet glasses in the world, is the glass of choice for leading artists and architects. Everything about it speaks quality—from its 19th century production facility in Waldsassen, Germany, to its generations-old tradition of superior craftsmanship. Exposed to light, Lamberts Genuine Antique Glass displays inimitable transparency, brilliance and body. There's simply no substitute for Lamberts in art glass, church or secular applications. Available for immediate delivery, in a vast selection of colors and glass types, exclusively from Bendheim.

BENDHEIM

61 Willett St., Passaic, NJ 07055 Tel: 800.221.7379 Outside USA: 973.471.1733 Fax: 973.471.1640
3675 Alameda Ave., Oakland, CA 94601 Tel: 800.900.3499 Outside USA: 510.535.6600 Fax: 510.535.6615

View our palette of Lamberts colors at www.bendheim.com
Religious Architecture Quality, Revisited

By Steven J. Orfield

Religious architecture is a noble practice of designing spiritual spaces, but often the architect and the client have very different feelings about the intent and results for very predictable reasons. In an article in Faith & Form (Issue No. 2, 2002) I discussed the background of this issue and some initial quantitative subject research on a congregation’s response to architecture. Underlying this work is the belief that architecture can benefit tremendously from research regarding clients’ feelings and associations about design. As is most often the case, architects do not measure the congregation or use its members in any formal way to define what design solution will resonate with them. This failure to define the problem formally can be a limiting factor in design success. Often, the architect and the church committee use themselves as surrogates for the congregation. They believe that the problem is able to be dealt with in a dialogue between the committee and the architect. In actuality, as the committee members become more oriented to the language and analysis of the architect, they often move away from the feelings of the congregation. In other words, both the committee and the architect become specialists representing generalists. The committee, like the architect, is quickly caught up in the details, and often loses sight of the larger picture, which is the only thing that the congregation ever sees.

BACKGROUND

In my last article, I discussed the conjunction of three areas of research that could potentially benefit religious architecture:
1. The increasing quality and predictability of acoustical and visual analysis;
2. The increasing use of visual and acoustical perceptual simulation models;
3. The potential for occupancy research with the congregation.

One particular project was discussed in detail, the beginning of All Saints Lutheran Church’s search for a new sanctuary. On this project, we completed one visual PMR (Perceptual Market Research) jury prior to working with the church to select an architect (this was covered in the last article). The congregation was asked to select approximately two dozen churches that they liked significantly, and they selected 21 spaces. Digital photos were taken of each of these sanctuaries from the rear, for later presentation. A list of semantic descriptors was forwarded to the congregation with the request that they use this list as a guideline for selecting words that were descriptive of their discussion regarding church quality. A set of semantics that they selected was provided to Orfield Labs, and it is noted below:

- Religious – Not Religious
- Calming – Stressful
- Symbolic – Not Symbolic
- Traditional – Contemporary
- Public – Private
- Bright – Dark
- Spiritual – Not Spiritual
- Settling – Unsettling
- Inspiring – Not Inspiring
- Joyous – Meditative
- Liturgical – Not Liturgical

The congregation then gathered, and they were first presented with the semantic list which they had assembled, and were asked the rank the semantics in order of importance. This was the order of the average results:
1. Spiritual
2. Inspiring
3. Joyous
4. Religious
5. Bright
6. Calming
7. Symbolic
8. Liturgical
9. Settling
10. Traditional
11. Private

Next, the congregation was presented with each of the photographic images of churches projected onto a large screen, and each member of the congregation ranked each image. After the semantic differential rankings were completed, a discussion was undertaken, similar to a focus group. This discussion was used to understand what congregation members said they wanted, compared to their test rankings for how specific churches made them feel. The discussion showed a clear preference for modern, simple architecture, but the data showed a clear preference for traditional cruciform churches of barrel-vault and peaked-roof design. It was interesting that not only the data pointed to this disparity, but that many of the churches selected by this verbally pro-modern congregation for consideration were clearly traditional churches.

ARCHITECT SELECTION

After the first PMR visual jury process (using images of actual churches) was completed and analyzed, architects were selected for interviews. Part of the interview was a request to review the first visual jury study and to explain how it might be employed in the design process, with the aid of some simple sketches that the architects would prepare as part of their presentation. These visuals were very rough interior sketches that were meant only to illustrate how the architect interpreted the process and might respond to it. The sketches were not considered as candidates for further design. The architects were also informed that two additional visual juries would be included in the actual design process.

On the evening of the second set of interviews, an architect was selected by Church Committee vote, with Orfield Labs refraining from expressing an opinion until the committee was polled for their selection. The selected firm, Sjoquist Architects of Minneapolis, agreed as part of the commission to collaborate in the additional juries, which are the subject of this article.

PHASE II OF THE PMR JURY PROCESS

The jury was to be a three-phase process, with the first phase completed:

Phase I – Visual jury of existing favored churches
Phase II – Visual jury of hypothetical and derivative designs
Phase III – Visual jury on a final interior shape/detail options

The results of the first PMR jury strongly supported a rectangular floor plan with a vertical space and a peaked or barrel-vaulted roof. On three of the four most important semantic scales (as rated by the congregation) these two shapes were clearly ranked highest (Spiritual, Religious, Uplifting). The second jury was based on this spatial configuration, as well as a series of suggested roof shapes and room finishes. Inherent in this second jury process was our knowledge that both peaked-roof and barrel-vaulted churches have some predictable acoustical problems.

With this in mind, we provided the architect with an exact rectangle size for this second jury (based on a concert hall with excellent acoustics), and we requested that the two favored solutions, as well as others that the architect would develop within this framework, be drafted in computer illustrations, with all roof shapes being expressed as semi-transparent designs hanging within the rectangular space.
What we were testing were design metaphors, rather than structural design concepts. The interest was in eliciting responses that echoed in strength the responses to traditional churches that the congregation ranked so highly.

Architectural Response
We set a deadline for the images to be used in the second jury, and the project architect, Mike Berg, prepared the initial set of drawings for a first meeting to discuss the Phase II jury. Berg developed some concepts (Figure 1) that were intended to respond to this information, and we talked about them in detail.

