

ARCHITECTURE GLASS ART

FRANZ MAYER OF MUNICH

MAYER'SCHE HOFKUNSTANSTALT

HIRMER

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**FRANZ MAYER OF MUNICH
MAYER'SCHE HOFKUNSTANSTALT**

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HIRMER

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Foreword

Brian Clarke

Stained glass has a simple nature. It is an apparently solid liquid. It is at times transparent, opalescent, diffused, striated with lines or alive with bubbles. Light passes through it, pauses at it or at times simply diffuses it. It is traditionally held together with lead and painted. Limited applications of color can be added to or etched away from its surface.

In the last few decades it has also become a different but analogous experience on commercial float glass. The marriage of technologies and experience gained over a millennium of stained glass is today informing the application of art digitally generated on mass-produced commercial float glass.

Art develops and alters as a human means of expression, it has always been so and technologies are created to meet contemporary needs. The creation of the one does not preclude the use of the other nor indeed combining them. Without the knowledge of the medium and its history it is impossible to use the medium to its greatest and widest ranging impact. There are but a few stained glass studios or factories that embrace both the history and the contemporary potential of the medium. The Mayer'sche Hofkunstanstalt or Franz Mayer of Munich as it is known in the English speaking world has been at the cutting edge of this investigative marriage for five generations. The creation of art, whether in the written or spoken word, the composition or performance of music or painting, sculpture, architecture or stained glass needs the constant nourishment of original thought. The radical and the original are frequently one and the same. We are used to seeing the avant-garde in the visual arts rise out of the swell of painting or the younger mediums of cinema, photography or conceptual investigations. That it should also be the product of a medium historically bound by craft, tradition, religion, and dogma is on

the whole considered as nonsense and the conventional art world thus dismisses the medium of stained glass without thought or serious consideration on the basis that it is ipso facto, redundant. Armed with the ruthlessness of convention and the violence of orthodoxy the art world has summarily consigned stained glass to a place in history from which they refuse to release it. It is imprisoned in a cultural Guantanamo from which it seems there is neither release nor reprieve.

Yet, for the past two hundred years the medium has confounded its detractors by generating some of the most significant works of art of those two centuries. It has also been the fertile ground upon which have grown ideas and concepts that have permanently altered the way we see the visible world. The achievements of Burne Jones, Morris, Thorn-Prikker, Matisse, Albers, Cocteau, Knappe, Meistermann, Schaffrath, and Schreiter have fundamentally enriched and increased the languages at the disposal of the contemporary artist and architect broadening the range of experience immensely. The critics dismiss it, the historians mention it in passing if at all, and the architects view it as a medieval expression unsuited to a language that views art and decoration as a placebo to clients and a public who ought to know better. However, every now and again, despite the great efforts of the orthodoxies of the mediocre and an art world obsessed with commercial portability and re-sale potential, works in stained glass thunder through the ignorance of the ordinary and make a difference. These differences when they occur are what keep the medium alive and viable. Artists cannot make these leaps alone. To push the medium into a position from which it is capable of speaking truth to contemporary power it needs a symbiotic allegiance with the craftsmen who make it. They alone can generate the excitement needed to

change thinking and find ways to effect these changes legitimately and with the delicacy of translation needed to produce poetry. Neither artist nor craftsman need fear these changes, indeed, it is only by positively embracing them that the medium has any hope of survival. It is not only the message that changes but also the medium that expresses it.

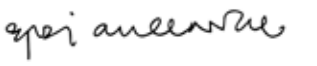
At times artists seek to bend and force the nature of stained glass towards characteristics more appropriate to easel painting or cinema. The rise of digital technology and printing have made it possible to introduce figuration at immense and complex scale giving a superficial impression of compositional complexity and thoughtful image making, however, on the whole this has only resulted in a sort of large-scale cinematic freeze-frame 'movie grabs' without architectonic substance or a respectful acknowledgement of the liquid and transilluminate nature of the medium. On such occasions this renders the resulting work vapid and banal. At other times when the artist leaps and dives with the givens of the medium and the material new opportunities are revealed that make the medium of stained glass a vital and thrilling reinvented language of the sublime.

Mayer'sche Hofkunstanstalt provide artists and architects with the knowledge of history and the enthusiasm for the future that is essential to the making of stained glass and indeed mosaics that are relevant to our own times.

The medium carries within its nature the simple joys of the well made treasured by our species for millennia and the profound complexities of poetry without which we cannot hope to appreciate the nature of the human condition. Unlike other mediums it is inexorably linked to architecture and uniquely positioned to contribute once again to the beautification of the built environment. The

role the Hofkunstanstalt plays in this drama cannot be overestimated. As an artist who has benefited from their patient forbearance and technical expertise I raise my hat to them with respect and with affection.

On a personal level as an artist I have shared victories, lamented losses, been bold, been humbled, allowed and encouraged to do my best by Mayers'. My relationships with both Gabriel and Michael Mayer have taught me much and kept me laughing for many years. Franz Mayer of Munich is a great European treasure and part of our culture. We must do all we can to deserve them.


Brian Clarke

HISTORY



FIG. PAGES 6 + 7 Interior view of one of the stained glass workshops, circa 1910



1 KING LUDWIG I SURROUNDED BY ARTISTS AND SCHOLARS, Wilhelm von Kaulbach, 1848

History

Bernhard Graf

Founded in Prerevolutionary Times

Times were restless in Bavaria: The people hated the reactionary politics of their king, Ludwig I (ruled 1825–1848), who offered censorship instead of freedom of press. They rejected their ruler’s dictatorial concept of art, detested his escapades, his perpetual affairs, his erotic trips to Italy, and finding his provocative love poems printed in newspapers.¹ Increasing prices for bread and beer ultimately led to the so-called Munich Beer Revolution. Even Ludwig’s Secretary of the Interior, Karl von Abel, rebelled against him. The monarch discharged him in disgrace when he refused the naturalization of the king’s new mistress, Lola Montez.

In these uncertain times, Joseph Gabriel Mayer (1808–1883) (*fig. 4*) founded the “Mayer’sche Kunst-

anstalt für kirchliche Arbeiten” (i.e. Mayer’s Art Establishment for Ecclesiastical Works). Born in Gebrazhofen in the Allgäu region of the Alps, this academy-trained artist and sculptor was a deeply religious man who served on the board of the State Education Institution for Physically Handicapped Children. He stated: “With the approval of my estimated superiors, I thus decided that I would carry out these massa works on my own account for the time being. I would do my work in a specially rented shop and solicit a special privilege from His Royal Majesty to execute the stone massa shaping I had invented. This was granted in September 1847 whereupon I soon began to set up the Art Institution.”² His vision was going to revive organizational principles and working methods of Gothic masonry workshops.³ Based on his idealized view of the Middle Ages, he initially produced religious stone figures and altars (*fig. 5*).⁴ He had not yet discovered the



2 TOMB OF MAX EMANUEL AIMMILLER (1807–1870), co-founder and director of the Königliche Glasmalereianstalt (i.e. Royal Institute for Glass Painting), Südlicher Friedhof, Munich, visited by members of the Mayer family, 1948



3 Glass panel from THE WINDOW CYCLE FOR THE MARIAHILF-KIRCHE, Munich, by Königliche Glasmalereianstalt, circa 1838

art of glass and mosaic for himself. The studio chronicle describes his motivation as follows: “the entrepreneur J. G. Mayer concentrated [...] on Christian art. He was indeed acutely aware of the sad state Christian sculpture had reached at the time. He was determined – and this was the core of the founder’s struggle – to improve this sad situation by decorating the churches with artistically superior, truly worthy artifacts to enhance the Christian art and to raise sensitivity for the latter.”⁵

However, Mayer’s vision appeared to fail and he desperately noted: “But the following revolutionary year 1848 was demoralizing if one wanted to create an art institution of any type, let alone an ecclesiastical one. The danger of demise was inherent.”⁶

At the same time, King Ludwig I of Bavaria wrote to his mistress Lola Montez: “I shall not give in. Just stay calm. Everything will be fine.”⁷ Yet the monarch had un-

derestimated the situation. On March 20, 1848 the revolution was over and he had lost everything: His crown, his honor, his mistresses, and his much-adored glass art. And it had all started so well thirty years earlier.

You Do Not Know Germany Unless You Have Visited Munich.

In Munich 1818, only three years had passed since Emperor Napoleon I’s final abdication. For some, this was the end of a triumphant era of victorious cooperation between Bavaria and France. For others, it meant liberation from suppression, grief, and death. Crown Prince Ludwig of Bavaria shared the latter view, refusing the politics of his father, King Max I Joseph (ruled 1806–1825): “We were opposites on too many counts.”



4 **FOUNDER JOSEPH GABRIEL MAYER**
(1808–1883)



5 **CORONATION OF THE VIRGIN**, Neo-Gothic main altar, Dom zu Unserer Lieben Frau, Munich, Joseph Knabl, 1862



6 **“FORTUNA,” STAINED GLASS**,
Private Collection, St. Petersburg,
Russia, Zettler 1874



7 **TOMB OF JOSEPH KNABL (1819–1881)**, Südlicher Friedhof,
Munich, design: Joseph Leonhard Mayer, visited by Anton Mayer with
sisters and sister-in-law, 1948



8 **SCHLOSS DRACHENBURG/RHINE**, detail of the many stained glass windows:
Head of Diana, Johann von Schraudolph, Mayer circa 1878

He had a preference for the French, the Tricolore, the Republic, Napoleon, and he was very much their friend “... I violently hate the French ... am full of Germanic feelings – utterly alien to him. I favor historic things, I want to preserve. He is for innovation, has no sense for the former.”⁸

The crown prince owed his preference for tradition, antiquity, and the Middle Ages to the contemporary poets Wilhelm Heinrich Wackenroder and Ludwig Tieck, whose works he encountered through the Nazarenes, a Rome-based association of artists. “In Munich the crown prince felt that all was stale and cold.”⁹ Therefore he was determined to drastically alter cultural activities. Wilhelm von Humboldt wrote to his wife: “One of Ludwig’s declared aims is to turn his residential city into a place that does honor to Germany, so that if you have not visited Munich you do not know Germany.”¹⁰ Hence

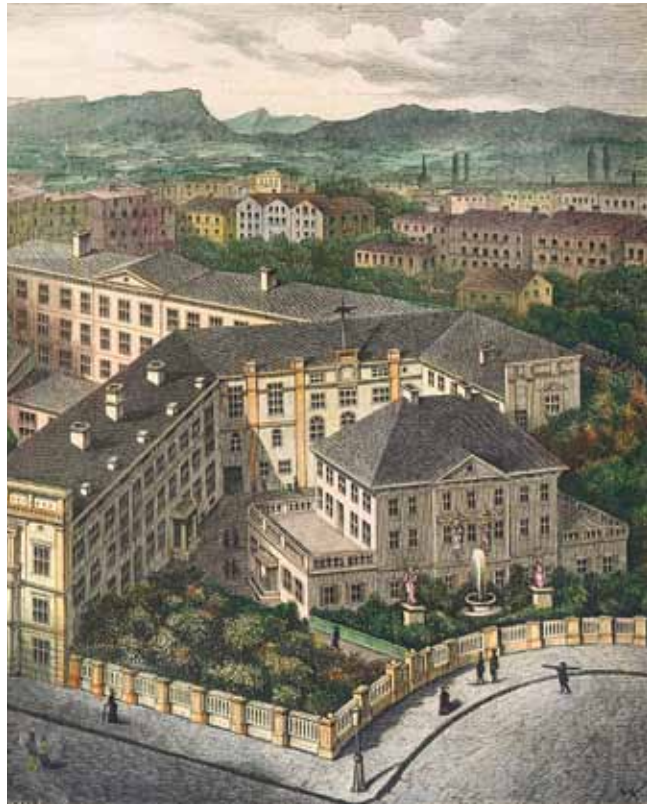
the crown prince asked his father to appoint the Nuremberg porcelain and glass painter Michael Sigmund Frank (1770–1847) to Munich.¹¹ His tenure with the Royal Porzellanmanufaktur began on July 5, 1818. This was also the beginning of Munich glass art, which became world famous under its American name, *Munich Style*.¹² Initially, glass art attained greater importance when the Bavarian Crown Prince Ludwig succeeded his father as king and in 1827 founded the “Königliche Glasmalereianstalt” (i.e. Royal Institute for Glass Painting) as a state institution. Until then, Frank had produced predominantly small size panels – mostly of white glass. Now, the first larger panels were created for the west facade of Regensburg cathedral.¹³ Shortly thereafter, the Porzellanmanufaktur’s director, architect Friedrich von Gärtner, who was also in charge of the “Königliche Glasmalereianstalt,” was no longer satisfied with Frank’s production of col-

ored glass. He entrusted the glass and architectural painter Max Emanuel Ainmiller (1807–1870) (*fig. 2*) with this function in 1833. Under his leadership the “Königliche Glasmalereianstalt” became an internationally recognized institution. This is considered the beginning of *Munich Style stained glass*. The realized works encompass the brilliantly colored windows for Munich’s Maria-Hilf-Kirche,¹⁴ Schloss Hohenschwangau,¹⁵ the cathedrals of Regensburg¹⁶ and Cologne¹⁷ as well as the glass decoration for the Church of Our Saviour at Kilndown in Kent and the cathedrals in London, Glasgow, St. Petersburg, and Zagreb.¹⁸

However, when the revolution broke out and after his abdication, Ludwig I faced limitations as sponsor. The great success of Munich’s first Glasmalereianstalt was suddenly called into question, followed by massive problems regarding production and sales. At times,

business operation stopped. Moreover, Ludwig’s son and successor, King Max II Joseph (ruled 1848–1864), had no interest in the institution. In 1851 he accepted the Finance Ministry’s petition to transform it into a private enterprise. His position as administrative director not only enabled Ainmiller to continue the workshop, he also extended its international reputation to the New World when he accepted the first church commission for St. John’s in Boston.¹⁹ When Joseph Gabriel Mayer and Franz Xaver Zettler took over after his death, the history of the “Königliche Glasmalereianstalt” was largely in the past.

