The New Window as an Integrated Part of the Cathedral’s Historical Glazing – The Genesis of a Design

About 20 years before consecration of the cathedral’s choir, around 1300 A.D., its clerestory was appointed with colourful glazing of refined quality [1]. The fifteen windows from a coherent cycle [2] subdivided into several zones. The lowest course of window panes is filled by the donors’ row with 50 coats of arms. Above these are 48 figures, alternating between ancient and more contemporary kings, each three panes tall. They flank the cycle’s only depicted scene, in a window located in the axis of the choir. Here, the adoration by the Magi of the Christ Child, who is standing on Mary’s lap, is shown. All figures stand in architectural tabernacles, the edges of which each extend across two rows. The window’s entire lower section is strongly coloured. The image backgrounds alternate between red and blue with the architectural motifs laid out in yellow, and the figures wear intensely coloured robes. Stretching above these panes is ornamental glazing in which colourless or light-coloured panes predominate, although the detailed forms and colours change from window to window. Only in the axial window does the strongly coloured figurative design continue as half-portraits of prophets and Old Testament kings. The colour intensity increases markedly in the window’s tracery sections. The design from the ornamental sections is taken up again in the windows of the triforium [3].

The glazing of the clerestory in the nave and transept, not finished until the 19th century, is oriented at the glazing of the medieval choir. Here, however, in the four- and six-sectioned windows above the donors’ row, Old Testament figures (north side), and New Testament figures and figures of saints (south side) stand and different colour harmony, either pastel or overly shrill. Colours that were too light would have led to glare, and overly gloomy colours were completely impossible in this location. Large monochrome or near-monochrome fields of colours were ruled out simply because of the window’s monumental size. The colouration was definitely the most crucial factor for a satisfying solution.

Gerhard Richter’s design

During an encounter with Gerhard Richter in 2002, mention was made of the planned glazing for the south transept window. This
task immediately stirred the artist’s interest, and he expressed his willingness to work together with the cathedral construction administration. Some years earlier, the artist had produced the print cathedral corner, the revenue from which he donated to the cathedral construction fund, and which was also published in a poster version [8]. Until then, one would not have made a connection between Gerhard Richter and glass windows, and only a few people knew already designed a window for a private residence. From the knowledge of this work, however, which includes both figurative and non-representational works, and of course also due to their outstanding quality, we were convinced that only Gerhard Richter could find a satisfactory artistic solution for the south transept window. With the knowledge of Friedhelm Hofmann, who was then Auxiliary Bishop in Cologne, I requested a proposal from the artist. As an art historian who has intensively studied contemporary art, Bishop Hofmann is a recognized advisor on questions of church art, and moreover, has been a friend and confidant of the artist for many years. Gerhard Richter accepted on impulse and with great interest. He was provided with all documentation available about the window, the desired theme, and the entire glazing of the cathedral. Gerhard Richter worked on a first draft, and we awaited it in suspense. When he presented it to us in his studio some months later, Bishop Hofmann and I were initially surprised. Richter had filled the sections of the window with many small coloured squares. Thereby he had clearly been inspired by a picture he had painted in 1974, 4096 colours. Several intense discussions followed, both in the studio and in the cathedral, before the artist had convinced us that for him, there could be no figurative design but only this solution.

Thereby, the first step towards years of intense work had been taken. Richter had initially presented proposals with squares of various sizes. In order to get a realistic impression of the effect, the first trials were made on-site using coloured transparent film. For glazing located at such a height and illuminated so intensively by natural light, checking on-site is very important. Also to be considered of course, is the fact that glasses windows have their own technical requirements.

A size for the squares had to be founded that was divisible by the length and breadth of the individual panes. After several experiments we decided on a format of 9.7 x 9.7 cm. This was followed by the important process of colour selection, which of course was linked to the question of which type of glasses to use.
After experiments with other types of glass, the decision was made to use mouth-blow, genuine antique glass for the new window, just has had been used in the historic windows. From the glass blowing workshop’s extensive colour range, the artist selected approximately 100 coloured glasses, reducing that number over time to 72. Test panes were repeatedly produces for placement in the window opening on-site. Initial viewing showed that all light-coloured squares would have to be eliminated, because in the intense light from the south side, their colouration could not be perceived at all. In compensation, the number of darker tones was increased. With dark panes of glass, hue differences that could hardly be perceived in the workshop presented themselves in the window.