What was expected were images that were very simple, with suggestions of spaces rather than detailed design, but the level of detail prepared was far beyond the purpose of a metaphorical image, adding potential visual “noise” to the images. My communication of what was desired had obviously not been clear and I requested that we start this phase again. It became clear that Berg and I were not communicating with each other what the goals and expectations were for this phase of the jury process.

I should have anticipated this from past research in the corporate field. Architects and designers, much like corporate researchers, often assume that they know what the question is and take on the problem of design as a solution to that (as yet) undefined question. Thus, there are often many solutions chasing an unknown question. The architect is most comfortable after the global issues are resolved (schematic design). Berg was assuming a vertical shape, and solving for many variables at once (fine interior shape, materials, surfaces, daylighting, etc.) but images of this complexity cannot be used for conceptual visual juries, as one needs to measure single variable changes, rather than content-rich images. As soon as this distinction was made, the images he came back with were superb in their approach (Figure 2), and were very clear in creating simple symbolic spaces that could be evaluated without the need for detail.

Results of Phase II Juries
The Phase II PMR visual jury was identical to the Phase I jury, and the Phase I jury responses had not been shared with the congregation, which would only be fully briefed after Phase III had been completed. This is because we did not want the bias of having the congregation respond intellectually rather than emotionally. The first jury had clearly shown that the congregation’s opinions and subjective perceptual ranking behavior were not aligned, and we did not want the congregation to move into the mode of trying to infer what kind of response was desired from the jury exercise (common in focus groups or design charrettes).

Our hypothesis in Phase II was that we could elicit responses from modern designs that were in some way metaphorical of those traditional churches preferred by the congregation in the Phase I juries. The results of the juries are often surprising in ways that had not been considered. The gross findings of this jury followed the hypothesis surprisingly well. Two images of these church interiors (the peaked roof and the barrel-vault roof) were ranked highest on the important four variables (Religious, Spiritual, Uplifting, and Joyous). Of the two, the barrel vault was the preferred option. The first PMR jury had not ranked any of the images of real churches high on Joyous, so we actually had concurrence with the first jury except for an increase in the quality of the Joyous semantic.

There were four interesting outcomes to the second jury. The first was that the congrega-
Faith & Form  www.FaithAndForm.com

designs were presented that had an off-center aisle. These designs were
that he should add what he was comfortable with. Thus, a series of
architect that I wanted to encourage rather than limit his options and
I thought a non-symmetrical design would be ranked lower. I told the
that all the preferred churches in Phase I were symmetrical, and that
non-symmetrical designs should be presented. The architect knew
is due solely to the addition of the cross as a religious symbol in the images.
Figures 3 and 4. Graphs of the two images show the increase in ranking that
image in the Phase III jury.

Figure 3 – Image with cross

Figure 4 – Image without cross

tion found it hard to read metaphorical images, and we actually ran the
jury twice. It was suggested by one congregation member that it would
have been helpful to run through all images quickly to allow the partici-
pants to see the range of stimuli, and we incorporated this suggestion in
our Phase III jury. The second interesting finding related to the fact that
the architect put a cross in some of the images, and we discussed the
bias that this might create, so all images with crosses were separated in
the final analysis. These images ranked highly, and were used as a basis
for measuring the symbolic ranking change due to having a cross in the
image in the Phase III jury.

The value of a cross in ranking images is suggested by the two images in
Figures 3 and 4. Graphs of the two images show the increase in ranking that
is due solely to the addition of the cross as a religious symbol in the images.

The third finding was based on a feeling of the architect that some
non-symmetrical designs should be presented. The architect knew
that all the preferred churches in Phase I were symmetrical, and that
I thought a non-symmetrical design would be ranked lower. I told the
architect that I wanted to encourage rather than limit his options and
that he should add what he was comfortable with. Thus, a series of
designs were presented that had an off-center aisle. These designs were
not only rated lower than others, but after the jury members of the con-
gregation were vocal about their distaste for non-symmetry. This was
the strongest expression in any of the juries.

The fourth interesting outcome was based on the fact that we asked the
architects to participate in the second jury to evaluate informally some of
the differences in response between the design firm and the congregation.
One difference was that the design firm ranked everything in narrower
positive and negative margins than did the congregation. The second
was that the design firm ranked those images with a cross to be lower in
value. Berg’s hypothesis was that he and Sjoquist, as architects, had been
trained to understand and interpret schematic images. He noted that as
designers, they understood the intent and potential of each schematic
design more fully than the jury members, and ranked the images accord-
ingly, rather than based on the “overt and obvious” image of the cross.

Phase III Jury

The Phase I and Phase II PMR juries were clear in isolating a feeling of
quality related to some traditional metaphors of Christian churches and
in demonstrating that these metaphors could be carried into a new non-
traditional design successfully. These Phase II juries actually maintained
and in some cases increased rankings over the traditional spaces. The
juries also confirmed a view that was our underlying belief in this exer-
cise: that a congregation and church committee should be allowed to
focus on church interiors without the design of the interior being “forced”
by the exterior design, as is so often the case. Ultimately, the worship
experience takes place inside, and the inside/outside hierarchy is useful
to help keep this in mind.

The Phase III PMR jury was our final exercise in measuring the con-
gregation, and its intent was to narrow the scope of possibilities for the
barrel-vault option and to explore a number of other questions. Due to
the earlier communications and the re-adjustments on the second
jury, it was decided that this jury would not be scheduled until the imag-
es prepared for it were completed and accepted. This jury concentrated
on four issues:

1. Ceiling shape and articulation
2. Daylighting design
3. Lighting and color
4. Finishes
5. The value of a cross in ranking images

A range of Phase III images are shown in Figure 5.

Figure 5 – Range of Phase III images

The ceiling shape and finishes were guided by the Phase I and II juries,
and the daylighting design was based on the collaborative understand-
ing between the architects and Orfield Labs that the daylighting should
be indirect, and the interior should be light and matte in finish to suc-
cessfully support the indirect daylighting design (direct daylighting often
makes visual adaptation to the interior difficult).