Inspired by Ainmiller’s success story, more than thirty glass firms were founded in Munich,²⁰ and the “Königliche Glasmalereianstalt” also served Joseph Gabriel Mayer as prototype²¹ only fifteen years after its formation. Mayer was to remain the only artisan whose



9 EXTERIOR VIEW OF THE MAYER'SCHE HOFKUNSTANSTALT, CIRCA 1880



10 INTERIOR VIEW OF ONE OF THE STAINED GLASS WORKSHOPS, CIRCA 1910



11 PORTRAIT OF FRANZ BORGAS MAYER (1848–1926), Leo Samberger, early 1920s



12 RECONSTRUCTION OF THE HOLY SPIRIT WINDOW OVER THE "CATHEDRA PETRI" ST. PETER'S BASILICA IN ROME, Mayer'sche Hofkunstanstalt and Martin Feuerstein, 1910

successors still work to this day in the same field to the highest international acclaim. Johann Nepomuk Bürkel was the master builder who had renovated Mayer's workshop, located for a long time on the outskirts of Munich's Maxvorstadt (fig. 9). "Among the many houses on offer, I purchased the one on Stiglmaierplatz Nr. 1 (then still called Luitpoldplatz). Unfortunately, it was very run down."²² In 1862, he commissioned his later son-in-law, Franz Xaver Zettler (1841–1916), to set up a glass studio in the building²³ (fig. 10). This meant that he was no longer obligated to pass church window commissions on to other workshops.²⁴ Six years later, this department was housed in the eastern portion of the new edifice,²⁵ enabling him to make the following offer to Cologne's Dombaumeister Karl Eduard Richard Voigtel: "It is with great pleasure that we recommend our newly-established stained glass studio to you."²⁶ From this point on, the

firm prospered. Joseph Gabriel Mayer opened branches abroad: In 1865 at 70 Grosvenor Street, London²⁷ and four years thereafter at 23 Rue St. Sulpice, Paris.²⁸ It was no disadvantage that Franz Xaver Zettler, husband of Mayer's daughter Therese, founded his own stained glass studio in 1870.²⁹ In the early 1870s Joseph Gabriel established yet another studio for stained glass with his son.³⁰ Both enterprises³¹ were fierce competitors for well over six decades and ultimately merged in 1939, when the Mayer'sche Hofkunstanstalt bought back the establishment F. X. Zettler. When the Bavarian "fairy tale" King Ludwig II (ruled 1864–1886) bestowed the title "Königliche Hof-Kunstanstalt" upon his company in 1882, Mayer must have felt at the zenith of his career.³²

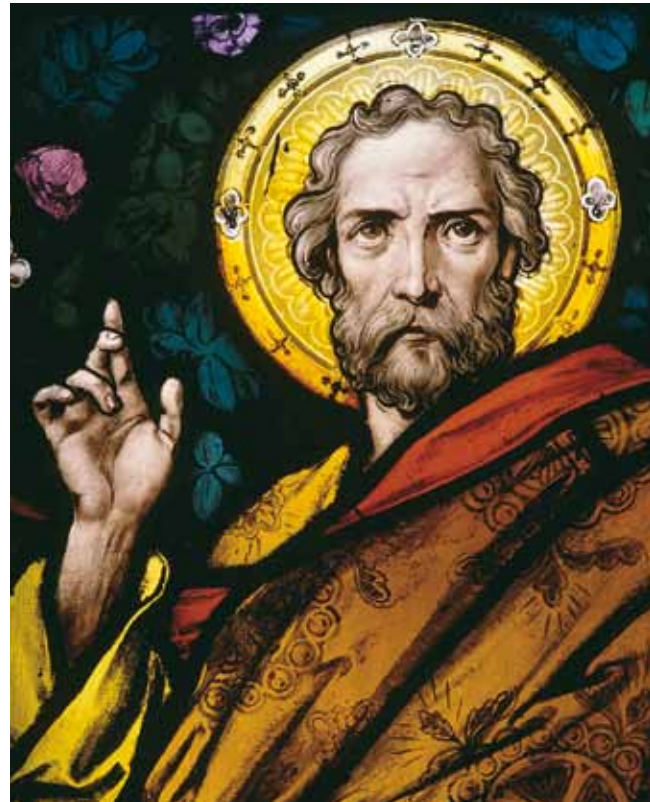
No Success without Diligence, Frugality, and Thriftiness

"Anyone who says that you can become successful and wealthy without diligence, frugality, and thriftiness, is a cheat."³³ Prelate Dr. Huhn used statesman Benjamin Franklin's quote in 1883 when burying Joseph Gabriel Mayer. It was not the elder son, Joseph (1846–1893), who soon withdrew from the management, but his like-minded, English-trained son, Franz Borgias (1848–1926) (fig. 11)³⁴ who continued the father's work. Under his strict regime, the Hofkunstanstalt attained the highest reputation, especially after opening its New York branch at 52 Barclay Street in 1888. In New York City alone until the 1930s, close to one hundred churches were furnished with glass paintings by Mayer (and Zettler). In her 2002 publication entitled *Stained glass*

in *Catholic Philadelphia*, Jean M. Farnsworth states: "Mayer produced more windows for the Archdiocese of Philadelphia than any other single studio, fulfilling its first commission in an Archdiocesan Church in 1883 ..."³⁵ This assured his international recognition. He also avoided the immense import duties on colored glass into the USA that affected his brother-in-law.³⁶ Since the cheaper European workforce posed a threat to American art institutions, they torpedoed regular customs on imported colored glass and demanded trade protection. The Munich firms hired American lawyers to fight for their rights. Even the Catholic Church supported this battle, because it wanted to continue to purchase duty-free imported glass. However, in 1888, two hundred American glass painters filed a petition to prohibit the duty-free import of foreign church windows – to no avail. Two years later, a 45% markup on all



13 **ST. PAUL'S EPISCOPAL CHURCH, NEW ORLEANS, LA, USA**, detail of the Ascension Window, 1907, restoration/conservation Mayer 1967



14 **FORMER ST. MARTIN'S CHURCH, CHICAGO, IL, USA**, all windows Mayer and Zettler 1903–06, detail: St. Peter



15 **CATHEDRAL OF THE MADELEINE, SALT LAKE CITY, UT, USA**, rose window over the organ, St. Cecilia surrounded by angels with musical instruments, all windows Zettler 1906



16 **ST. ROCH CHAPEL, BINGEN/RHINE**, St. Cecilia with angels and organ, detail, William Francis Dixon, Mayer 1905, this copy is from the archives of the Mayer'sche Hofkunstanstalt

imported glass was implemented, resolving the conflict in favor of the American firms.³⁷ This was particularly bitter since at the turn of the century about 80% of the glass production by the Franz Mayer of Munich studio was sold abroad.

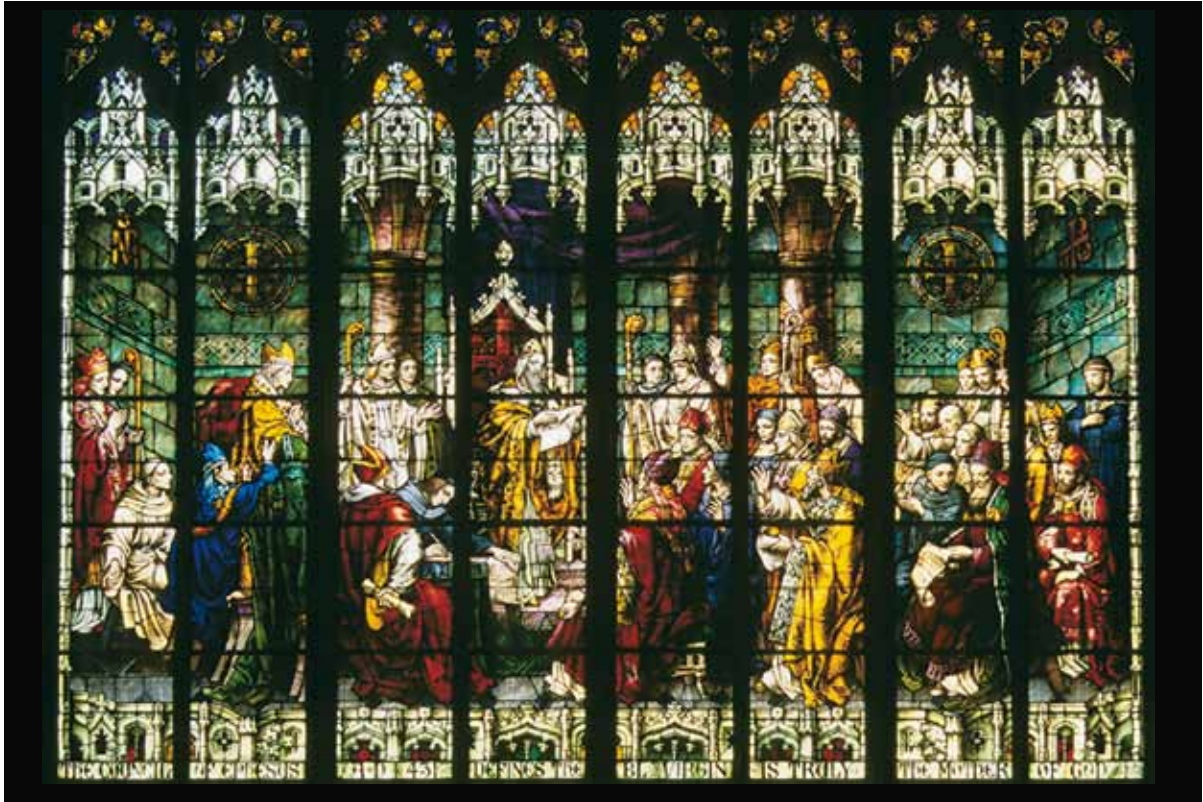
But there was also good news for Franz Borgias: In 1892, Pope Leo XIII bestowed upon his firm the distinction “Pontifical Institute of Christian Art.”³⁸ It was not by coincidence that a few years later he was commissioned to reconstruct the Holy Spirit window in the western apse of St. Peter's Basilica in Rome (*fig. 12*). In addition, he and the Mayer-Zettler workshops worked on thousands of other church buildings, fifty cathedrals in the USA and Canada as well as fifty additional cathedral projects on other continents. During this phase of the Munich Glass Works, the Roman Catholic Church became its most important client. As a result, Mayer and Zettler

employed as many as five hundred artists and glass painters around the turn of the century, and three hundred worked for Franz Borgias alone.³⁹ The situation remained virtually unchanged until World War I. Apart from the many other Munich stained glass studios, the sister enterprises Mayer and Zettler with their huge global volume of orders, were among the most important contractors for artists, artisans, and painters in the residential city and art metropolis of Munich and in the kingdom of Bavaria. Thanks to the two major corporations, the *Munich-style* trademark was on the tip of everyone's tongue. It was considered the epitome of precision and quality – not just in the US but worldwide.

