

Let there be light. (Genesis 1:3)

A brief history of stained glass windows and the installation at Grace Lutheran Church

The sanctuary windows at Grace Lutheran Church, River Forest, Ill., are a fine example of the Gothic Revival style, created by artist Charles Connick, whose primary goal was to restore the tradition of using the highest quality colored glass possible to create windows with an intangible spiritual depth. As such, the glass, color and image composition are based on the early Gothic church window tradition as established at Chartres Cathedral and the St. Denis Abbey, both located near Paris. Grace's windows have a strong narrative plan, a feature of windows in the late Gothic period. The style of the imagery is more modern to complement the Art Deco lines of Grace's architecture.

Grace is truly blessed with an inspiring set of stained glass windows rich with story, color and luminosity.

This exceptional set of stained glass windows that inspires generations of members and visitors was possible through three strokes of blessing. Pastor Otto Geiseman had a clear narrative plan. A fine studio in nearby Milwaukee was available to create the windows, along with a studio in Park Ridge, Ill., run by a famous designer, who made the narthex windows. And the financial resources were available at the right time. Grace is truly blessed with an inspiring set of stained glass windows rich with story, color and luminosity.

Stained glass history

The history of colored glass dates back to Egyptian and Roman times. The first known use of stained glass is in Roman villas and palaces in the first century A.D. There are windows in early Christian churches of the fourth and fifth centuries with patterns of thinly sliced alabaster giving a stained glass effect. The earliest known example of pictorial stained glass is a tenth century head of Christ excavated from Lorsch Abbey in Germany.

The idea of stained glass windows as we know them today sprang from the illuminated mind of Abbott Suger (Soo-ZHAR) of the St. Denis Abbey, located north of Paris. Suger's vision was a church building with expansive windows and colored glass to bathe the interior with uninterrupted heavenly light. Suger associated the penetration of light through church windows with the presence of God in the church.

The St. Denis Abbey, Suger's visionary church consecrated in 1144, was the prototype for all Gothic architecture, where stained glass is part of the overall design of the building rather than a fanciful add-on. In this context, the purpose of stained glass windows is to serve the architecture by controlling light.

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The art of stained glass

While all other visual arts are perceived through reflected light, in stained glass, light is the art. Images and scenes literally and symbolically shed light on our relationship with our Lord and creator.

Written by Mark Brewer.



Grace's windows reflect the Art Deco design influences of its Gothic Revival building.

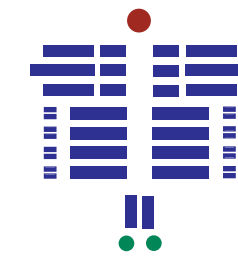
Early Gothic stained glass is generally characterized by a deep blue background, an artistic tradition established early at the Chartres cathedral and imitated widely in early Gothic windows. The aesthetic of early glass makers was to create luminous colors and jewel-like brilliance to mimic the rich colors of gemstones.

In early stained glass, there was no attempt to imitate painting or sculpture. It was a completely new art. The art of the glass was as important — or perhaps more important — than the art of the image.

Narratives in glass

Early window images were usually dominated by saints, patriarchs, monarchs, bishops, Jesus and Mary, and were interspersed with biblical narrative. However, early Gothic artists and designers were more interested in the expressive force of the ensemble than in organized narrative themes.

Artists of the Grace windows



- The Rose Window was produced by Charles J. Connick, Jr.
- The Jesse Tree Windows in the narthex over the Bonnie Brae entrance doors were produced by Alfonso Iannelli.
- All other windows were produced by the T.C. Esser Studios, Milwaukee, Wis., most under the direction of Erhardt Stoettner. The Last Judgment windows were designed by Gerard Recke.

As art of Gothic windows matured, monks became interested in strong narrative themes for their monastery churches. These narrative themes set the context for their daily worship and prayer in the chancel (or "choir") of their monastery church. They were literally bathed in the light of the themes and people significant to their tradition.

As the preaching orders proliferated in the early 13th century — the Dominicans, Franciscans and Cistercians — monastic window designs transformed from representational imagery to complex abstract forms conducive to deep meditation. Meanwhile, narrative themes became popular in cathedral and parish churches.

Stained glass dominated image making for four centuries and is the major form of pictorial art to have survived. In the Middle Ages and beyond, stained glass images and church sculpture were sometimes the only images many people would see in their lifetimes.