The issues of lighting and color were based on the fact that the church
was assumed to be chromatically quite neutral, so it became a some-
what layered design via natural and artificial lighting. The appearance
of the room would be one of the ceiling floating via daylighting from
the walls, so that when one walked into the unoccupied room, it was a
simple monochromatic and meditative glowing space, with brightness
diffusing from the top down.

The lighting was contemplated to allow for a number of options that
were part of an “architectural dynamic” of the space for “scene control”
of a variety of appearance criteria. One criterion was that daylighting
when present, should support the service. This means that daylighting
should have a forward orientation, and non-directional or south-facing
daylighting elements should be used (the front of the church was ori-
ented to the south for this reason).

continued on page 10
Another criterion was that colored lighting would be employed for design and liturgical purposes, so that the sanctuary and altar could be bathed in yellow at Easter, for example. This would include the control of front and side daylighting that washes these walls.

Another design criteria was related to apparent or visual shape. Since the vault would be executed as a semi-transparent element, it would be constructed of some type of mesh that could serve as a diffuse light reflector. This reflector could be featured or de-emphasized via lighting control. Thus, the room might appear essentially rectangular for one use, and for another the vault could be the major luminous feature in the space.

Underlying this visual discussion is the view that the temporal aspects of building interiors are a dominant stimulus when present. This is supported in traditional churches by the glow of south-facing stained glass on a clear day and by the dynamic daylighting transparency of much of modern architecture.

Phase III Jury Results
The Phase III results ranged from predictable to reinforcing new concepts.

Ceiling shape and articulation actually supported the favored design from Phase II, as well as an iteration of that design (both shown in Figure 6). Both designs featured a central barrel vault and two side or ambulatory vaults.

The two preferred daylighting design images (Figure 7) were supportive of the scheme from the Phase II jury.

The images of lighting and color use were extremely interesting, as they demonstrated very clearly that the congregation's preference for color-illuminated images versus chromatically neutral images was quite pronounced, providing some evidence that the use of colored lighting and scene controllers has the potential to provide measurable quality improvement to religious architecture.

Conclusion
This project, now split into narthex and sanctuary phases, will be under construction next spring. Working with the church and the design team has been a journey on many levels. It was suggested to the pastor and the church committee early on that this design approach might not only benefit the congregation of All Saints Lutheran Church, but could potentially provide a significant contribution to religious architecture. It was the belief of the church committee that in taking the extra time and effort that this approach needed for its definition and application, the congregation was supporting its own mission of contributing in a very important way to the design process from which it would benefit and which might be adapted by others. As a small and newer congregation with a limited budget, it was also suggested that the quality of architecture is not proportional to its cost. The pastor of this church understood this clearly from the outset and supported it very directly and unequivocally with his congregation.

Both Orfield Labs and Sjoquist Architects provided many hours of un-reimbursed time in order to allow this small congregation to take a journey of both faith and intellect. The congregation rose to the occasion with intention and direction, in a way that few large churches are comfortable in doing.  

Figure 6 – Phase III favored images

Figure 7 – Preferred daylight images
Hagia Sophia: A Vision for Empires

Editor’s note: The following text, written by Cyril Mango, is excerpted from the introduction to the stunning book, Hagia Sophia: A Vision for Empires (Ertug & Kocabiyik). The photographer Ahmet Ertug, an architect by training, has documented Hagia Sophia in sweeping views and intimate details, a few of which Faith & Form is pleased to present here.

Once upon a time there lived at Constantinople (if he ever lived) a holy fool called Andrew. His folly, which he exhibited in public, was contrived, for when he was by himself or in the company of his one disciple, he was the wisest and most pious of men. He was also a prophet who foretold exactly how the world was going to end. Before the final convulsions Constantinople would be wrenched from its foundations and sink into the sea. “Tell me, father,” asked the shaken disciple, “is it true, as some people say, that when that happens Hagia Sophia will not be submerged with the rest of the city, but will be suspended in the air by an invisible force?” “What are you saying?” answered the Saint. “When the whole city sinks into the sea, how will Hagia Sophia remain? Who will need her? Do you think that God dwells in temples made by human hands? What is true is that only [Constantine’s] column in the Forum [Cemberlitas] will remain, because it contains the precious Nails [of the Crucifixion]. Only this will be saved, so that ships will come and be moored to it, and the sailors will bewail this Babylon, saying ‘Woe to us! Our great city has disappeared into the depths of the sea!’” Strangely enough, Constantine’s Column is still there.

Does God dwell in hand-made temples? The “correct” answer, of course, is that He does not, but men have always been inclined to believe that whereas He is present everywhere, He is nevertheless more fully present in some places than in others. Here is how the historian Procopius put it with reference to Hagia Sophia: “Whenever anyone enters to pray, he under-stands at once that it is not by human power and skill, but by God’s will that this work has been so finely finished. His mind is lifted up to God and floats on air, feeling that God cannot be far away, but must especially love to dwell in this place, which He has chosen.”

As time went on, the supernatural character of Hagia Sophia became increasingly marked. It appeared that human hands had played only an ancillary part in its construction. Justinian’s master-builders, no matter how cunning, had done no more than translate into stone a design that was made in heaven and revealed by angels to the emperor — not to the architect. Its beauty was mystical and inexpressible. In this way human agency was reduced to a minimum. Hagia Sophia was the house of Wisdom “which she hath builded,” as the Bible says — built for herself, hence for her own habitation.

It was said that a few days before Constantinople fell to the Turks, on the night of Friday, May 25, 1453, flames were seen issuing from the windows of Hagia Sophia at the very summit. They united into a single flame, which encircled for a long time the base of the dome, then rose to heaven. The gates of heaven opened to admit the flame and closed again. The meaning of the story (which is reported by a Russian eyewitness) was that God had departed from Hagia Sophia, but other observers saw different phenomena that admitted of other interpretations: a supernatural light spread over the whole city, a thick mist, an eclipse of the moon. It could also be argued that God was about to return in a new guise.