Like his father before him, Franz Borgias's approach to art combined bygone aspects with innovative techniques. Romanticism inspired all of his depictions and the historic renderings glorified the Middle Ages.⁴⁰ Yet,

he distanced himself from the general characteristics of the Nazarenes and the Pre-Raphaelites which Michael Sigmund Frank and Max Emanuel Ainmiller and their teams had transferred to glass art. Franz Borgias encouraged domestic and English glass painters alike to take the style of the Alsatian Master Peter Hemmel von Andlau (circa 1420 – after 1501) or the Augsburg panel painter Hans Holbein the Elder (circa 1460/65–1524) as their point of departure. It had been a ‘music’ glass technique and in contrast to British stained glass characterized through intense painting with matting colors and equally intense erasing and rubbing processes. Between 50 and 65% of the overall ‘painting’ work was committed to erasing.⁴¹ Such stained glass resulted in both very colorful and very translucent stained glass windows with proportionally correct figural renderings, well-balanced compositions, and excellent design (see *fig. 8, 13–17*).«

This was only possible because Franz Borgias could engage a good number of the historical and monumental painters from Munich's Art Academy, utilizing specialists for each branch. Job titles at the firm included “preparer (color and glass selecting,)” “cutter (glass cutting,)” “leader (leading,)” “fettler (zementing,)” “packer”, “book binders”, “draftsmen”, and “colorists” as well as “painters of flesh, draperies, and ornaments”. Teamwork was of utmost importance and was even propagated outside the firm. Although there were no stars within the applied arts at the time, artists who established themselves included Martin von Feuerstein (1856–1931) (see *f.i. fig. 12, 14*), professor at Munich's Art Academy, Burne-Jones's student William Francis Dixon (1848–1928) (see *f.i. fig. 16*), and Englishman George Daniels (1854–1940), making designs that were particularly popular in the US. These included the glazing of the cathedrals St. Madeleine in Salt



17 ST. MARY'S CATHEDRAL BASILICA OF THE ASSUMPTION, COVINGTON, KY, USA, all windows Mayer 1905–22, lower part of the northern transept window, Council of Ephesus

Lake City, Utah, circa 1906 (fig. 15), St. Mary in Covington, Kentucky, circa 1909 (fig. 17), or St. Joseph in Buffalo, NY, dated 1912.⁴² The long-lived success and the extreme popularity of the *Munich Style* resulted in US companies opening smaller branches (“stained glass studios”) in Munich, justifying the term *Munich Style* and enabling them with access to appropriately trained glass painters. In addition, there was an inferior studio in Chicago that called itself the “Munich Studio” but had no actual connection to Munich.⁴³

A Studio for the Artists (since 1918)

At the beginning of the 20th century, the importance of *Munich Style* stained glass declined, and it was often looked down upon (at home). Although Emperor Wilhelm II supported Neo-Romantic art as the new “Reichsstil” (i.e. imperial style)⁴⁴ in unprecedented ways and Mayer delivered the glass windows for his Gedächtniskirche (i.e. Emperor Wilhelm Memorial Church) in Berlin, this type of historicist approach was definitely unfashionable by then. One of the most outspoken critics of applied arts was the architect Adolf Loos (1870–1933) who strictly refused the connection between the everyday life and art. His 1908 article entitled *Ornament and Crime* states: “There is certainly no connection between civilized products of our time and art. The Barbaric times, when works

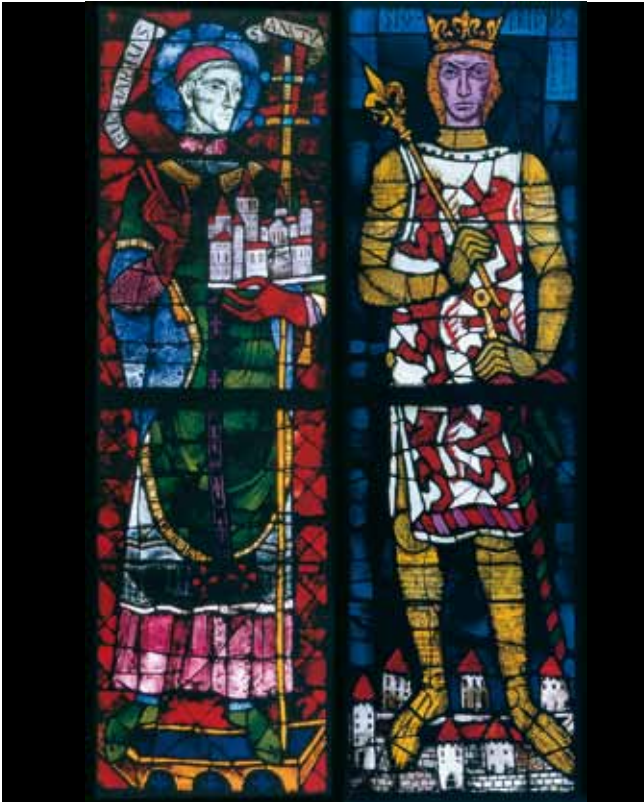


18 THE THIRD GENERATION with their father Franz Borgias and members of the Hofkunstanstalt's executive board in front of the old stained glass building, early 1920s (first left: Anton, second left: Karl, center: Franz Borgias with US-representative Patrick Kelly, right: Adalbert Mayer

of art and utilitarian objects were amalgamated are definitely over.”⁴⁵

When Franz Borgias handed over the firm to his sons – and thus to the third generation – after World War One and at the end of the monarchy, he said: “I have always only loved beauty for its own sake, never because I intended to own it.”⁴⁶ As the eldest son, academy graduate Anton (1886–1967) became the artistic leader, whereas his younger brothers Karl (1889–1971) and Adalbert (1894–1987) turned to the large firm's entrepreneurial and business sides.⁴⁷ Their work was to be overshadowed by another world war, inflation, decline, dictatorship, and destruction (see fig. 18).

In keeping with the Roman Catholic Church's conservative stance, after 1918 many glass windows for this client continued to be fabricated in the traditional *Munich Style*, especially in the US. Back then, a stricter



19 CATHEDRAL OF NOTRE DAME, LUXEMBOURG, two saints, detail from the four triple lancet stained glass windows for the Prince's Gallery, Josef Oberberger, Mayer 1938

“old style”⁴⁸ prevailed, wherein the leading glass artists sometimes combined Early Gothic forms with Art Nouveau or Art Deco elements. More abstract designs were still inconceivable in the North American church.⁴⁹

Onset of Modernity

Thanks to Bauhaus and Deutscher Werkbund ideas, things took a totally different turn in the Weimar Republic and Europe.⁵⁰ Now “modern” at times even “avant-garde” artists joined Franz Mayer of Munich with inventive ideas; albeit with primarily minor commissions, and the firm eventually began to develop into the “studio for the artist”. Franz Mayer of Munich no longer represented and dictated the “style.” Instead, it made available to the “free artist” all its knowledge and experience, the



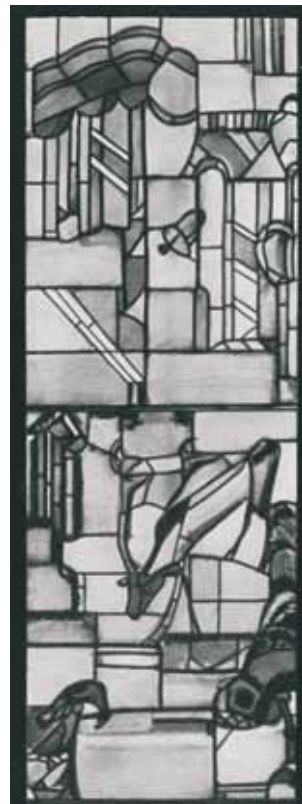
20 PHILOSOPHERS WINDOW, Sepp Frank, late 1920s, archives Mayer'sche Hofkunstanstalt



21 LUTHERAN ST. PAUL-KIRCHE, CONSTANCE, altar window with Last Judgment, Karl Knappe, Mayer circa 1928



22 EXPOSITUR-KIRCHE ST. JAKOBUS D. Ä., DÖLLNITZ/OBERPFALZ, 1928



23 CANTICLE OF THE SUN, ST. FRANCIS, Karl Knappe, Mayer circa 1930



24 ST. VERONICA'S VEIL, Karl Knappe, engraved stained glass panel, still painted with Schwarzlot, Mayer late 1930s



25 BULGARIAN ARTIST IVAN PENKOV AND ARTISANS IN FRONT OF CARTOON DRAWINGS, full scale, shot in the studio, circa 1930; the head depicted on the right in the cartoon is part of the window *fig. 26*



26 UNIVERSITY CHURCH SOFIA, Bulgaria, one of Ivan Penkov's (1897–1957) Mayer windows

abundant supply of materials, tools, and studios – thus slowly evolving into an assisting entity. This also explains how artists such as Karl Knappe (1884–1970), Paul Thalheimer (1884–1948), Wilhelm Rupprecht (1886–1963) Albert Figel (1889–1955), and Joseph August (Sepp) Frank (1889–1970) made a name for themselves within the realm of the applied arts.⁵¹

Karl Knappe – The New Beginning of Stained Glass

Born in Kempten (Allgäu), the sculptor and teacher Professor Karl Knappe is paramount when addressing the dominant characters of 1920s stained glass (later also mosaics). Knappe was to remain with the firm for more than fifty years.⁵² In 1918, he submitted his first window design to Anton Mayer. The Mayer'sche Hofkunstanstalt immediately offered him a free studio, which he used until his death and which enabled him to work and to experiment. At first, he created small panels that could be admired in an exhibition of the Kunstgewerbeverein in 1920. His first commission followed in 1921/22: Six windows with a connection to architecture for a war memorial chapel in Hindelang (Allgäu).⁵³ Contemporary witness Otto Fischer was full of praise for this new ap-

proach to art: “A depth of burning colors magnificently articulates atmospheric creatures, like a blazing, inner ember, expressing their tight movements by the most simple outlines. ... A new language is born for the super-real, the deeply meaningful. A task, similar to the Old Masters' one, is rediscovered and dissolved into a new experience.”⁵⁴ Additional early Knappe creations for Mayer included glass for Munich's Gewerbeschau (1922), the Altöttinger Chapel at Munich's Gasteig, the Expositur Church of James the Elder in Döllnitz (Upper Palatinate) in 1928,⁵⁵ (*fig. 22*), and the Funerary Chapel (1931) for the cemetery in the Perlach woods. Aided by the Hofkunstanstalt, Knappe also designed an expressionistic altar window for St. Paul in Constance depicting the Last Judgment (*fig. 21*).⁵⁶ With regards to his work for Mayer he stated: “The fact that glass moves me is related to my gift as a sculptor who loves the true

material.”⁵⁷ Thus, the first truly “modern” windows after World War One were created in the Mayer'sche Hofkunstanstalt (*fig. 21 – 24*).

New Construction in Times of Inflation

Despite severe economic obstacles during the Weimar Republic, the Mayer brothers managed, thanks to their export surpluses, to erect a new commercial building. Due to income derived from their US exports in stable dollars, the firm could even use their own “banknotes.” Nearby shops, craftspeople, and construction firms accepted these secure bills because the owners knew their value and that the Hofkunstanstalt would always back them.



27

DESTROYED BY BOMBS IN 1944, on the right the totally burned-out old business structure



28

WORKSHOP MASTER FICHTMÜLLER in front of the ruins of the old stained glass building.



29

VIEW OF THE STUDIO BUILDING FROM 1923 ON SEIDLSTRASSE DURING RECONSTRUCTION, circa 1948; the front building was burned out from the roof to the ground. On the right the south part of the old workshop building – to be demolished slightly later



30

ST. BENEDIKT, GAUTING/MUNICH, Christ in the Mandorla, reconstruction of the pre-war window, Karl Knappe, 1947 (now without Schwarzlot painting)

In 1922, the Mayer brothers appointed Munich-based city planner Theodor Fischer (1862–1938) as architect-in-charge of the new edifice.⁵⁸ Based on his plans, Mayer erected the prestigious main building on the newly built Seidlstraße. Fischer paid special attention to the firm's centerpiece, the triangular exhibition space with balcony and unobtrusive wall decoration. To this day, the utilitarian architecture reveals to what degree the “Franz Mayer'sche Hofkunstanstalt” had become a workshop for artists; enabling them to contemplate and to judge, if need be corrected, or simply admire their work on a multistory glass wall (see fig. 530, 531).

But on October 24, 1929, one blow terminated the “Golden Twenties.” Also known as “Black Friday,” the crash on Wall Street led to a collapse of the world economy, inflation, and mass layoffs. In Munich, too, life

consisted of being on the dole and begging, poverty and hunger prevailed. Since the Mayer'sche Werkstätte was engaged in long-term projects, the consequences of the crisis only began to take effect a few years later, yet with double impact: On top of the economic crisis, 1933 marked the rise into power of the National Socialists.