After completion of the preliminary design process the work was presented to the Metropolitan Chapter, which holds sole decision-marketing power as the cathedral’s ruling body [8]. Gerhard Richter was commissioned to further develop his design, and at a second meeting in 2006, the Metropolitan Chapter ultimately accepted his design for the south transept window [9].

Parallel to this work by the artist, who was still adjusting the coloration and arrangement of the coloured squares in the window’s overall pattern, the technical execution was tested. The coloured squares close placement to each other created implementation difficulties [10]. Attempted with a test pane, the conventional lead glazing technique did not produce satisfactory results. While from the church nave one could not actually see the lead cames between them, they are still perceptible, and that made a significant difference. Intense contact between the colours, a distinguishing feature of Richter’s design, could not be fully achieved using the lead glazing technique.

Two solutions remained, both of which were pursued almost to the end. The Peters Company in Paderborn had developed a mechanical mounting. Screws cemented onto a carrying pane at the coloured squares’ intersection points used nuts to hold the stained glass panes a set distance apart while still allowing for any movement due to thermal distortion. Using this solution, the coloured panes would hardly have been effective from the outside, however, and since the exterior appearance of this completely unobstructed window looking out over the large plaza is almost as important as the view from the interior, we refrained from using this construction. Finally, the most satisfactory solutions was that suggested by Wilhelm Derix Glasstudios of Taunusstein, which used a non-hardening silicone...
gel to fasten the coloured squares to the carrier pane, then additionally fastening them to one another with black silicone. This way, the individual coloured squares can expand at various rates without creating dangerous stresses. The connection between supporting pane and coloured glass simultaneously has the effect of transmitting the colours to the outside, thus avoiding a monotonous glass surface of facing the south. As seen after the installation, the silicone gel lets the colours glow even more intensely. A permanent ‘wet-effect’ seems to be created.

In the meantime, Gerhard Richter had further refined his design. The 72 colour tones selected were arranged in the panes using a random-pattern generating program. Since not all of the colours appear with equal frequency, the colouration could by very subtly controlled. The entire area was not covered uniformly; instead he experimented with repetition and mirror reflection among the panels and sections. It was particularly important in the sections of tray not to make the tapestry of colour simply continuous, but rather to consider the geometry of the stone. In June of 2006, the presented to the press, and the contract with the Derix Company was signed in September.

Right from the beginning, the public followed the idea that Gerhard Richter was to design a window for the cathedral with great interest, although the parties concerned did not actively promote this. Because a photographer managed to take and published pictures of a few test panes that corresponded neither in size nor coloration to the final choices, reactions, as could only be expected, were impetuous. Some criticism was not objective, but some was well-founded, and a few letter writers expressed their lack of understanding over the fact that no saints were to be depicted. Norbert Feldhoff, Dean of the Cathedral, personally answered all of the letter-writers, and requested their understanding for the decision. To a much greater extent than expected, however, we received approval from many sides and all levels of society. Indeed, many people were truly enthusiastic, and were happy to tell us so.

The large window did not just have to be designed and produced; it also had to be paid for. Since the members of the Zentral-Dombau-Verein donate their money to the cathedral’s preservation, and since we could not nor would we want to burden the budget set aside for cathedral preservation with this windows coast, the question of a means of financing arose. Although we probably could have found in individual donor, we did not want to follow this course. Feldhoff, Dean of the
Cathedral, had the idea of initiating a campaign to attract donations for the window. We wished to find, as many donors as there were squares. A flyer was printed, and in the Internet one could see a running total of the amount donated and a list of donors. This list continues to be viewable there. Over the year 2006, the sum increased continually, and finally more than 1000 donors participated in this window’s financing, thus also expressing their approval of the selected design.

The new south transparent window produces to Gerhard Richter’s design responds in a most sensitive manner to the coloration of the historical glasswork, and is indeed a 21st century artwork in its own right. The vitreous wall of colour with is beguiling light has dispelled all ornament and seems to contain everything that has ever been said about spiritually, light and colour. All thoughts, all images, and all saints are united in this window.

A far more detailed description of the design and production process shall appear in the 2007 Cathedral newsletter.

[3] The ornamental panes in these windows today are mostly reconstructions
[5] An exception to this actually seems to be Cologne, where Markus Lüpertz is working on windows for St. Andreas, and Sigmar Polke on designs for St. Kunibert
[8] Metropolitan Chapter meeting of February 1, 2005
[9] Metropolitan Chapter meeting of May 2, 2006
[10] This aspect was also be dealt with extensively in the 2007 Cathedral newsletter