A few decades earlier a Byzantine intellectual tinged by Renaissance humanism, Manuel Chrysoloras, took a significant step in shifting Hagia Sophia from the realm of the divine to that of human genius. He still admitted that it was a work of divine wisdom, which inspired in the observer the same kind of wonderment as the revolution of the heavenly spheres. Yet, even if one could not explain how the vault of Hagia Sophia was held in place, that had been done by an architect who was not guided by precedent, for nothing of the kind had been done before. He must have been a great geometrician who placed his trust in the harmonies of science and thereby proved not only his own genius, but that of humankind in general. Hagia Sophia remained inexplicable and inexpressible, but it was no longer a purely divine creation in which human agency had played little part. Instead, it was a proof of what man can achieve thanks to the elevation of his spirit.
View into the dome and apse.
180 feet above the floor.
Detail of mosaic figure of Christ, which dates from the end of the 13th century.
The pulpit appears as a ship on a sea of stone in the nave.
St. John the Baptist mosaic, whose small tiles give it a painterly quality.
Virgin and child, flanked by John II Comnenus and his wife, Irene.
Theological education is a hotly debated topic today. In a world grown increasingly secular on the one hand, and yet highly conscious of the role that religion plays in politics and contemporary world events on the other hand, today’s students and the general public are curious as to what religious people think and do. In the broadest sense of the term, “theological education” is what we are all about at Yale Divinity School and the Institute of Sacred Music (ISM), two complementary entities within the 300-year-old institution known as Yale University in New Haven, Connecticut.

Yale actually began as a seminary in 1701 for the education of Congregationalist divines and of young men for service in public life. As the seminary evolved into Yale University, other disciplines were added to the theological core together with secular subjects, eventually becoming one of the world’s premier research universities. Yale Divinity School likewise has evolved in recent years into a graduate school where women and men of all denominations can train for ministry in the churches, and also where those of other faith traditions or those who are looking beyond church ministry can receive an interdisciplinary education centered around religious belief. Whether students plan on working for the church or not, they realize that, in addition to Bible, philosophical theology, and ethics, the arts are a key ingredient to understanding the history of the church and its imaginative life. That is, today’s students are aware that the religious imagination and the liturgical imagination are equally worthy of academic study, and that the arts are formative of a religious perspective on life.

Within the field of sacred music, art and architecture, of painting and sculpture, of literary and rhetorical arts, and of poetry and liturgical drama, lie the raw materials and expression of theological education, where the most exciting and creative work is being done today. The clergy of tomorrow cannot be narrowly parochial in their education and formation; their parishioners are often highly educated and more keenly aware of the power of visual and musical culture around them. Even our own students who will go on to careers as concert artists, educators, nonprofit managers, socially-concerned lawyers, psychologists, or advocacy specialists, see that the various arts in theological education make for a human being broadly trained in the best of the humanist-religious tradition. This is part of the appeal of Yale’s Divinity School, and especially of the Institute of Sacred Music, which shares its campus and supports the programs of Religion and the Arts and Liturgical Studies there.

With its origins in the School of Sacred Music at Union Theological Seminary in New York City, the scope of the Institute’s activities has always been broader than its name would indicate. The School moved to Yale in 1973 and became the Institute with a vision that included the related disciplines of liturgical studies and the sacred arts, as well as sacred music. Today, these related disciplines include the study of the great religious literature of the past and present, as well as the visual arts of religious architecture, painting, sculpture, mosaic, etc. It is hardly surprising that our ISM students of music, as well as the students on the divinity side of the aisle, should consistently choose to enroll year after year in the course I teach entitled “The House of the Lord: Twenty Centuries of Church Architecture.” Our organists and choral directors, for example, know that it is impossible to understand sacred music in a vacuum, and that studying its ambiance, including details of the physical space, is a necessary part of the sacred context. This is much more than mere attention to church acoustics; it demonstrates a realization that the architecture and interior liturgical design have called forth or stimulated certain compositions and styles of music. Moreover, these students will spend many years of their lives making music in liturgical space, so they have a vested interest not only in what it sounds like but how it looks.

“The House of the Lord” is a core course offered every spring semester. By January when the course begins, our new students have settled into patterns of graduate study and know their way around the Institute, the university, and the city of New Haven. I have the good fortune to offer the course with the

*ISM students are exposed to a range of arts that are not typical of seminary training.*

*Photo: Courtesy of Yale Institute of Sacred Music.*

---

Jaime Lara is Associate Professor of Christian Art and Architecture, Chair of the Program in Religion and the Arts, and is a member of Faith & Form’s editorial advisory board. Parts of this article originally appeared in PRISM, vol. XII, no. 6, published by the Yale Institute of Sacred Music (www.yale.edu/ism).
encouragement of the Yale School of Architecture as well as the History of Art Department, which have shown support for the interdisciplinary possibilities. In recent years I have had teaching assistants who are third-year architecture students and who bring their own diverse faith traditions and instincts to bear on understanding sacred space and liturgical needs. Some of my best assistants have been Buddhist, Jewish, or Zoroastrian.

The course itself is divided into two parts. The first, spanning two-thirds of the semester, is an historical survey of Christian church architecture from beginnings until the present day, although we actually begin even earlier with the Jewish structures of the Tent of Meetings, the Temple of Jerusalem, as well as ancient and modern synagogues. The students in the class are a paradigm of the interdisciplinary enterprise, representing the myriad of faiths and career paths. In addition, there are several ISM students who have studied architectural history before coming to Yale and who have the opportunity to teach a class with me on their favorite period of liturgical space.

While the first two-thirds of the course is essentially historical-iconographical, in the last third students are required to gain practical firsthand experience of the principles studied by drawing plans, building a simple scale model, and presenting their project for a contemporary house of worship. They are exposed to the sophisticated art of computer modeling and the adaptive reuse of everyday materials and found objects. Most work in groups, and all have access to the expertise of the teaching assistant/architect, who helps them obtain the materials, and provides them with instruction on drawing and model-making. I have found that having to create a physical representation of their ideal contemporary building and its furnishing is much more educational than merely describing in prose what their church, synagogue, or mosque will look like and how it will function. Last year, for example, two creative students built their project out of Lego blocks, a total of 4500 pieces, complete with disabled-access ramps, an immersion font for adult baptism, and even an espresso bar in the narthex! Our organists and choral directors always surprise me with the ingenious location of their choir areas and pipe organs; as musicians, they are willing to be quite experimental.