Rose window: Charles Connick

The Rose window (or wheel window) above the chancel is by the Connick studio of Boston. Charles J. Connick has been called the greatest American stained glass artist of the 20th century and is the father of the Gothic Revival stained glass window aesthetic.

Stylistic cues of Connick windows include use of blue as the central color and the use of glass of uniform thickness and color. He emphasized that the purpose of stained glass is to serve the architecture, and rather bluntly rejected the highly representational “opalescent picture windows” of Tiffany, LaFarge and their followers. Connick preferred to use clear antique-style glass of the Gothic period calling it “colored radiance, with the luster, intensity, and baffling vibrant quality of dancing lights.”

Connick designed and produced the rose windows of the Cathedrals of St. Patrick and St. John the Divine in New York City, and windows in the Princeton University Chapel.

Other Oak Park-River Forest installations of Connick windows include Grace Episcopal Church, First Baptist Church and the First United Church chapel.

Stoettner’s window designs follow the thematic direction of the Rev. Otto Geiseman and faithfully follow Connick’s Gothic Revival style, particularly in the deep blue backgrounds.

Gothic revival

The popularity and quality of stained glass ebbed and flowed over the centuries. In the early 20th century, the innovative art glass of Louis Comfort Tiffany and John LaFarge initiated a stained glass revival. This was the “opalescent era” and their style of pictorial art, rendered in opaque glass, was widely copied.

However, not everyone was impressed. Architect Ralph Adams Cram, collaborating with artist Charles Connick, created a Gothic Revival architectural movement (also called Neo-Gothic) that included a revival of early Gothic stained glass art in direct response and opposition to what Connick called “the abysmal depth of opalescent picture windows.”¹

The Grace Lutheran Church sanctuary windows are a product of the Gothic Revival movement. Just as medieval windows were integral to the architectural fabric of their host building, Grace’s windows reflect the Art Deco design influences of its Gothic Revival building. The rose window above the altar was created by the Charles Connick studio of Boston. But the Gothic Revival style is most expressive in the other sanctuary windows, created by Erhard Stoettner of the T.C. Esser Studio in Milwaukee. In contrast, the narthex windows over the



Bonnie Brae entrance and the doors to the sanctuary were created by the Alfonso Ianelli Studio of Park Ridge, Ill. These windows are made with translucent and clear glass and are most certainly in their own category stylistically.

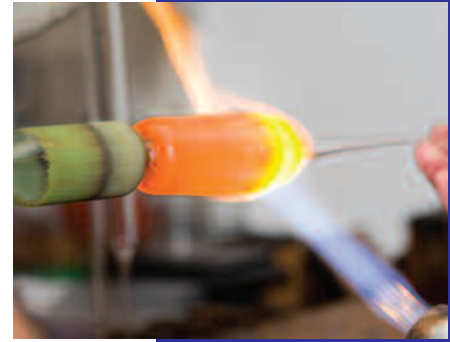
Stoettner’s window designs follow the thematic direction of Otto Geiseman — Grace’s pastor at the time of the development of the church windows — and faithfully follow Connick’s Gothic Revival style, particularly in the deep blue backgrounds. The black trace lines are an elegant counterpoint to the Art Deco lines of the church interior, as designed by the architectural firm of Tallmadge and Watson. The keen observer will also notice the quality of the glass, which hearkens back to the early Gothic aesthetic of deep, gem-like colors. For many people, the story content of Grace’s windows is secondary to the impact and draw of the rich colors.

What is stained glass?

The process of making stained glass has changed little since the 12th century. Interestingly, most “stained glass” is not stained. Color is created by adding metal oxides while the glass is molten in the pot. This type of glass is called “pot metal glass,” which is prized for its clarity and brilliance. Copper oxides produce green or bluish green. Cobalt makes deep blue. Gold produces wine red and violet. Manganese produces amethyst. Sulfur and iron salts produce amber glass ranging from yellowish to almost black. The way the glass is heated and cooled can significantly affect the final shade.

In the 14th century, a silver-based stain

One piece of glass with three different colors is created using flashing. Bottom layer: clear glass. Middle layer: yellow and light brown flashed glass. Top layer: black enamel detail.



was developed to create yellow or orange shades. The stain was applied and fired onto the glass, and could be applied in multiple layers.

Another technique used is called “flashing” where a thin sheet of colored glass is laminated onto a clear or tinted sheet. As far as can be determined, all of the glass in Grace’s Connick and Esser windows are pot metal glass, and there are many instances of flashed glass use.