“A Vision Like Nero's”

In compliance with Hitler's reactionary concept of art, the entire cultural sector was brought into line by introducing the Reichskulturkammer on September 22, 1933. Henceforth, Modern Art was considered “entartet” (i.e. degenerate). Many artists were banned from their profession, went into exile, or fled – a catastrophe also for the Hofkunstanstalt. At the same time sales plummeted

both in the German Reich and the US. While the Mayer brothers were not members of the Nazi-party, director Clemens Spengler joined the party so the firm could at least continue to exist. This sufficed for the rare orders coming from the administration. When the boycott of German goods began in 1935,⁵⁹ the studio's revenues did not recover. Among the by now rare commissions, were four windows in 1938 for the duke's gallery at Luxemburg Cathedral (fig. 19) by Josef Oberberger (1905–1994), some larger glass paintings for German industrial plants by Sepp Frank such as the illustrated *Philosophers* (fig. 20) with their expressionist faces, as well as the large window with net-like structures that Ivan Penkov (1897–1957) executed for Sofia's University Church (fig. 25, 26). The number of employed artisans declined drastically.

When the US entered the war in 1941, production came to an end, despite the prior purchase of the firm

“Glasmalerei F.X. Zettler.”⁶⁰ While his brothers were in the war, Anton Mayer was unable to prevent the company's collapse and destruction (fig. 27–29). By 1944, the number of employees was down to less than 20 compared to the original 500.⁶¹ In a letter to his mother, Karl Mayer describes the situation in Munich: “The apocalyptic silver birds kept coming from Italy, always flying across the Tegernsee: divinely beautiful. Equally unforgettable the view of Munich burning the night after the April '44 attack. Seen from the Zeugamt's highest roof. A vision like Nero's.”⁶² The structures of the united Mayer and Zettler firms shared this fate. Anton Mayer states: “By 1944, it also began to get bitterly serious for the Stiglmaierplatz area. It was, as usual with grand horror, that we saw fire and wads of smoke over the tortured city from the roof of our house.”⁶³ “In 1944, Zettler's old business structure at 23 Briennerstraße fell victim to bombs ... Added to this

were, in July, heavy strikes of our edifice. On July 11, the front building’s five stories burned out entirely. On July 13, the roof and the two top floors of the workshop building were hit by explosive bombs.”⁶⁴

When the US troops marched into Munich on April 30, 1945, the “Franz Mayer’sche Hofkunstanstalt’s” absolute nadir had been reached: The firm’s chronicle reports: “The front building: burnt out to the ground floor. The workshop building: roofless. Destroyed: the glass basement, the basement below the courtyard, the carpenter shop in the court, the photo studio with appliances and all. Almost all cartoons and sketches burnt. Most business papers, the old correspondence, all advertising materials and all records plus the entire equipment. Lost for the unforeseeable future: Our best German markets Silesia, the Sudeten territories and the Saar.”⁶⁵

In the Middle of Reconstruction

“After all of this, we will really begin to build: The third and fourth floors of the workshop building will be reconstructed; the exhibition gallery, where our first show will take place in early April 1946, will be rebuilt. This chapter is entitled reconstruction. All financial efforts and the mental power of the leader, Bertl [Adalbert], will be dedicated to this end.”⁶⁶ Adalbert Mayer was the youngest of the brothers. From 1922 until 1936, he had worked almost exclusively in New York and the USA. Now his special project was the firm’s reconstruction. Encountering the inherent challenges was his nephew Konrad Mayer (born 1923), son of his older brother Karl,⁶⁷ who entered the firm as a glass apprentice. By 1946 Adalbert had almost managed to reach the 1932 national revenue, though with a devalued Reichsmark. Many German inner



31 LAST SUPPER, Karl Knappe, mosaic-collage, circa 1960



32 TREE OF LIFE MOSAIC, MUNICH, Laurentiuskirche, Karl Knappe, 1957, architects: Emil Steffann and Siegfried Östreicher



33 KARL KNAPPE, circa 1960



34 ABSTRACT MOSAIC COLLAGE IN POSITIVE SETTING, made of stone, semi-precious stones, gold, and silver, for the German Pavilion at the Brussels's World Fair, Karl Knappe, 1958, today kept at Munich's Oberste Baubehörde, architects of the pavilion: Sep Ruf and Egon Eiermann

city glass windows had been destroyed by the World War Two bombardments. Adalbert and his brothers attempted to combine continuity with modern expressive means. Those participating from the first moment included Felix Baumhauer (1876–1960), Hermann Kaspar (1904–1986), newly appointed professor at Munich’s Art Academy Josef Oberberger, and, once again, Karl Knappe.

Karl Knappe and Mosaic Art

“At my work in glass it took me a long time to decide not to paint on it with *Schwarzlot* (i.e. black ceramic melting color) any longer, which meant to build the window with pure glass, only then I dared to approach the field of mosaic,” remembers Karl Knappe.⁶⁸ Apart from stained glass windows, experimental and innovative mosaics of the highest artistic caliber were now being created at Franz Mayer of Munich: Mosaics from the 1940s include *St. John on Patmos*, the *Crucifixion* (today in the workshop building’s exhibition gallery), and the *Entombment Angel* mosaic for the Stuttgart collector Beck; 1955: the *Crucifixion* mosaic for architect Alexander von Branca’s monastery church Herz-Jesu located on Munich’s Buttermelcherstraße, 1957: the *Tree-of-Life* mosaic in the St. Lawrence Church, Munich (fig. 32), 1958: the great



35 **ST. MARGARETHA, REICHERTSHOFEN**, mosaic on the altar wall, natural stone and gold mosaic form the background for a Baroque wooden cross, Benedict Schmitz OSFS, 1977



36 **CASINO IN THE LVA BUILDING, MÜNSTER**, detail of a glass mosaic made of Italian glass and silver smalti, Blasius Spreng, 1973



37 **FACADE MOSAIC FOR FARBWERKE HOECHST AG, FRANKFURT/MAIN**, colorful glass mosaic, circa 5400 square feet, Blasius Spreng, 1960

abstract mosaic for the German Pavilion at the Brussels World's Fair, today kept at the Oberste Baubehörde in Munich (fig. 34). And finally the big altar wall mosaic from 1961 depicting the *Resurrected Christ* for Hiroshima's World Peace Church.

Knappe and Franz Mayer of Munich thus became innovators in the ancient art of mosaic, thereby serving as a role model for many contemporary artists who looked at similar tasks. Knappe only made rough sketches for his mosaics, developing the works mostly from the material itself. The basis of his mosaic collages consisted of varied substances including hewn stone cubes, stone slabs (either rough or polished), gold and silver "smalti," later also glass "cake," and industrial Detopak glass. The traditional 'negative' setting technique no longer satisfied Knappe; thus Franz Mayer of Munich developed the 'positive' setting technique towards the late 1950s,

an important innovation at the time, which is now almost globally applied. Franz Mayer of Munich received Knappe's last and maybe largest mosaic commission at the artist's grave: The city of Munich's Kulturreferent ordered a mosaic to be executed posthumously for the Odeonsplatz subway station. The collaboration between the workshop and this important artist made Franz Mayer of Munich the leading and seminal modern mosaic studio. During the first half of the 20th century, the "August Wagner Vereinigte Werkstätten für Mosaik und Glasmalerei" in Berlin was Germany's largest and internationally most important mosaic studio. When it was forced to close down in 1969, Jucunda Wagner-Weinmeister wrote to her clients and artists: "The loss of this studio's artistic accomplishments ... would be irreplaceable for many if it were not for the Mayer'sche Hofkunstanstalt in Munich ... I am convinced there is no better studio in Germany."



38 **ST. THOMAS MORUS, NEUSÄSS**, circular gold and stone mosaic, *Agnus Dei*, Georg Bernhard, 1989

Karl Knappe's influence on other artists was considerable. Among them was, for example, Benedict Schmitz OSFS (born 1935), who began to design many church mosaics starting in the 1970s, such as the one in Reichertshofen (fig. 35), JoKarl Huber (1902–1996), Edeltraud Braun-Stransky, Roland Peter Litzenburger (1917–1987), Kurt von Unruh (1894–1986), Leo Müllenholz (born 1921), Bengt Olof Kälde from Sweden (born 1936), and the American Peter William Gray. Knappe's influence even extended to artists like Hubert Distler (1919–2004), Georg Bernhard (fig. 38), Ludwig Schaffrath (1924–2011), and Hermann Schardt (1912–1984) from Essen. Anton Wendling (1891–1965) reverted to natural stone, glass, and gold in his large altar wall mosaic for the St. Peter in Chains Cathedral in Cincinnati, OH, which was executed by Franz Mayer of Munich.



39 **MEMORIAL FOR ELSE LASKER-SCHÜLER, WUPPERTAL**, glass mosaic made of ¼ inch hand-hewn Italian glass smalti, Stephan Huber, 1989

Those in the Mayer studios who pursued entirely different approaches than Knappe were especially Blasius Spreng (1913–1987) from the 1960s on (fig. 36, 37) and, later, Stephan Huber (born 1952) (fig. 39). When the Hofkunstanstalt opened its US branch in 1988, it was an artisans' studio especially dedicated to new and modern mosaic.



40 **ANGELS PROTECT THE EARTH FROM THE ATOMIC BOMB**, detail from a stained glass window over the Sixtus Portal, north side, Dom Zu Unserer Lieben Frau, Munich, Karl Knappe, 1961



41 **LARGE SOUTH FACADE WINDOW, ST. JOSEPHS KIRCHE, HOLZKIRCHEN**, Karl Knappe, 1961, architect Franz Ruf

Stained Glass from the 1950s to the 1970s

In West Germany, the end of the Nazi regime and World War Two as well as the economic miracle led to a departure towards Modernism. The work of the Munich studio was characterized by multifaceted, lively, and at the same time modern artists expressing their individual styles and personalities. Once more, the most important name in this context is Karl Knappe's, who no longer used *Schwarzlotmalerei* ("tracing color") and began "to build a window using pure glass." Early examples are the reconstruction of a stained glass window, partly destroyed during the war, for church of St. Benedict in Gauting, dated 1947 (fig. 30), and the Funerary Chapel for the Perlach Cemetery (1949–1951). His most important and seminal glass paintings are without doubt the

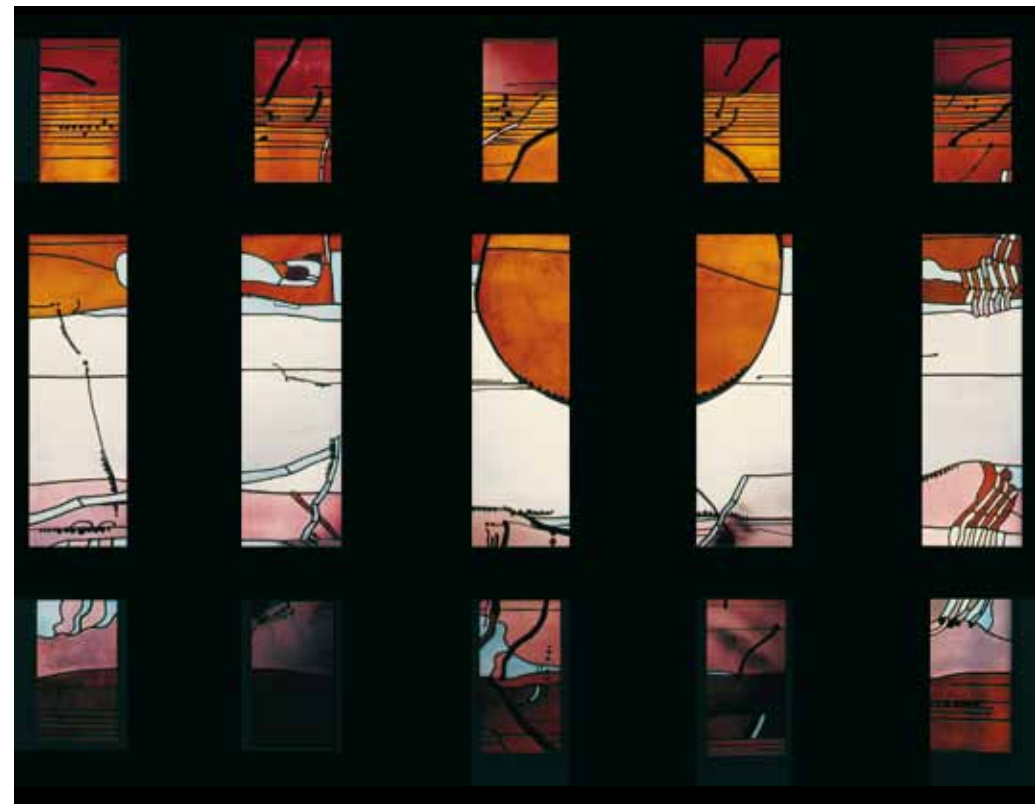
window *Angels Protect the Earth from the Atomic Bomb* for Munich's Cathedral, (fig. 40) dated 1961, the windows for St. Gertrud's in Aschaffenburg, 1960, his work for the St. Pius Church in Hausen (1966), as well as the totally minimalist *Tree of Life* window (fig. 41) for the large south wall of St. Joseph's in Holzkirchen, dated 1961. There was a plethora of other artists creating glass works for the Mayer'sche Hofkunstanstalt. The list is far from complete and only lists some of the typical personalities: Albert Burkart (1898–1982) came from Riedlingen. First a professor (1949–1963) and then the director of the Städelshule in Frankfurt/M., he taught realistic painting, mural painting, painting in space, and glass painting. Apart from numerous monumental paintings for churches, he also created an impressive number of stained glass windows. The latter were mostly done in collaboration with the Mayer Studio and executed in the



42 **ST. JOACHIMSKIRCHE, MUNICH-NEUAUBING**, Christ Pantocrator, Albert Burkart, 1956

1950s and 60s. He made his first larger post-War piece in 1953 for St. Peter and Paul in Brühl. In Munich alone, Burkart created stained glass windows for four Catholic churches: Zu den Heiligen Engeln (1955), St. Joachim in the suburb of Neuaubing (1956) – with the powerful Pantocrator window above the organ gallery, (fig. 42) – St. Willibald (1958), and the church Königin des Friedens (1962).