Virtually all our students will be involved in some capacity during their vocational lives in the design or redesign of sacred space. They might be pastors, church musicians, or lay leaders on church vestries or boards. The hands-on experience in practical collaboration they receive in this course will prove invaluable to them as they go about their life’s work. Having to work on a building committee can be taxing, and we all know that when it comes to religious space feelings run high. Having a committee member, either clerical or lay, who has studied the 20 centuries of Christian architecture and who has an insight into a building’s liturgical function, is the envy of every denomination.

In addition to the historical studies and the class presentations, we use some class sessions to visit historic houses of worship in the New Haven area and analyze how they work for liturgy and for the religious
imagination. This year we will visit the three churches on the New Haven Green, as well as St. Mary’s Church and Christ Church downtown, and also St. Barbara’s Greek Orthodox Church and B’nai Jacob Synagogue in Woodbridge, Connecticut. That is quite a panorama of liturgical practices and building types, from neo-Gothic to colonial to modern.

The course has been greatly helped by the state-of-the-art audio-visual equipment that we have in the ISM Great Hall. I can simultaneously use two slide projectors, a video or DVD projector, play a music CD, project a PowerPoint presentation from a computer, or hook up to the Internet and project images with sound from web sites. We use several “fly-through” animated websites, which allow the students to virtually enter a historic building like St. Mary Major’s basilica in Rome, or Amiens Cathedral in France, and look around in a 360-degree view. The Institute has also purchased commercially available fly-through programs of St. Paul’s Cathedral in London, St. Peter’s Basilica in Rome, and a virtual tour of Old Jerusalem.

We have begun a collection of teaching models that were commissioned for use in this course. Currently we have a model by the architect Cyrus Subawalla of the original St. Peter’s Basilica that was constructed by Constantine’s architects in 320 CE. A second model represents a typical evangelization complex from 16th-century Mexico used for the conversion of the Aztecs; it was constructed by the architect Christian Kuttel. This latter model of the Franciscan building at Huejotzingo also happens to be the centerpiece of my recent book, *City, Temple, Stage: Eschatological Architecture and Liturgical Theatrics in New Spain* (University of Notre Dame Press). The church, friary, atrium, outdoor chancel, and four stational chapels were designed to replicate the Temple of Jerusalem as seen in the vision of the prophet Ezekiel (40-44). It was designed to be used by Aztec Christians, believed by the friars to be descendants of the lost tribes of Israel, in the last age of the world then commencing in the New World. I also use this model in one of my other courses, “The Art and Architecture of Conversion and Evangelism,” in which we study Christian missiology from the point of view of its material culture.

Another teaching model is in progress: Chartres Cathedral. It will be a “doll house” model; that is, it will open to reveal human figures to scale that can be positioned in the building to demonstrate how the various liturgical events unfolded and how the building—with its labyrinth,
crypt, choir stalls, and chapels—would have worked. My colleague, Professor Margot Fassler, is one of the world’s experts on the music and liturgy at Chartres, and we co-teach a course on medieval visual-musical culture. Other models are projected for the future. I am hoping to obtain a model from the architect Frank Gehry, designer of the new Disney Music Hall in Los Angeles. Gehry taught a studio course at Yale School of Architecture three years ago where I acted as his liturgical consultant and fictive client; his architecture students designed various “alternative cathedrals” for the city of Los Angeles. They were all spectacular designs, but perhaps the best was by a Buddhist student who had a great sense of architectural drama. Frank Gehry was among the competitors for the design of the “Millennium Church” on the outskirts of Rome, and he has a great interest in church building.

Our 60 enthusiastic students—musicians, architects, and theologians—have at their disposal a kaleidoscope of resources and possibilities, and we’re proud of it. At what other institution than the ISM could you find gallery space devoted to the display of contemporary and classic works of religious art? At what other divinity school could you find a more extensive library collection of books and materials on religious art and architecture than ours? And at what other center of graduate study could you find a department of art history, a music school, an architecture school, and a theological school for clergy and lay leaders that cooperate to research and study the great tradition of sacred space down through the ages? At 30 years old, Yale University’s Institute of Sacred Music—including its components of Sacred Arts and Worship—is a place like no other. It serves as a model of what other institutions might do to expose future clergy and lay leaders to a sacred world shaped by architecture and the arts, which they in turn will help shape in their careers.
The Garden as Spiritual Place

By Jon Bohlander

The church, synagogue, mosque, and temple have traditionally served as the center of the community. These buildings provide a common ground for a diverse mix of races, ages, cultures, and genders to come together in prayer and worship. They provide a forum for social support, emotional healing and interaction among individuals or groups in a community, and in many cases, they even sponsor healthcare institutions that provide sanctuary and medical treatment to the ill, elderly, disabled, or destitute.

Specialty gardens can help support both the healing and spiritual goals of hospitals and retirement communities. These environments address more than just the physical well being of the members, patients, or residents. They can provide spiritual healing and the maintenance of one’s health, equally nurturing the physical, psychological, and spiritual aspects of a person’s and become part of the healing process.

Calm in the Garden

One of the ways this trend is being manifested in healthcare settings is through therapeutic gardens, or healing environments, that provide the patient, resident, staff, and visitors an opportunity to interact with nature, areas for active or passive exercise, and opportunities for private or social interaction. These are the fundamentals of design described by environmental psychologist Roger Ulrich, professor of architecture and landscape architecture at Texas A&M University, and director of the Center for Health Systems and Design, in his carefully researched design theory that states that gardens can improve medical outcomes by providing opportunities to maintain a sense of control, social support, exercise, and exposure to nature. Ulrich and others, such as Rachel and Stephen Kaplan, professors at the University of Michigan in the School of Natural Resources and Environment and the Department of Psychology, are leading the way in studies to prove the health benefits and stress calming attributes of nature in the medical realm, and how humans respond to nature in their every day lives.

