

# Theatrical Lighting in a Sacred Context

By: David Barbour

## Using theatrical techniques to reveal the glories of a traditional worship space

At a time when many Catholic dioceses in the Northeast are closing their churches, either because of fiscal problems or changing demographics, the renovation of St. Francis Xavier Church in New York's Chelsea neighborhood seems little short of miraculous. Interestingly, a key aspect of the building's stunning restoration is its new lighting, which was provided by Tim Hunter Design, a firm more usually associated with archtainment projects and the creation of unique video content for television and public display. It's a striking example of how the subtle deployment of both conventional and theatrical lighting technologies can have a transformative effect on a building's interior.

### A monumental neighborhood church

St. Francis Xavier has been a neighborhood presence in Chelsea since the middle of the 19th century. The first church built by the parish, on 16th Street between Fifth and Sixth Avenues, went up in 1851, but, thanks to the congregation's explosive growth, was replaced in 1882 by a much larger structure, which included a residence for the parish's Jesuit priests and a boy's high school—both of which, like the church, remain today.

The church, designed by the architect Patrick Keely—a specialist in Roman Catholic churches—is described in the *AIA Guide to New York City*, as “monumental.” As

described by *The New York Times* architectural writer Christopher Gray, “The exuberant cut-stone exterior might be a Parisian opera house or train station but, for lack of a better word, is usually described as baroque.” He adds, “The interior, although still colossal, is more conventional. In 1884, *The New York Tribune* called it ‘sumptuous and exhilarating,’ a giant Latin cross with a high domed crossing, covered with coffering, carved plaster, ornament, and scene paintings, all as rich as a cream sauce. One notable departure from the usual are the windows at either end of the crossing. Instead of figural religious scenes, they contain pure geometric shapes, lush and highly colored, with a pre-Raphaelite character.”

The marble for the new sanctuary—Calacatta (white), Bardiglio (grey) and Giallo di Siena (yellow)—was sourced from Italy; two of the stained-glass windows were designed by none other than Louis Comfort Tiffany, who was a parishioner. It is true that, even in its pre-renovation state, the church's incredibly detailed assemblage of stained glass, statuary, painted medallions, and decorative moldings was extremely impressive, especially for a neighborhood parish. Other Catholic churches of the same vintage in the area don't begin to compete with it.

St. Francis Xavier has always been a busy place—its members have a long record of involvement in outreach and social-justice activities—

and, over the years, most of the church's money has been spent on such endeavors. As a result, the building was neglected and entered into a long, slow period of decline. By 1981, when I first saw it, the interior was notably weathered, even if its elaborate outlines continued to impress. Still, its wealth of marvelous detail had begun to disappear under a grimy gray patina.

By the late '90s, the building was in serious trouble. According to Bonnie Rosenstock, in the newspaper *Chelsea Now*, “For starters, the lighting was broken; the oak pews, covered in varnish, were almost black; there was extensive damage to the stained-glass windows—you could take your finger and peel off the lead caning; the 14 Stations of the Cross murals, which wrap around the church, were yellowed and dark from candle smoke and incense; plaster was pulverized; the original wood floor didn't meet together along the aisles, which was hazardous; and layers of soot and grime were everywhere and on everything.”

Also, there were concerns that the building, if left untouched, might become structurally unsound, so, under the leadership of Fr. Ned Coughlin, then the church's pastor, work began in 2001. The exterior was tackled first; the work included installation of a new roof; replacement of the roof draining and snow guard systems; repair and restoration of all windows and catwalks; repair and cleaning of exterior walls, including mortar repointing, brick replacements; and the restoration of the entry portico. During this period, the building was enrobed in scaffolding for months at a time.



While the exterior work was moving forward, Fr. Ned, evaluating the interior conditions, hired Thomas A. Fenniman Architect, whose firm is located in nearby Union Square, as the project architect. Fenniman., who got involved in the project after attending the wedding of a colleague

destroy any of that.”