Hubert Distler (1919–2004) chose a completely different approach. A graphic artist, church painter, and glass designer, Distler conceived most of his glass windows in conjunction with ceiling paintings or murals and worked both in southern and in northern Germany, predominantly for Protestant churches. His first window project in collaboration with the Mayer'sche Werkstätte was for the Athanasius Church in Hanover (1964). Included are two of his four Munich projects: For the Lutheran



43 **SENIOR CITIZENS' HOME, CHAPEL, MUNICH-PASING**, Hubert Distler, 1977

Philippus Church he created – in tandem with the architect Lichtblau – a bright openwork altar wall with inlays of faceted glass. A particularly beautiful stained glass window may also be found at the back of the church. Good examples of Distler's glass windows – almost always revealing the graphic artist – are the small panels located in the Altenheimkapelle in Munich-Pasing (fig. 43).

The other personality who shaped the art of stained glass design beside Karl Knappe was Hans Gottfried von Stockhausen (1920–2010). A fine, learned, and sensitive artist deeply rooted in tradition, he later went to the Stuttgart Art Academy (1969–1985), successfully teaching both ecclesiastical and secular contemporary glass design.⁶⁹ He was considered one of the great proponents of 'musivic' and narrative stained glass. Like the old masters, he discovered for himself the technical and



44 LUTHERAN ST. NICOLAIKIRCHE, DORTMUND; circa 6500 square feet of glass design for lateral and choir walls of this early Lutheran concrete church; in the center: *The Good Shepherd*, Hans Gottfried von Stockhausen, 1963



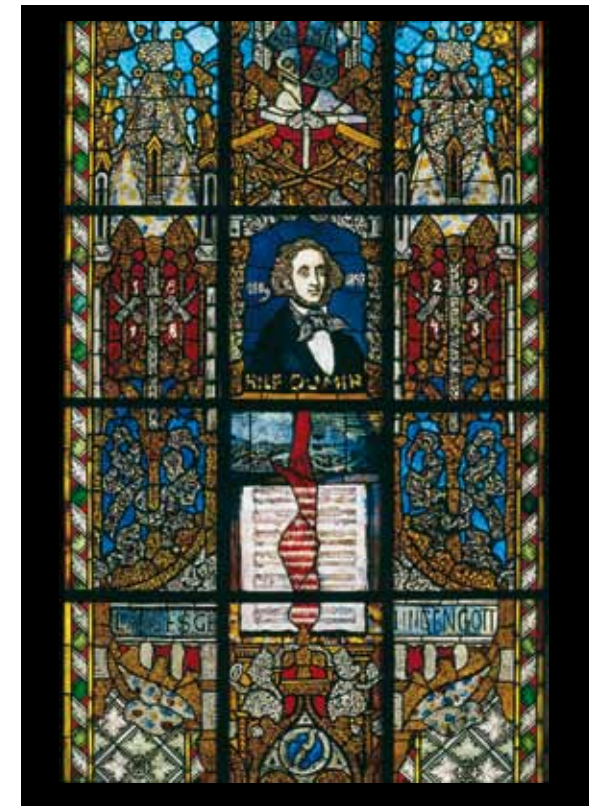
45 MÜNSTER, ULM, ISRAEL WINDOW, vision of the prophet Elias; detail of the two lower rows depicting the mouth of hell/Auschwitz, Hans Gottfried von Stockhausen, 1986



46 HANS GOTTFRIED VON STOCKHAUSEN, circa 1995



47 SAINT JOSEPH'S UNIVERSITY, PHILADELPHIA, PA, USA, CHAPEL; *Divine Quaternity*, altar window, Hans Gottfried von Stockhausen, 1991



48 LUTHERAN ST. THOMASKIRCHE, LEIPZIG, *Mendelssohn window*, south nave, detail, Hans Gottfried von Stockhausen, 1997

aesthetic merits of – one could say – ‘functional’ leading. This did occasionally lead to conflicts with Karl Knappe, who had largely abandoned *Schwarzlot*.⁷⁰ The charges of conservatism did not faze Stockhausen: “According to my understanding, terms like ‘conservative’, ‘progressive’ and such have turned into questionable buzzwords. I am the only one who can determine my artistic means ... What counts is the result, the spiritual essence alone. After all, time will be revealed in everything.”⁷¹ The Mayer’sche Hofkunstanstalt supported the realization of his designs and visions for more than five decades. The windows for the Ulm Münster are a particularly wonderful mark of the shared success story. It began in 1955, when the Gothic glazing was to be enhanced by appropriately regulating the light and sensitively adding corresponding hues of color, and it continued for three decades: In 1986 Stockhausen and Mayer realized the

so-called *Israel Window* (fig. 45) for the Münster. A broad color palette, symbolism, and protagonists using expressive gestures characterize this piece. Stockhausen’s vast oeuvre documents how strongly the Hofkunstanstalt and its team respected his requests and supported his development. His work includes the four sixty feet high ornamental windows for St. Maria zur Wiese in Soest 2002, the enormous glass assignment with the central scene of the *Good Shepherd* (1963) (fig. 44) for the entire lateral and choir walls of Dortmund’s St. Nicolai Church, begun in 1929/30 by the architects Karl Pinno and Peter Grund as an iron, concrete and glass structure, the circa 750 square feet glass painting, *Stuttgart Glass Screen*, dated 1985 and generously given to St. David’s Hall in Cardiff, Wales, by its partner city of Stuttgart, and the *Divine Quaternity* for the chapel of St. Joseph’s University in Philadelphia (1991) (fig. 47).

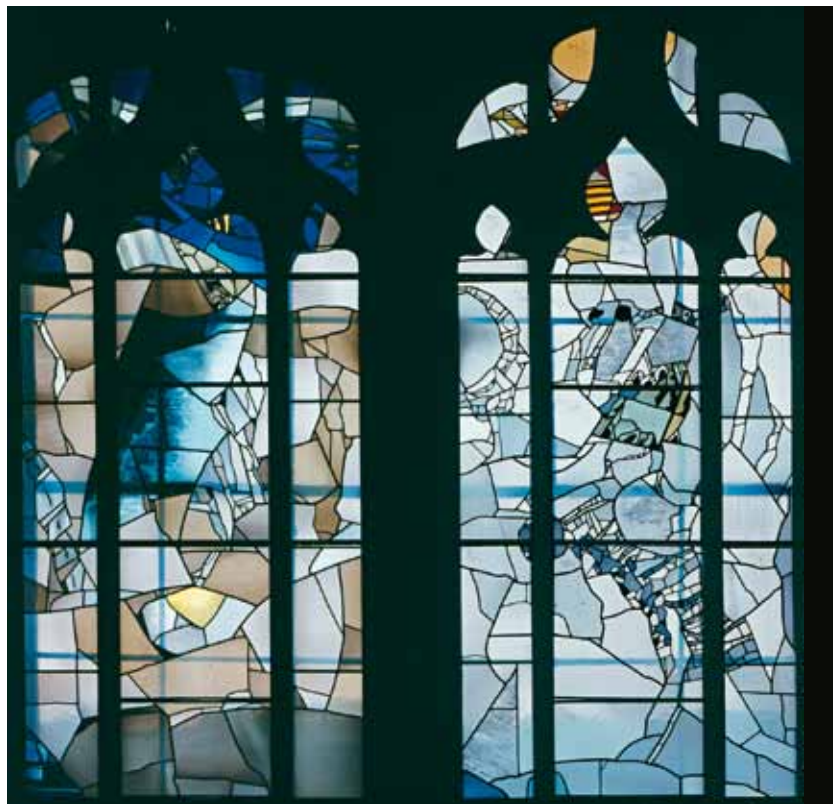
Raised in Marseille and a student of Riemerschmid’s, Carl Fritz David Crodel (1894–1973, called Charles), was someone of great importance to Adalbert Mayer during the 1950s and 60s. A professor at the Akademie der Bildenden Künste in Munich (1951–1962), he won a glass window competition for Frankfurt’s Katharinen Church, painting Old- and New Testament scenes in tandem with his wife (1953/54). Aided by the Hofkunstanstalt, he created glass characterized by a fresh and lively narrative style full of movement.⁷² The Mayers helped him on most of his glass projects until his death, among them the numerous brilliant apse windows he designed for the St. Jakobi Church in Hamburg (1957/1961).⁷³ Other examples documenting that the Hofkunstanstalt had become this artist’s workshop-home are the Schlosskirche in Pforzheim (1959/60), the Catholic parish church in Fulda-Horas (1959), the St.

Andreas Church in Brunswick⁷⁴ (1964), and St. Kilian’s in Heilbronn (1965/1968). Glass painter Josef Karl (JoKarl) Huber (1902–1996) was Karl Caspar’s master student at the Munich Academy. Between 1954 and 1967, he created, in collaboration with the Hofkunstanstalt, fascinating abstract and extremely colorful stained glass, for example for the Gothic city church in Weil der Stadt (1954), St. Martin’s in Malsheim (1962) (fig. 49), and for the Catholic church of St. Elisabeth in Stuttgart (1967). A professor of graphic art and painting since 1947, Franz Nagel (1907–1976) was the president of the Akademie der Bildenden Künste in Munich from 1960 until 1963. During his cooperation with the Mayer’sche Werkstatt, he created numerous important “modern” stained glass works and also encouraged some of his students to work on church windows. Gabriel Mayer points out that Josef Oberberger (we will turn to him later; like Nagel, he also



49

ST. MARTINSKIRCHE, MALMSHEIM, BADEN WÜRTTEMBERG, *Jubilate window*, detail, J. K. Huber, 1962



50

ST. KILIANSDOM, WÜRZBURG, two triple lancet stained glass windows from the cycle in the nave, Franz Nagel, 1966/67



51

LUTHERAN ST. MICHAELISKIRCHE, HILDESHEIM, one of 17 concrete and melted glass windows, east choir and sides apses, Gerhard Hausmann, 1966 and 1969



52

LUTHERAN ST. MICHAELISKIRCHE, HILDESHEIM, three of the choir windows of the Romanesque church, colorless glass, Gerhard Hausmann, 1966 and 1969

collaborated with the Mayer'sche Werkstätte) supposedly fought some type of "religious war" against Nagel and his students concerning issues pertaining to 'modern' and 'old.' Nagel and Oberberger were professor-colleagues and antipodes at Munich's Academy at the same time. Nagel's point of departure was based more on graphic thoughts, with at times powerful and mostly solemn color. Among his most important works are his stained glass windows for the Catholic churches St. Albertus Magnus in Regensburg (1964), St. Pius in Haunstetten near Augsburg (1966), and the nave windows for the St. Kiliansdom in Würzburg (begun in 1966) (*fig. 50*).