The notion of nature, or a garden, as a healing environment can have measurable benefits within the medical community, but it is important to recognize that these same principles and elements of a healing environment can be applied to our religious institutions and places of worship, as they are often integral to the healing process as well. This is where the most important aspects of a religious institution overlap Ulrich’s model of the principles of a healing environment. The garden provides a physical space within both of these settings to administer or practice one’s beliefs. This is evident throughout many of the world’s religions where such environments as labyrinth gardens have been created to provide a setting for meditative journeys, or Zen gardens within many Japanese cultures as a place of contemplation. The garden as a setting for prayer or meditation can be part of the healing process as it allows individuals coping with challenging and stressful events an opportunity for social support and the ability to regain control, or comprehend their situation. Healthcare and religious institutions are equally important to the health and well-being of an individual or community, both physically and spiritually. The healing process goes well beyond administering a physical remedy or cure. An individual’s faith and the strength of their congregation or community can have an equally profound effect upon one’s recovery, attitude, or ability to deal with change or loss.

Healing Environments Defined

An exploration of the term “healing environment” often leads to a loosely defined subject that is open to interpretation. Words that are often used to describe or qualify these spaces within the design community include: therapeutic, enabling, restorative, rehabilitative, meditative, or spiritual, to name a few. However, none of these words clearly define for whom or for what these spaces are intended. Understanding what elements make up these spaces is often fuzzy as well. A simpler way to look at it is that all of these spaces are intended to elicit a positive or healthy outcome upon the user’s physical, psychological, and spiritual well-being. The elements to incorporate are dependent upon the user and how they interact with the space. For example, within the medical realm a person may be recovering.
from an accident and in need of an encouraging space to begin their rehab, dealing with a serious illness and seeking quiet solitude, or simply in need of some social interaction or passive recreation. Much the same, within a religious institution or at a place of worship, these spaces can provide a positive setting for individual prayer and meditation, the assembly of support groups, or a setting for classes, activities, and community programs.

A good starting point to determine which elements of a healing environment are appropriate within a religious institution would be to examine the principles of one’s physical, psychological, and emotional well-being. Within the healthcare setting, understanding whom the users will be, their needs and limitations, and the surrounding context can easily determine the qualities of a space and the elements that respond to those various principles. In a rehab hospital, it would be essential to include physical choices and challenges such as ramps, stairs, and handrails to facilitate physical therapy programs and the restoration of body functions. At a retirement community, spaces for active or passive exercise are important to maintaining life functions. Offering opportunities for social interaction can deter the negative effects of depression, anxiety, and boredom. However, within a religious institution, the definition of the space and the elements to include need to be broad and diverse. Being flexible to the variations in practice and belief within a congregation and responding to the various demographics are important factors to address. Understanding the role of the church and fundamental beliefs, practices, and traditions will also be essential to the success of the space.

**Ancillary Benefits of Gardens**

Addressing the physical well-being of an individual or congregation may be the most easily discernible benefit a garden space can provide to a religious institution and its sur-

Roger Smith Memorial Garden in Friendship Village senior living community in Schaumburg, Illinois, offers several seating areas and a large overhead trellis.

Therapeutic Water Garden at Edward Hospital in Naperville, Illinois, features a natural stone
rounding community. The implementation and maintenance of the garden will serve as a healthy activity requiring the congregation’s ongoing involvement. Fruits and vegetables grown in the garden can contribute to food drives, bake sales, or other community outreach programs. Flowers grown in the garden can be used for floral displays or included in care packages for the sick or elderly of the community. Spaces within the garden might be used for plays, youth programs, choir performances, yoga, support groups, or special services. These gardens can also serve as an excellent setting for festivals, celebrations, ceremonies, and services that are specific to the denomination or community.

The physical layout of the space is extremely important to consider as well. Religious symbols or symbolism are closely identified with many faiths and represent a level of detail that must be carefully considered. Providing opportunities for individuals or groups to interact separately within the garden will allow for a variety of public and private activities to occur. The opportunity for shade and protection from the elements is desirable and will positively enhance a user’s experience as well. These are just a sampling of the many physical benefits a garden can provide to a religious institution, and the importance of having a space that is flexible and able to respond to the current and future needs of its users.

**Conclusion**

How a garden can promote psychological and spiritual well-being within an individual or congregation can be unique to the various religions, practices, or beliefs. It will be important for the designer to understand the teachings and beliefs of the religion and the needs of the congregation to successfully address these issues. A garden or healing space can facilitate social interaction within an institution and provide a healthy and supportive environment for individuals or groups to grow their faith during times of stress or uncertainty. These spaces can also serve as a sanctuary within the confines of the church, synagogue, mosque, or temple for private meditation, prayer, mourning, consultation, or the development of one’s devotion or relationship with God. Unity is another facet these spaces should strive to achieve as they can provide supportive settings for groups or individuals to share in their faith.

The introduction and significance of gardens is common to many religions and practices, from the Garden of Eden in the Old Testament, to the Koran’s representation of paradise as a garden, or even the creation of Greek mythology and Gaia, as mother earth. Whatever the case, nature is a fundamental aspect of many religious beliefs and practices. It represents the natural cycle of life, and the mystery of growth and renewal. It is a common element that transcends the many cultures and societies of the world. It has maintained its ability to nurture and heal civilizations throughout time, and it is now the responsibility of today’s religious and healthcare communities to expand upon this vital resource and its many benefits to our physical, psychological, and spiritual well-being.

**Common Elements to Include in Spiritual Garden Environments**

- Flexible, programmable spaces
- Public and private areas
- Sense of mystery or discovery
- Positive distractions – voluntary or involuntary stimulus
- Lush plantings with access to plant material at various levels
- Opportunities for passive or active recreation
- Seasonal interest
- Elements that attract wildlife
- Opportunities for personalization and a sense of ownership
- Protection from the elements (sun, wind, rain, temperature)
- Elements that engage all the senses
- Contrasting colors and textures
- Moveable furniture with arms (preferably wood w/padding)
- Opportunities for prospect and refuge (overhead canopy with views out)
- Landmarks, destinations, and focal points
- Water (natural or decorative)
- Elements that maximize awareness and orientation
- Distinguishable signage and access points
- Complimentary relationships between indoor and outdoor activities
- Transitions spaces from indoor to outdoor
- Greater level of detail

waterfall that flows into a recirculating stream filled with several dozen Koi.
**Notes & Comments**

**E. Fay Jones, 1921 – 2004**

Noted chiefly for his wonderfully delicate chapels in wooded settings, renowned architect Euine Fay Jones died on August 30. His work was honored by numerous design awards. For 35 years he taught at the University of Arkansas School of Architecture.