Much of the work involved restoring the interior to a close approximation of its original state, a move designed to let the elaborate interior—with its plasterwork and statues—speak for itself. The firm EverGreene Architectural Arts, which

made as well; the spacing between pews was increased and new areas for wheelchairs. A new heating and cooling system was installed. Two of the original confessionals, no longer used, were reworked; they now provide a display for devotional statues. New glass elements were sandblasted

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at St. Francis Xavier, says, “In the beginning, the project was going to involve cleaning, painting, a new electrical system, and possibly new air-conditioning. We were ready to do that, but under the guidance of Fr. Joe Costantino, Fr. Ned’s successor, the plans for the interior renovation underwent a significant change.”

The review process instituted by Fr. Joe involved, among other things, a number of meetings with parishoners. “We realized that nothing less than 100-percent parishoner participation was needed in our efforts,” he told the newspaper *Chelsea Now*. Out of those meetings came a plan to dramatically reclaim the church’s interior.

### Restoring the interior

The newly re-envisioned plan combined painstaking renovation with some dramatic new gestures. Among the latter, the 24-ton marble high altar was moved 12’ closer to the congregation, creating room for a sleekly modern new sacristy directly behind it. (The sacristy, which is invisible from the pews, is topped by a startlingly modern glass ceiling.) A single cohesive sanctuary level was created, with ADA-compliant ramps installed on either side to enable mobility-challenged parishoners to play key roles in services. “The main issues were accessibility and a number of level changes,” says Fenniman. “We tried to weave in new material to fit with the church’s existing fabric. My concern was that the church has such a strong character—we didn’t want to

LSA readers will recognize in conjunction with a number of theatre-restoration projects, was brought in to replace missing or destroyed plaster work, restore statues of 35 saints and 47 murals, and paint decorative stencils on the walls. The latter, says Fenniman, were covered with “a calcimine water-based paint that had to be removed and washed down, because nothing would stick to it. The paint was originally chosen because it could be easily washed off.” In terms of choosing a new color for the interior, the architect adds, “We did a lot of testing to approximate the original. The best that we could determine was that it was a glazed finish, which we did in the apses and also in some of the ornaments and brackets. The rest is a two-tone flat color, a lighter color that is more appropriate for the molding. It blends with glazed finishes used elsewhere.”

In addition, the firm The Gil Studio/Femenella and Associates restored the stained glass. A new marble and stone baptismal font was added. Pews were repaired and restored. A new pipe organ was installed. The granite pilasters, stone inlays, and terrazzo floors were cleaned and restored. Patrick Brewis, director of stewardship for the renovation, told *Chelsea Now*, “Every single square inch of this church was touched by human hands, whether cleaned, washed, primed, painted, or restored.”

Many other improvements were

with elements of a pattern traced from the original stained-glass windows. Existing motifs in the church were worked into new mosaics and woodwork. New stone was taken from both Italian and domestic quarries, matching the church’s existing stonework.

The result is a vintage building that looks startlingly new; for the first time, one can sit inside the sanctuary and imagine what the original parishoners saw in 1882.

### The theatrical lighting approach

The restored church looks dazzling on a bright Sunday morning, when sunlight pours into the transept, illuminating many of the fine decorative touches. But the interior is arguably even more dazzling at night, when, thanks to Hunter’s meticulous lighting, each piece of plasterwork and statuary can be seen in marvelous detail. The effect has been achieved using a sleight-of-hand technique. The lighting cleverly blends restored period lanterns, which are visible throughout the building, with carefully hidden units that wash the walls and highlight the extraordinary architectural details. As a result, one is hard-pressed to identify the source of the light; the interior seems to glow from within.

As noted earlier, Tim Hunter Design (THD) has specialized in the creation of high-profile experiential and media designs for high-profile clients and installations. Readers of *LSA* will remember the firm’s work on the new Harrah’s tower in Atlantic



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City, in which Hunter and his staff covered most of the building's exterior with LEDs, transforming it into a giant video wall. Working in a very different context, the lighting of St. Francis Xavier nevertheless drew on Hunter's theatrical flair and architectural skills. The basic interior wash looks created for the church are meant to show off the interior in all its detail. But for services and other special events, including the many musical performances hosted by the church, something more was needed. As Hunter recalls, “When I first met with the church's restoration committee, I sensed that they wanted a design solution that was dynamically alive and exciting. As we talked, it was clear that they were looking for the lighting to provide dramatic

expression, movement, and focus to the church in a way that is typically found in theatre lighting.”