The project for St. Michael's in Hildesheim is of particular importance. This church is one of the large and most important Romanesque churches in Germany. Gerhard Hausmann and the Mayer'sche Hofkunstanstalt created concrete thick glass windows for the three east choirs

(*fig. 51, 52*). Windows made of concrete were certainly daring for such a historically eminent edifice. Hausmann carved graphite forms to create smelt glass pieces, which offer marvelously clear yet subdued light. It appears that to this day these windows still present an excellent solution. They are timeless (even in the technique of concrete glass, which in itself is really time-related).

German Post-War Stained Glass Becomes "World Famous"

There appears to be a parallel between the enormously popular *Munich Style* from around 1900 and the modern approaches of post-War German stained glass. No matter whether they were more painterly like the works by von Stockhausen, Crodell, or Oberberger or more graphic

works reduced to aspects of pure color or leading, same modern German stained glass slowly became "world famous" among experts and artists.

These works of glass painting represented a real breakthrough, both for new churches and for the many old and medieval churches. In the post-War era, constructing churches was of great significance for architects. Some architects who ought to be remembered here include Rudolf Schwarz, Dominikus and Gottfried Böhm, Alexander von Branca, Emil Steffann, or Hansjakob Lill. Artists made their very own contributions with regards to windows (and mosaics as well.) Their works were ambitious. It was not until the mid-1970s that this was recognized abroad. However, it can be said that at this point artists from England, Australia, and North America began "pilgrimages" to Germany, visiting leading German artists from the stained glass scene and the relevant

studios. It was only natural that they also wanted to see the projects in the churches.

Josef Oberberger Holding Court at the Kunstanstalt

Josef Oberberger (1905–1994) was appointed successor to Olaf Gulbransson as professor for glass painting at Munich's Academy. He worked with the Hofkunstanstalt for many decades – or, more appropriately and figuratively speaking: He held court. The craftspeople and most especially Adalbert Mayer, his friend for many years, had the highest regard for Oberberger. Beginning in the 1950s, Oberberger and Mayer also repeatedly and intensely worked for the cathedrals in Augsburg (*fig. 56*) and Regensburg (*fig. 57–61*), where



53 **THE GOOD SAMARITAN**, Charles Crodel



54 **DREIKÖNIGSKIRCHE, FRANKFURT/MAIN**, *Journey of the Three Magi*, Charles Crodel, 1957

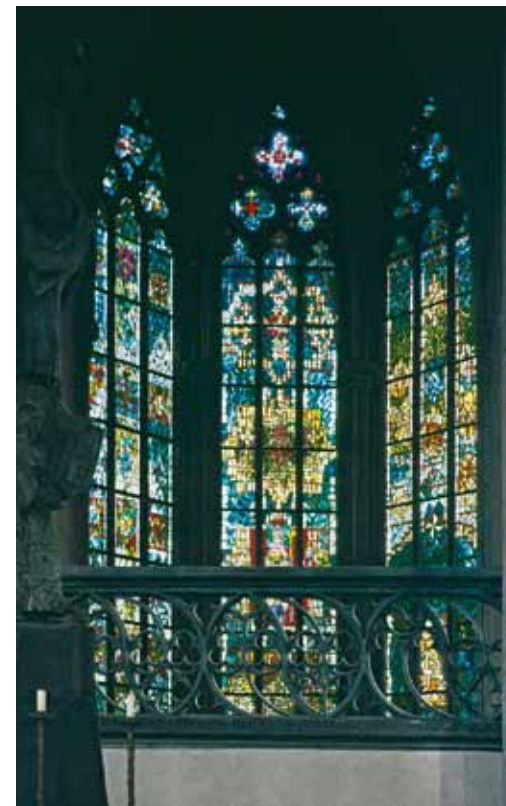


55 **DREIKÖNIGSKIRCHE, FRANKFURT/MAIN**, *Adoration of the Magi*, Charles Crodel, 1957

their predominantly abstract creations developed in a technique of free glass cutting and leading. Paramount to Oberberger was the impression of colored light breaking through mystical darkness. Studio and artist achieved this effect by coating the glass with a patina on both sides. Reinhard Müller-Mehlis wrote of his first work for the Regensburg Dom's north choir chapel (1966)⁷⁵: "Oberberger's attunement to spatial and thematic connections reached a high degree of empathy, making it almost impossible to date these four windows and leaving them in utter anonymity, which Oberberger uses to place himself beside the ancients."⁷⁶

The Fourth Generation Takes Over

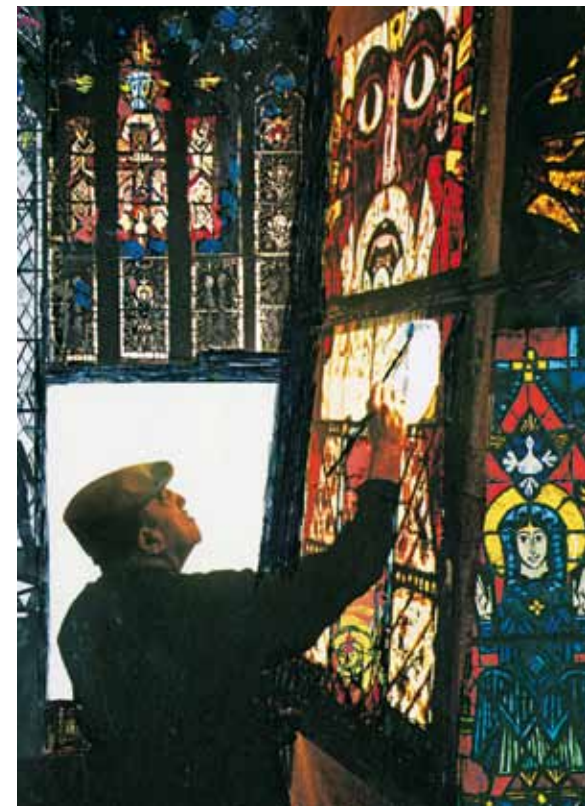
Despite its success during the two decades following World War Two, in the late 1960s the Hofkunstanstalt was pulled into the economic depression, accompanied by fifteen years of reduced exports. After the Second Vatican Council (1962–1965) there were only very few orders for modern windows in Europe. This was most severe in southern Germany with its strictly Catholic and Baroque traditions. Traditional windows were hardly in demand in the US, and the clergy did not really appreciate challenging modern solutions. While there was little demand in the US for artistically ambitious works in secular architecture and in public spaces, these kinds of commissions all but perished in Germany. In these troubled times the young Dr. Gabriel Mayer (born 1938) entered the firm. His father Adalbert Mayer began, around 1965, to withdraw from



56 **DOM, AUGSBURG**, stained glass windows for the east choir chapels, with the central medieval window of the Medallion Master as point of reference. Here the windows in the right choir chapel, Josef Oberberger, 1962–66



57 **DOM, REGENSBURG**, interior view. New stained glass by Josef Oberberger and Mayer, 1966–1989, among others all windows for the south and north nave clerestory. Mayer performed also preservation work on a substantial part of the numerous outstanding medieval windows.



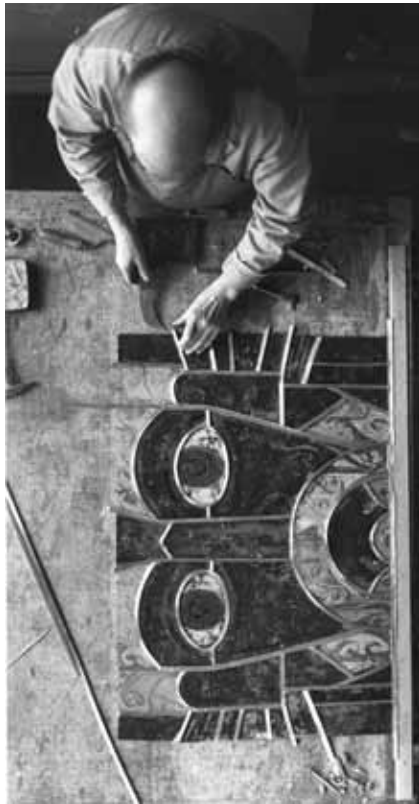
58 **JOSEF OBERBERGER** paints in the studios of the Mayer'sche Hofkunstanstalt

management and from a long work-life characterized by two world wars and incredible turbulences.⁷⁷ Gabriel's fifteen years older cousin Konrad Mayer had already joined the company in early 1954. At the end of the 1960s, the fourth generation was solely responsible and the times were all but rosy. At the time, conservation work formed the economic base of the workshop operation.

The Beginning of a New Era

In the early- to mid-1980s, the situation changed dramatically: Taking the slowly changing circumstances into account, Gabriel Mayer began to concentrate once more on the values of artistic and technical quality, while he always operated at the highest level. This approach had been the foundation for early successes. Therefore,

he contacted the best artists and architects of the day, also and especially again in the USA, and explored, experimented with, and tried out innovative forms and techniques. A milestone had been in 1982 the first collaboration with the genius and "glass possessed" British artist Brian Clarke (born 1953). From the early 1990s onward, a close and trusting friendship began to evolve. Also worth mentioning is the fascinating *Artistic Glass Tent*, realized in 1984/85 with Frei Otto (born 1925) and his daughter Bettina. This was the first successful major work executed in a technique Mayer called "float glass painting." Equally important were the increasing numbers of contacts with the US and Canada and finally, in 1988 (100 years after the first branch opened in New York), the creation of a mosaic studio in Fairfield, NJ. Another cornerstone was the intense and renewed study of the *Munich Style*, in every respect a high-quality



59 **LEAD SPECIALIST AT WORK:** leading the head of God the Father, *Pentecost window*, Josef Oberberger, Dom, Regensburg



60 **DOM, REGENSBURG,** Window No. 7, north clerestory, *Resurrection* and heraldic panes, 1989



61 **DOM, REGENSBURG,** Detail Adam and Eve, *Pentecost window*

painting and drawing technique, which had established the works of Mayer and Zettler in circa 1900. In 1997, the entire workshop building in Munich was restored on the occasion of the firm's 150th anniversary. 2001 saw the inauguration of the newly-established float glass department, whereby the Mayer studio transferred the brilliant invention of the Englishman Sir Alastair Pilkington (1920–1995) to their firm.

The Breakthrough of Float Glass Art

The float glass process was introduced to the public on January 20, 1959. Pilkington's innovation pours the glass at circa 1000°C over a tub filled with liquid tin, facilitating the production of glass panels with highly precise sur-

faces in any size. They look flawless even before sanding and polishing.⁷⁸ The effect of Pilkington's discovery was a revolution in the glass industry.

With the further development of float glass painting, the industrial glass, flawless in every way, fundamentally changed the Kunstanstalt's business. The emphasis was no longer on hand-blown "real antique" glass, based on medieval processes. Now, Gabriel Mayer and his team began to shape and burn the disembodied industrial glass by sand blasting and etching, by applying and burning-in of the most diverse types of enamel colors. They attempted to return body and a translucid surface for their designs to the all-too-perfect glass.⁷⁹ The clear, neutral glass contains very few flaws, allowing for a highly differentiated, versatile treatment without the disruption of lead lines. Float glass painting offers the possibility of overcoming old traditions to pursue other means of de-



62 **ARTISTIC GLASS TENT, DQDC, RIYADH, SAUDI ARABIA,** architect and artist: Frei and Bettina Otto, 1984–86; the first monumental work executed in float glass painting technique, one of ten segments set up in the exhibition gallery of the Hofkunstanstalt



63 **HEART TENT, ARTISTIC GLASS TENT, DQDC, RIYADH, SAUDI ARABIA,** seen from above

signing windows.⁸⁰ Artists must no longer deal with lead comes or the relatively small pieces of hand-blown glass.

Between 1984 and 1986, Gabriel Mayer accomplished the launch and the breakthrough of this extraordinary development, working together with architect Frei Otto and his daughter Bettina on the *Artistic Glass Tent* (fig. 62, 63). The ministers and commissioners from Saudi Arabia were delighted when they saw Bettina Otto's plants, tendrils, and flower designs. This was just the solution they wanted for the *Heart Tent*, the artistic centerpiece of a nature garden in a complex of the Diplomatic Club that was to be erected in Riyadh's modern diplomatic quarter. Owing to the extreme fluctuations in local temperatures and the innovative steel rope construction, this was a massive challenge. Everyone felt that a glass design would be the best solution. Yet, there had never before been a comparable project within the realm

of glass painting. The Hofkunstanstalt experimented for more than six months, collaborating with material testing firms, Munich's technical university, and contributing its own experiences with glass painting. In the end, the studio managed to realize this project, an immense stimulus to "architecture art," with the aid of uncounted translucid glass shingles onto which ceramic enamel paints were applied, using painting and etching techniques. It was the first major project worldwide executed in this new type of float glass painting.⁸¹

In 1985, disregard for stained glass was by no means over. The art-world still regarded it as nothing but craft, although as an artistic media, glass and stone offer inexhaustible possibilities. In an attempt to reconstitute its major role, Gabriel Mayer and his studios used all their energy to reestablish this art form in architecture, public spaces, and buildings.