Jones was born in Pine Bluff, Arkansas. A “Popular Science” film on Frank Lloyd Wright’s Johnson Wax headquarters, which Jones viewed at the local cinema in 1938, inspired his career in architecture and introduced Jones to the work of the man who would become his mentor. After serving as a Navy pilot during World War II, Jones studied architecture at the University of Arkansas and at Rice University.

In 1953 Jones began his association with Wright, serving as a fellow at Taliesin West near Phoenix in the spring and spending the following summer with his family at the Wisconsin Taliesin. Jones developed a friendship with Wright, returning to Taliesin regularly and hosting Wright at the University of Arkansas in 1958. Wright’s emphasis on simplicity, native materials, and seamless integration between the built and natural environments deeply influenced Jones’ work.

Throughout his career Jones focused primarily on small projects, designing 135 residences and 15 chapels and churches in 20 states, as well as fountains, gardens, and commercial buildings. Soaring interior spaces, open expression of structural elements, careful detailing, and the use of native materials characterize his style.

Over the course of his career Jones received more than 20 national design awards, including an AIA Honor Award for Thorncrown Chapel (drawings left) in 1981. At a White House ceremony in 1990, Jones was awarded the highest professional honor an American architect can receive, the Gold Medal of the American Institute of Architects. In a national survey conducted by the AIA in 1991, American architects ranked Thorncrown Chapel as one of the five best buildings by an American architect in the 20th century.

**J. Irwin Miller, 1909-2004**

The man who built architectural patronage into a fine art, while changing the face of Columbus, Indiana, J. Irwin Miller helped to create one of the greatest concentrations of modern architecture (including a number of landmark churches) in the U.S. Miller, head of the Cummins Engine Company, started a program in the 1950s to pay the architectural commissions of some of the world’s greatest architects who designed structures for Columbus. But his experience in commissioning great architects started in the 1940s, when he advised his aunt and great-uncle on the selection of Eliel Saarinen to design the First Christian Church. Years later, Miller brought Eero Saarinen to Columbus to design a number of projects, including the North Christian Church (above) in 1964 (Eero’s last building). As recently as 2001, IFRAA held its annual conference in Columbus.
Notes & Comments

Places of Transcendence
The theme of this year’s IFRAA meeting in New York City was “Places of Transcendence,” and the two-day conference included visits to several contemplative environments that straddled the sacred and the secular. The contemplative space shown above was designed by artist Eric Karpeles for the HealthCare Chaplaincy in Manhattan. The artist explained to conference visitors how color and light were used to create an environment that would “engage the imagination of the chapel visitor and encourage a transition to a contemplative state of being.” Also on the tour was the newly reopened St. Paul’s Chapel near the World Trade Center site; Ground Zero itself; a Richard Upjohn church from the mid-19th century that has been converted into a night club; the Marble Collegiate Church; the Isamu Noguchi Garden Museum; and the Presbyterian Church of New York. The conference also included presentations by Rev. Patrick Russell (who spoke on the use of neuroscience in understanding the creation of contemplative spaces) and Steven Orfield, whose research into how congregations make decisions about the design of their sacred spaces is the subject of an article in this issue. Photo: Christopher Burke

Send Your News to Faith & Form
The editors of Faith & Form want to bring its readers the latest news of those involved in the fields of religion, art, and architecture. Send press releases and materials to the attention of Michael J. Crosbie, Editor, Faith & Form, c/o Steven Winter Associates, 50 Washington Street, Norwalk, CT 06854; fax: 203-852-0741; email: mcrosbie@faithandform.com.

Quote of Note
“The Church must be forever building, for it is forever decaying within and attacked from without...”

T.S. Eliot
Architects Directory

ADW Architects, PA
Specializing in churches for 28 years.
1401 West Morehead Street
Suite 100
Charlotte, NC 28208
704-379-7109
FAX: 704-379-1920
showell@adwarchitects.com
www.adwarchitects.com

BIRSCHBACH & Associates, Ltd.
Allan R. Birschbach
PO Box 1216
Appleton, WI 54912-1216
920-730-9200
FAX: 920-730-9230
ar@birschbach.com
www.birschbach.com

Bissell
George Bissell
Liturgical consultants, planners
and designers of sacred spaces,
from remodels and additions to
major complexes.
3422 Via Lido
Newport Beach, CA 92663
949-675-9901
FAX: 949-675-9962
birsch@aol.com

Brown & Teevey & Associates Architects, PC
Jack W. Brown
4190 Telegraph Rd., Suite 2700
Bloomfield Hills, MI 48026
248-664-8777
FAX: 248-664-4605
bta@uol.com
www.bta.net

CCBG Architects, Inc.
Brian Cassidy, AIA
Specialists in master planning,
design, and interiors for religious projects.
818 North First Street
Phoenix, AZ 85004
602-258-2211
FAX: 602-255-0909
info@ccbgarch.com
www.ccbgarch.com

CCBG Architects, Inc.
Darold Davis, AIA
Specialists in master planning,
design, and interiors for religious projects.
2130A Kettner Boulevard
San Diego, CA 92101
619-234-2255
FAX: 619-234-2255
info@ccbgarch.com
www.ccbgarch.com

Conce Wayne & Associates Inc.
Maurice N. Finegold, FAIA
77 North Washington Street
Boston, MA 02114
617-227-9272
FAX: 617-227-5582
mafinegold@aol.com
www.finegold.com

Fleming | Associates | Architects
Scott Fleming
1204 Poplar Avenue
Suite 106
Memphis, TN 38117
901-767-3924
FAX: 901-767-7136
sfleming@flemingarchitects.com
www.flemingarchitects.com

Fuller Architectural
John M. Fuller, AIA
68 Court Square
Suite 200
Mocksville, NC 27028
336-751-0400
FAX: 336-751-1660
fullerarch@aol.com