The glass itself is made from sand and ash — or more technically, from silica, potash and lime. The glassmaker melts the ingredients in a crucible, adding the appropriate metal oxide for color, and uses a blow tube to create a cylinder of semi-molten glass. The maker then cuts off the ends of the cylinder and scores the resulting tube from top to bottom. The glass is then flattened into a sheet usually about 14” x 24” and is cooled or “annealed” in a controlled environment to yield the properties desired by the glassmaker.



Right, top to bottom: A cylinder of glass is blown. This will be cut to lie flat.

A glass cutter is used to score glass so it breaks precisely where it is drawn.

Glass pliers are used to break glass along the scored lines.

Lead comes form the framework for the glass.

The final cut pieces of glass are assembled with the lead came.



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Stained glass windows by Erhardt Stoettner

Most of the windows at Grace Lutheran Church, River Forest, Illinois, were designed and built by the T.C. Esser Studios, Milwaukee, Wis., under the direction of master craftsman Erhardt Stoettner.

Other churches with windows designed by Erhardt Stoettner:

Cathedral of St. John the Evangelist, Milwaukee, Wisconsin

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St. Peter in Chains Cathedral, Cincinnati, Ohio

St. Bernard Church, Fort Wayne, Indiana

St. Helen Church, Chicago, Illinois

St. Anthony's Memorial Hospital, Effingham, Illinois

Mount St. Scholastica Chapel, Atchison, Kansas

Peace Lutheran Church, Oshkosh, Wisconsin

St. Mark's Episcopal Church, Grand Rapids, Michigan

Lake Park Lutheran Church, Milwaukee, Wisconsin

Norway Lutheran Church, Milwaukee, Wisconsin

Lake Park Lutheran Church, Milwaukee, Wisconsin



Details of faces, hair, hands, clothing and drapery are applied onto the inner surface of the glass using an enamel paint made of finely ground iron filings, ground glass and a binder such as wine or vinegar, and fired in a kiln. The trace lines in Grace's windows are black enamel, consistent with the Gothic Revival aesthetic.

The glass for Grace's Connick and Esser windows was most likely made in England. English glassmakers were known for exceptionally clear, high-quality glass with vibrant colors, which was not available in the United States at the time.

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Creating a stained glass window

Window designs are based on ideas and themes provided by the client and executed in a sketch by an artist. After the client approves the design, a full-size cartoon is created for each window.

Drawing from the studio's inventory of fine glass, an artisan cuts the glass and places each piece on the cartoon. The artisan then traces the details of faces, hair, hands, clothing and drapery onto the inner surface of the glass using an enamel paint. The artisan makes the paint using finely ground iron filings, ground glass and a binder such as wine or vinegar. The trace lines create outlines and solid areas. The paint is applied and fired in a kiln. The trace lines in Grace's windows are black enamel, consistent with the Gothic Revival aesthetic.



The final window or window section is assembled piece by piece with lead "came" to hold the pieces together. The lead joints are soldered together and linseed oil putty is applied to seal the gaps between the lead and the glass, adding strength and waterproofing. The lines produced by the lead are part of the window's design and prevent the colors from blending together when viewed from a distance.

Multiple window panels are then placed into an iron or zinc frame called an armature. The final construction is then installed into the church wall.

Sources and further reading about stained glass

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Elizabeth (Aislin) Reynolds. "The Development of Stained Glass in Gothic Cathedrals," *JCCC Honors Journal*, Vol. 4, #1; Fall 2012. Johnson County Community College, 2013. Retrieved Aug. 16, 2013. Format: PDF. Scholarspace.jccc.edu/honors_journal/vol4/iss1/3

The window is assembled piece by piece with lead came to hold the pieces together. The lead joints are soldered together and linseed oil putty is applied to seal the gaps between the lead and the glass, adding strength and waterproofing. The lines produced by the lead are part of the window's design.

Grace's window legacy

Drawing on the tradition of timeless biblical themes and the enduring traditions of Gothic art and architecture, the Grace Lutheran Church windows speak to us on many levels: spiritually, artistically, intellectually.

The timing was ripe for Grace Lutheran Church to commission and install its remarkable windows. The Gothic Revival style was firmly established. The glass and artisans to create great works of emotional beauty were in place and available. The congregation put its resources firmly behind the effort to see it through to successful completion. Through their legacy, the light of God in story, color and art continues to filter through to illumine our hearts and minds, and we are so very thankful for it.

Endnote

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