64

THE STUDIO BUILDING TODAY, view of the facade facing the courtyard and the new pavilion for float glass painting

At this point, the fifth generation had long since entered the scene. In 1990, Gabriel's son Michael C. Mayer, (born 1967), began an apprenticeship in the field of mosaics in Italy; he collaborated on such challenging tasks as the conservation of the stone inlays of Frederick II's ('the Great') Picture Gallery at San Souci as well as conserving and reconstructing the Roman Tethys mosaic at Harvard.

From then on it was paramount for father and son to further modernize the workshops and to elevate them to high-tech standards while retaining the age-old handicraft technologies. The Hofkunstanstalt was to become even more of an equal and up-to-date partner for the artists, who were taken seriously on all counts. As the carriers of ideas, visions, and concepts, they need support for their tasks, especially since they often lack technical and practical knowledge or experience to apply sustainable technologies to architecture.

Continuous research and experiments enabled the Munich studio to furnish artists with the latest glass handling technologies: Sand-blasting, etch engraving, digital print, airbrush, hand painting, and all types of computer design. They may all be combined with existing glass painting techniques such as adhesive bonding, slumping, or fusing. Added to this were all the possibilities of large-scale design, light and heat regulation, as well as all security elements glass techniques can offer. This virtuoso and fascinating palette of technical innovations was geared towards pure architecture.



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INTERIOR VIEW OF THE STUDIO BUILDING TODAY, 4th floor with view to the office floor from the exhibition gallery (Nancy Spero picture and original sketches from circa 1900)

Innovative “Public Art” Instead of “Kunst am Bau” (i.e. Percent for Art Program)

Starting in the 1980s, the concept of “Public Art” evolved into an important movement, especially in New York City, the new metropolis of modern art. NYC's MTA Arts for Transit became very active, turning the subway system into a platform par excellence for high-caliber artworks. One could appropriately refer to a “Public Art Museum” in New York City's underground. The MTA's AFT managed to attract stars from New York's art scene, as well as emerging and not very well known local artists to design the individual stations, resulting in an appealing public art image. In the US, “Public Art” is often required by law and is generally positively regarded. Investors were increasingly approached to realize works of art where their proj-



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ONE OF THE SKYLIGHT WINDOWS, NORTE SHOPPING MALL, Rio de Janeiro; Brian Clarke and craftsmen on the hoist of the exhibition window, 1995

ects affected the public. The principle is to set aside fees for artists and implementation from the overall project cost. Generally, the ratio (20% artist fee to 80% fabrication costs from budget) applies to all artists regardless of their popularity. Many of the great stars were even proud to be asked to design art for their city. This particular environment became the breeding ground for Mayer's innovative mosaic and float glass art. Within the last fifteen years, Munich's Hofkunstanstalt, known in the US as “Franz Mayer of Munich,” realized over two-dozen predominantly large glass and mosaic architectural projects in New York City alone. Some of these works will be discussed in our chapter, “projects.”

Based on the idea of forming first-rate, professional and fantasy-filled partnerships with the artist, over the last two decades numerous large projects evolved in the US and across the world. The prestigious list of contem-



67 **BETWEEN THEN AND NOW:** An old Riedhammer kiln, dated circa 1948



68 **ART TODAY,** stained glass window by Georg Baselitz during set up in the exhibition gallery, 2012



69 **TODAY:** detail from a float glass painting design for a private home, Felix Weinold, 2007



70 **BETWEEN YESTERDAY AND TOMORROW:** glass panel of an unknown photographer with a LOMO camera, LOMO exhibition, Mayer'sche Hofkunstanstalt, 1995

porary artists includes: Brian Clarke, Julien Opie, Robert Mangold, Alyson Shotz, Martha Schwartz, Eric Fischl, Mel Bochner, Kiki Smith, and Robert Wilson; and for Germany Imi Knoebel and Georg Baselitz, to name but a few.

British artist Brian Clarke is a wonderful example to illuminate how much famous artists appreciate the Hofkunstanstalt's expertise and knowledge of modern technologies. By now, he has collaborated with Gabriel and Michael Meyer, exclusively, for almost two decades: "In the small ... churches around Lancashire, where I was born and grew up and which I visited regularly, I became aware of a stained glass, that came from something called Mayer of Munich. And they were mostly by an English artist called Francis Dixon. So from a very early age, from the age of let us say 15 years old, I was aware, that there was this studio in Munich. I wasn't quite sure, where Munich was, but I knew, it wasn't in Lancashire.

1974 I visited Munich and met Mr. Michael C. Mayer's grandfather and father and I was profoundly conscious, that this was more than a commercial operation. And so when I come here, I feel, I'm coming home and I'm coming to join with friends and colleagues, who have the same focus as me."⁸²

Enthusiasm and shared interests have increased since 1982, when Brian Clarke and others worked with the Hofkunstanstalt on the mosque of King Khaled International Airport in Riyadh. Starting in 1993, big projects followed almost annually: The synagogue in Heidelberg (1993), *The Glass Wall* (dedicated to Linda McCartney) for the Corning Museum of Glass in Corning, NY (1994), the Norte-Shopping Center in Rio de Janeiro (1995/96), the monastery church of the Cistercian nuns in Romont, Switzerland (1996), the headquarters of the pharmaceutical company Pfizer in New York (from

1996), the Sinai Synagogue in Chicago (1997), *Stamford Cone* in Stamford, CT (1998), and many more. In 2008 Clarke noted: "Over the years we worked on a variety of projects and I suppose principally I'm best known in this field for the very big grand, big scale projects, like the King Faisal-Foundation in Riyadh or the Pyramid of Peace in Kazakhstan, which we did last year, which is a great pyramidal structure, that was designed by Norman Foster. The apex of the structure contains images of a flock of doves swirling around to the apex and that creates an environmental atmosphere. So the stained glass in that context creates an entire environment. You are not then going into a building to look at a window, but you are consumed and surrounded by it. And so basically I suppose the criteria for choice is, when we are asked to do a project: Is this project something, where we can extend our artistic language? Is this project something, where we can at least hope to cre-

ate an experience, that might be engaging or entertaining or perhaps even sublime?"⁸³

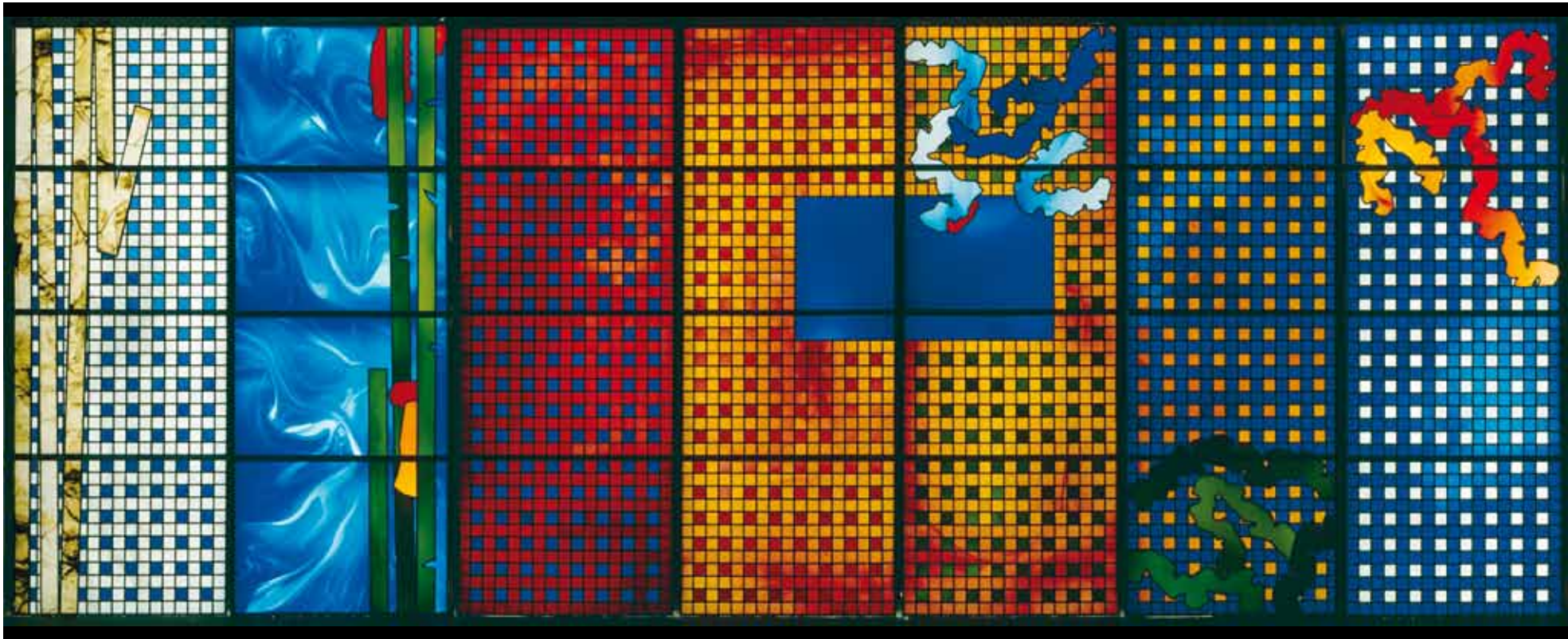
The equivalent to the US concept of "Public Art" in Germany is "Kunst am Bau" (i.e. Percent for Art Program). The latter developed after World War Two and was closely connected to the democratically structured society. Its foremost intention was to offer social assistance and commissions for creative individuals. This explains why a certain percentage of the total cost was legally stipulated for "Kunst am Bau," which, until the 1960s, was practiced in West Germany with some consequence and a certain degree of success. However, the effect was the specialization of a few building-artists and inevitably a severe restriction of artistic diversity and quality. In the late 1960s, "Kunst am Bau" drifted off, due to a lack of creativity and enthusiasm. Apart from the few prestige projects, today the "Kunst am Bau" movement has degenerated into an

unloved administrative act. In many places, art, decoration and embellishment are considered superfluous. Instead of seriously striving for quality in accord with art and architecture we are often confronted with regulations, limitations, and doubts. The Mayer'sche Hofkunstanstalt's international activities enable it to show its work in splendid ways, pointing out just how well it can be done. Like no other company, it ennobles mosaic technologies through innovation and, even more importantly, thanks to the multiple possibilities of applying the new float glass technique, to the arts of glass and mosaic. The term "Kunst am Bau" does not do justice to its large-scale projects. Instead, the Hofkunstanstalt is the place where an eminent and innovative architectural art points the way to the future.

The firm has thereby attained a deep understanding vis-à-vis the needs of the present. Its high degree of empathy and respect for traditional as well as innovative

solutions are among its distinguishing characteristics, culminating in the joy of experiments and the mutually beneficial cooperation with exceptional artists. May Gabriel Mayer's apodictic motto come true:

"We need art in architecture like our daily bread. But it must be good!"



71 GLAXO HEADQUARTERS, LONDON, curved stained glass wall with hand-blown glass and onyx from Pakistan, Brian Clarke, 1990/91



72 MEMBERS OF MAYER FAMILY CURRENTLY ACTIVE: right Gabriel Mayer, 4th generation (born 1938), left Michael C. Mayer, 5th generation (born 1967), 1998

Trained as an Art Historian, Historian, and in German Studies, Dr. Bernhard Graf was born in 1962 in the Lower Bavarian town of Landshut. He is an adjunct professor at the universities of Munich and Darmstadt. His international fame is based on scholarly books and articles, on conceiving reknowned exhibitions and on his work as screenplay writer and director for the Bayerischer Rundfunk, where he created numerous historic, art, and cultural documentaries. In his documentary film, ‘Munich’s Stained glass Conquers the World’ (2008), he stressed the global importance of Mayer of Munich.

¹ Cf. Rudolf Reiser: König Ludwig I. in Rom. Im Paradies zwischen deutschen Malern und schönen Mädchen, Munich 2005, p. 17–86

² Quoted after Konrad Mayer: Franz Mayer'sche Hofkunstanstalt, gegründet 1847. Eine Münchner Unternehmensbiographie, part I: Die 1. Generation, 1847–1883, Munich 2001, p. 15

³ Cf. Mayer, like fn. 2, p. 93: “The big challenge I envisioned was to unite the fine arts – architecture, sculpture, and painting – to connect them with technology and then to reintroduce the medieval masonry workshops, which created so many great things, especially in the ecclesiastical realm.”