Graham & Hyde Architects, Inc.
James M. Graham
Master planning, architecture and interior design for religious and educational facilities.
1010 Clocktower Drive
Springfield, IL 62704
217-787-9830
FAX: 217-793-6465
gh@gh-inc.com

Aaron G. Green & Associates, Inc.
Jan Novie, President
5 Third Street
Suite 224
San Francisco, CA 94103
415-777-0530
FAX: 415-777-1014
jnovie@agaarchitects.com

Groth Design Group
Mike Groth, AIA
NSB Professional Park, Columbus Rd.
PO Box 332
Cedarburg, WI 53012
262-377-8001
FAX: 262-377-8003
info@gdg-architects.com
www.gdg-architects.com

Hamblin Associates Architects
Ken Hammel
Specializing in design of spaces for worship, fellowship, and education for all denominations.
26 West Orange Street
Lancaster, PA 17603
717-393-3713
FAX: 717-393-8227
kahamblin@hamblinarch.com

HGA - Architects
John Justus, AIA
Full-service architecture and engineering firm with additional offices in Minneapolis, MN and Milwaukee, WI
616 1/2 Santa Clara Dr.
Sacramento, CA 95661
916-787-5125
FAX: 916-784-7738
jjustus@hga.com
www.hga.com

HH Architects
Jerry L. Halcomb, AIA
5910 N. Central Expressway
Suite 1200
Dallas, TX 75206
214-404-1034
FAX: 214-404-1034
jhalcomb@hharchitects.com
www.hharchitects.com

Betty H. Meyer is Editor Emeritus of Faith & Form

“The Power of Light

Just One More Thing... * Betty H. Meyer

“Welcome to the Next Church” were the words that caught my eye as the subject of an article in Atlantic Monthly magazine. Readers were told that “centuries of European tradition and Christian habit are being deliberately abandoned, clearing the way for new contemporary forms of worship and liturgy.” I remember being encouraged. Tradition, I thought, is made to be changed and we need to be more inclusive of other faiths. Our loyalty should be to the spirit of truth rather than a particular truth.

But this was before the war. Now diversity is eluding us and fundamentalism is growing again in all our faiths. It is insisting on preserving the past rather than searching for new truth. James Smucker, a United Church of Christ minister writes of commonality. “I am not talking about one world religion, but about people of all religions sharing a common concern for the human.” Is this not the purpose of an interfaith forum on religion, art and architecture? Do not all three involve the human?

Architect John Wilson points out in one of his articles that recent architecture has all but robbed us of diversity. “Much of the architecture that I see in magazines,” he writes “reflects the strong architecture seen in previous magazines. The form arises from the life encoded in the program wedded to the site. This robs us of diversity.”

While I was feeling a little depressed about all of this, I received a manuscript from James Oleg Krulhy, an architect, entitled: “The Essence of a Multi-Faith Center.” It began with the question: Can one express architecturally the common thread that ties all faith groups together? Or is it impossible to avoid creating a space that is so non-specific that it has no meaning at all?

Kruhly and his associates were asked by Pennsylvania State University to design a 26,000-square-foot addition of multi-faith space to the existing Eisenhower-era chapel. “Having designed worship spaces for different faith groups,” he said, “I longed for an opportunity to create a more basic, abstract space that would speak to man’s essential need to worship a Creator.”

He began the design process by asking ministers of more than 30 denominations and faiths to write a one-page summary describing the essence of worship space for their particular group. Not surprisingly, this was difficult. Beyond particular icons, the most common characteristics described were a sense of reverence, a sense of aspiration, and a sense of awe. While he acknowledged that the basic form derives from function and how the materials are used, Kruhly realized anew that pretentiousness, excessive decoration, cleverness in details, and artificial materials would all detract and weaken the simplicity that he wanted so much. He did not want function to dominate the character of his space, but hoped that a sense of beauty would be strong enough visually to transport the individual from immediate concerns to a larger sphere of meditation.

This goal, he writes, “provided the key to the design process for Penn State Spiritual Center. In the end we found light to be the most common thread capable of holding faiths together. From Genesis to the Koran, the dominance of light has been unmistakably the most moving expression of the beauty and power of God.”

Kruhly speaks of visiting Ronchamp 25 or more years ago and being so profoundly moved that he has waited ever since for the opportunity to design a space where light is equally as important as in Ronchamp. He believes that large-scale splayed masonry recesses—interior and exterior—responding to the curving floor plan have allowed a soft and diffused light to penetrate his interfaith space.

“The true purpose of my building,” he writes, “is to promote unity among diversity. Even if a universal space cannot provide all the richness of a particular faith, it can reinforce the commonality of the faiths...a reverence for a Creator, the world created, and all its inhabitants. It will establish beauty.”

After reading James Kruhly’s manuscript and looking at his photographs, I felt hope again because I knew that if this is happening in Philadelphia, it must be happening in other places too. Other architects must be longing for the same challenge to design a multi-faith space. I am sure, too, that some clergy must be trying to invite and persuade their congregations to enter into dialogue with faiths other than their own. If both succeed and the war is finally over we will emerge from our present spiritual emptiness with new possibilities. Will you help them come true?

Betty H. Meyer is Editor Emeritus of Faith & Form

www.liturgical-consultants.org

Your online resource for finding liturgical consultants, architects, and artists dedicated to the creation of worthy spaces for faith communities

Association of Consultants for Liturgical Space
AMERICA'S FINEST
CUSTOM MADE
CHURCH WINDOWS

Specially designed church window systems made to receive stained glass and protection glass. Protection glass will protect your stained glass and insulate your church from cold and sound. Systems are available to receive insulated or single pane protective glass. Exterior protective glass can be installed at time of erection and the stained glass can be installed at the churches own convenience. Insurance and fuel costs can be substantially lower. Available in thermal and non-thermal aluminum frames.

Call or write for more information or visit us on the web at www.jsussmaninc.com.

Since 1905

J. SUSSMAN, INC.
109-10 180th Street
Jamaica, New York 11433
Tel: 718-297-0229
Fax: 718-297-3090

FINE ARCHITECTURAL METAL PRODUCTS AND SERVICES