In addition to theatricality, the THD team also understood that a major goal was to make the lighting sustainable and user-friendly, so the system combines a number of carefully worked out highlighting techniques that make use of the most energy-efficient units available. For example, GVA LED striplights were selected to light murals in the apse and the area behind the altars, and also to provide backlight for the church's Pieta statue, located to the left of the altar. The two Tiffany windows at the side altars, as well as the transom windows that lead to the stairwells on the church's east side, are illuminated using Rosco LitePad, a slim-profile

LED lighting unit. Additional VGA LED strips were installed to provide backlighting for the altar, highlighting the candlesticks; a few of these units were also used for the organ.

“It was an easy choice to use [ETC] Source Four PAR HIDs to uplight the ceiling,” says Hunter, who notes that ten such units are mounted on top of the new sacristy, located behind the main high altar. “Six of them cover the five statutes that are found at the top of the apse. The other four are used to light the ceiling medallion.” He notes that additional front lighting from the mezzanine level—where the organ and choir loft are located—is used to wipe out shadows on the statues. Source Four PARs are also found on the organ's screen; additional Source Four ellip-

soidals, fitted with tungsten lamps, are placed in boom positions on the mezzanine level as well in a small number of holes that were cut into the ceiling. The reason for the boom and ceiling units, says Bill Groener, of THD, is "Fr. Joe didn't like the idea of too much front light coming from the mezzanine, because it blinded him and impacted his view of the congregation." Of course, the use of Source Fours from a variety of angles creates subtly theatrical lighting on the priest celebrating mass.

Hunter's firm also worked on the restoration of the lanterns that hang over the church's aisles. "We looked at the period fixtures, restored some and created a new design for others based on the originals," says Groener. "He adds that Fenniman recommended a Long Island-based company, Lite Makers, Inc., which repairs and restores vintage units—and also makes new period-style lights—to restore the old lanterns and build new ones. In order to make them more controllable, the units were fitted with dimmable compact fluorescent bulbs, with an additional MR16 downlight


placed in the bottom of each lantern. A few are fitted out with MR15 HID units to light the main cross, the Stations of the Cross murals, and some of the statuary.

An ETC Paradigm control system was chosen, partly because the lighting can be changed using a handheld wireless controller. A touch screen is located in the mezzanine, to the left of the organ, next to the dimmers. Of course, the Paradigm system is designed to be used by anyone, not only those with lighting experience, which makes it especially appropriate for this application; Hunter provided a series of theatrical presets that can be applied as needed. An ETC Sensor 96 dimmer provides power.

The lighting created by the system does not draw attention to itself. Instead, like theatrical lighting, it is used to reveal the church's dramatic interior and focus the attention of the congregation on the celebrant, the singers, and other participants.

Groener notes that the project, originally scheduled on a 12-month timeline, eventually consumed more than 20 months. For a good portion

of 2009, Masses were held either in the church's basement or in the gym of the school next door. But enough work was completed by Christmas Eve 2009 for Midnight Mass to take place there. The project was finished in the early summer of this year, and a grand rededication Mass was held on June 16, at which Archbishop Timothy Dolan told a standing-room-only audience, "The renovation is a tribute to your faith and generosity. Not only have you restored the historical church, but you have also given a booster shot of hope. There are reasons to be sad these days; there is only bad news. But you show the community you love your church."

Hunter adds, "This project was a labor of love propelled forward by a wonderful team of collaborators, led by Fenniman, resulting in the restoration of a beautifully rich and detailed tapestry of architectural and liturgical details. It was a joy to create a lighting design that reinvigorates this beautiful church while providing dramatic highlight for services and events." 

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