⁴ Suzanne Beeh-Lustenberger: Dem Licht Farbe gegeben. 150 Jahre Franz Mayer'sche Hofkunstanstalt 1847–1997, in: Das Münster, vol. 51, issue 1, 1998, p. 36

⁵ Quoted after Mayer, like fn. 2, p. 21

⁶ Quoted after Mayer, like fn. 2, p. 21

⁷ Quoted after: Egon Caesar Conte Corti: Ludwig I. von Bayern. Ein Ringen um Freiheit, Schönheit und Liebe, nach dem schriftlichen Nachlass des Königs und zahllosen sonstigen unveröffentlichten Dokumenten, Munich 1937, p. 541

⁸ Quoted after Hubert Glaser: in: Wittelsbach. Kurfürsten im Reich – Könige von Bayern, eds. Hubert Glaser and Reinhold Baumstark, Exhib. cat. Bayerisches Nationalmuseum, Munich 1993, p. 56–58

⁹ Quoted after Wilhelm und Caroline von Humboldt in ihren Briefen, vol. III, Berlin 1909, p. 7

¹⁰ Quoted after Winfried Nerdinger (ed.): Romantik und Restauration. Architektur in der Zeit Ludwigs I. 1825–1849, Munich 1987, p. 122

¹¹ Cf. the critical acclaim when a memorial plaque was installed in 1890 in the Upper Bavarian chronicle volumes and the annual reports of the Chamber of Commerce for Upper Bavaria

¹² Elgin Vaassen: Bilder auf Glas, Glasgemälde zwischen 1780 und 1870, Munich, Berlin 1997, p. 178

¹³ Elgin Vaassen: Notizen zu Leben und Werk des Glas- und Architekturmalers Max Emanuel Ainmiller (1807–1870), in: Schriften des Historischen Vereins Murnau am Staffelsee e.V., vol. 8, issue 12, Murnau 1987, p. 7

¹⁴ Cf. extensively Vaassen, like fn. 12, p. 191 f.

¹⁵ Cf. extensively Vaassen, like fn. 12, p. 195

¹⁶ Cf. extensively Elgin Vaassen: Die Glasgemälde des 19. Jahrhunderts im Dom zu Regensburg, Stiftungen König Ludwigs I. von Bayern 1827–1857, Regensburg 2007, p. 9–122

¹⁷ Cf. Vaassen, like fn. 12, p. 192–195

¹⁸ Vaassen, like fn. 12, p. 195, 219

¹⁹ Vaassen, like fn. 12, p. 219

²⁰ Extensively in Vaassen, like fn. 12, p. 249–269; among them Josef Peter Bockhorni, Heinrich J. Burmester, Gottlieb and Karl Hildebrand, Ignaz Hirschvogel, Ignaz Neumair, Josef Lechenbauer, Friedrich Dorn, Wilhelm Götz, Julius Kühn, Nathan Prager, Karl Eduard Rederer, Carl de Bouché, Franz Emil Gnant, Josef Hannes and Anton Wieninger, Joseph Gabriel Mayer, Johann Baptiste Rossmann, Otto Friedrich Wörner, Georg Boos, Gustav van Treeck, and Franz Xaver Zettler

²¹ Cf. Franz Mayer of Munich and F. X. Zettler: A Short Historic Survey, ed. by the Mayer'sche Hofkunstanstalt GmbH, Munich 2009, p. 6

²² Quoted after Mayer, like fn. 2, p. 15

²³ Mayer, like fn. 2, p. 84

²⁴ Mayer, like fn. 2, p. 85

²⁵ Joseph Gabriel Mayer: Meine Biographie, Munich 1872: “In 1867 our space turned out to be too small once more due to the increased number of workers. Therefore, we proceeded to construct an adequate new edifice in 1868/69. At the same time we introduced a workshop for glass painting.”

²⁶ Quoted after Vaassen, like fn. 12, p. 259

²⁷ “In 1865, we founded a branch in London to serve England. I first had the opportunity to introduce my art products there in 1851, when there was already quite some demand for them.” Mayer, like fn. 25

²⁸ Cf. Mayer, like fn. 2, p. 95; the inscription on the plaque (translated): “Statues, Altars, Paintings, Bronze & Zink-Foundry, Mayer'sche Kunstanstalt for ecclesiastical works in Munich Stiegelmeier Platz N.º 1, New York 52 Barclay Street, London 70 Grosvenor-St., Paris 23 rue St. Sulpice, Jos. Gab. Mayer, Knight of the Papal Order of St. Gregory, Director.”

²⁹ Cf. extensively Joseph Ludwig Fischer: Vierzig Jahre Glasmalkunst, Festschrift der Kgl. Bayerischen Hofglasmalerei F. X. Zettler zum Gedächtnis ihres vierzigjährigen Bestehens, Munich 1910, p. 35–39; Jean M. Farnsworth, Carmen R. Croce, and Joseph F. Chorpenning O.S.F.S: Stained Glass in Catholic Philadelphia, Philadelphia 2002; Vaassen, like fn. 12, p. 262–266. “In the spring of 1870 my son in law, F. X. Zettler, left our institution. As a consequence, I gave him the glass painting for himself, thereby following his wishes. Yet glass painting remained closely connected with the institution.” Mayer, like fn. 27

³⁰ Beeh-Lustenberger, like fn. 4, p. 36

³¹ Extensively on the Zettler enterprise see Farnsworth et al., like fn. 29, p. 27: in the US, Franz Xaver Zettler was represented by the Draprato-Statuary-Society in Chicago und New York City

³² Mayer, like fn. 2, p. 94

³³ Quoted after Mayer, like fn. 2, p. 9

³⁴ Cf. Karl Mayer: Die Aera Franz Borgias Mayer, Munich 1950 (manuscript)

³⁵ Farnsworth et al., like fn. 29, p. 27

³⁶ Cf. Die F. Mayer'sche Hofkunstanstalt und Firma Zettler; quoted after the chronicles of Upper Bavaria and the annual reports of the Handels- und Gewerbe­kammer für Oberbayern for the year 1892 at Munich's Stadtarchiv

³⁷ Farnsworth et al., like fn. 29, p. 27. The 1899 annual report of Zettler states: “The expenses for US-customs are, as the firm decries, still as high as before (45 %), making all exports second to impossible.”

³⁸ Farnsworth et al., like fn. 29, p. 27

³⁹ Mayer, like fn. 2, p. 91

⁴⁰ Cf. Franz Mayer of Munich, like fn. 21, p. 13

⁴¹ Franz Mayer of Munich, like fn. 21, p. 42

⁴² Beeh-Lustenberger, like fn. 4, p. 38

⁴³ Cf. Franz Mayer of Munich, like fn. 21, p. 40

⁴⁴ Cf. Michael Bringmann: Gedanken zur Wiederaufnahme staufischer Bauformen im späten 19. Jahrhundert, in: Die Zeit der Stauer. Geschichte, Kunst, Kultur, exh. cat. Württembergisches Landesmuseum, vol. V, Stuttgart 1977, p. 581–620

⁴⁵ Adolf Loos: Ornament and Crime, 1998

⁴⁶ Cf. Karl Mayer: Epilog zur Aera der Franz Mayer'schen Kunstanstalt unter Franz B. Mayer, Munich circa 1950 (manuscript)

⁴⁷ Cf. Franz Mayer of Munich, like fn. 21, p. 54

⁴⁸ Cf. the term Alt-Stil-Fenster (i.e. old style windows) in Beeh-Lustenberger, like fn. 4, p. 38

⁴⁹ Cf. Franz Mayer of Munich, like fn. 21, p. 54

⁵⁰ Cf. Franz Mayer of Munich, like fn. 21, p. 41

⁵¹ Cf. Clemens Spengler: Die Franz Mayer'sche Hofkunstanstalt in München, Munich 1945; Beeh-Lustenberger, like fn. 4, p. 40

⁵² Konrad Mayer: Speech at Karl Knappe's grave on March 24, 1970: “We from the Mayer'sche Hofkunstanstalt are standing at the grave of a man with whom we have collaborated for over 50 years. We had the privilege to follow the artistic path of the deceased, accompany him and help realize his visions for more than three generations.”

⁵³ Beeh-Lustenberger, like fn. 4, p. 39

⁵⁴ Quoted after Otto Fischer: Karl Knappe, Münchner Kunstzeitschriften, Augsburg 1929, p. 11 f.

⁵⁵ Cf. Marianne Mayer: Chronik der Franz Mayer'schen Hofkunstanstalt München, Munich 1960–1978, p. 84

⁵⁶ Beeh-Lustenberger, like fn. 4, p. 39

⁵⁷ Quoted after Alfred Zacharias: Karl Knappe 80 Jahre, in: Das Münster, vol. 17, 1964, p. 399 f.

⁵⁸ Winfried Nerdinger: Theodor Fischer, Architekt und Städtebauer, Berlin and Munich 1988, p. 293 f.; Ulrich Kerkhoff: Eine Abkehr vom Historismus oder ein Weg zur Moderne. Theodor Fischer, Stuttgart 1987, p. 224 f. and 253

⁵⁹ Beeh-Lustenberger, like fn. 4, p. 39

⁶⁰ Farnsworth et al., like fn. 29, p. 27

⁶¹ Marianne Mayer: Chronik der Franz Mayer'schen Hofkunstanstalt München, beginnend mit ihrer Zerstörung 1944 und ihrem Wiederaufbau nach Kriegsende, Munich 1955, p. 5, 14

⁶² Karl Mayer: Bericht, in: Mayer, like fn. 61, p. 7

⁶³ Anton Mayer: Bericht, in: Mayer, like fn. 61, p. 16 f.

⁶⁴ Mayer, like fn. 61, p. 16

⁶⁵ Mayer, like fn. 61, p. 25

⁶⁶ Mayer, like fn. 61, p. 48

⁶⁷ Mayer, like fn. 61, p. 32: In September 1945, Konrad Mayer began to work at the Hofkunstanstalt, replacing glass painter and mosaicist Johannes Kern, who had left.

⁶⁸ Quoted after Zacharias, like fn. 57, p. 399 f.

⁶⁹ Extensive biography in Peter Schmitt: Hans Gottfried von Stockhausen. Das Glasbild, Munich 1987, p. 49 f.

⁷⁰ Beeh-Lustenberger, like fn. 4, p. 44

⁷¹ Cf. Bert Hauser in a conversation with Hans Gottfried von Stockhausen, in: Hans Gottfried von Stockhausen, like fn. 69, p. 25

⁷² Doris Schmidt: Glasmalereien von Carl Crodel in der Frankfurter Katharinenkirche, Frankfurt am Main 1956, p. 8; Beeh-Lustenberger, like fn. 4, p. 46

⁷³ Thomas Ehler: Hauptkirche St. Jacobi zu Hamburg, Hamburg 1988, p. 18

⁷⁴ Robert Slawski: St. Andreaskirche Braunschweig, Kiel n.y., p. 1 f., 9 f.

⁷⁵ Cf. Hans Habermann: Zur Durchführung der Maßnahme, in: Dom zu Regensburg. Neue Glasgemälde von Prof. Josef Oberberger, Regensburg 1990

⁷⁶ Reinhard Müller-Mehlis: Neue Arbeiten. Aus der Mayerischen Hofkunstanstalt München, offprint from: Das Münster, vol. 22, issue 3, 1969, p. 149 f.

⁷⁷ After years of practical experience, he took over; cf. Mayer, like fn. 61; Munich, August 1962: “August 1; Gabi begins to work at the firm. At first in the glazier's shop. He is supposed to learn the technical side from scratch.”

⁷⁸ Extensively in Theodor C. Barker: The Glassmakers: Pilkington, the Rise of an International Company, 1826–1976, London 1977, p. 75; the same: Pilkington Brothers and the Glass Industry, London 1961

⁷⁹ Cf. Michael C. Mayer: Franz Mayer'sche Hofkunstanstalt, Munich 1994, p. 29

⁸⁰ Beeh-Lustenberger, like fn. 4, p. 51

⁸¹ Cf. Franz Mayer of Munich, like fn. 21, p. 70

⁸² Brian Clarke's statement, in Bernhard Graf: Die Münchner Glas-kunst erobert die Welt, Munich 2008, p. 2

⁸³ Clarke, like fn. 82, p. 16