Fehlstellenergänzung in der Glasmalerei: Pixel (Dorndorf)

The Challenge

The question of replacing missing areas had always been at the forefront of stained glass restoration, due to technical necessities born out of the need to close the gap in the outer skin of the affected building. However, the way in which this replacement was designed has changed over time, not least because of the mostly traditional approach within this particular field. It was comparatively late, towards the end of the twentieth century that stained glass conservation fell in line with the general restoration principles, eventually aided by the Corpus Vitrearum Medii Aevi (CVMA) Conservation Guidelines of 2004.

With respect to missing areas, these guidelines stipulate that “the insertion of infills, inpainting and restoration of missing paint … should only be undertaken when fully justifiable based on thorough art-historical and technical research. Such treatment must be guided by the principles of minimal intervention and reversibility. Every addition of a new piece of glass must be identified in a permanent manner with a date and signature or other identifying symbols.”

But how can this be put into practice, in particular when besides the conservation ethics also aesthetics are playing a major role?

The Project

The former East Window of the Parish Church in Dorndorf, Thuringia, consisted of two lights, each filled with four stained glass panels placed there by the Naumburg-based firm of Franke in the year 1912 (fig. 2). All panels had been removed in 1970 but thankfully not disposed of but stored, if inadequately, on the gallery next to the organ from where they had been rescued in 2009 by students of our department. By the time of their rescue, the panels had lost pieces of glass to a varying degree (fig. 1) including most of the figurative heads so that a concept for the reinstatement of lost areas had to be developed. As overriding principle, we chose the approach devised by Paul Philippot and Paolo and Laura Mora, who postulated in the 1970s “a clear distinction of the various categories of missing areas and their differing treatment according to a strictly differentiating concept. This would, in their opinion, regain the continuity of a fragmentary picture and thus facilitate its perceptibility without any falsification.

The Options

Since there were no pre-damage photographs available, the Dorndorf-panels could be assigned to two categories:

a) areas of missing glass, where the original design could be copied from surviving glass in the corresponding panel in the adjacent light. This was mostly possible with the ornamental background. The copies were painted in a faithful reproduction of Franke’s original style. Fine lines, scratched into the paint before firing, and a dated signature (FHE 2013) ensure the identification at close quarters of these infills as later additions (fig. 3).

b) areas of missing glass, where there was no sufficient information available such as the heads and torsi within the figurative design, but in parts also missing areas of the ornamental background design. An example of the latter clearly illustrates, that there were several ways of reconstruction possible, all based on mere speculation, thus being not admissible (fig. 4). So how to proceed in those cases?

The Solution: Pixels

As a way forward, we recognised a solution which had been implemented, to the best of our knowledge, for the first time in the abbey church of the Hôpital Notre-Dame à la Rose in Lessines in Belgium. Here, missing areas had been replaced with painted squares reflecting the assumed colour-scheme of the original design. We quickly noticed, however, that crucial to the success of such a substitute for the lost original was a tedious process of finding the right size of what we since termed the “pixels”, their colour-distribution and light-values.

At first, we did this by hand-drawing the pixels but of course, working with a suitable software programme is the way into the future (fig. 5). The same notion to move away from “all work done by hand” applies to the transferal of the various pixels with the differing colours onto the glass before firing. So far, we have done this by covering the surface with a foil and cutting-out the relevant pixels assigned to a particular colour before applying the paint and the removing the foil for fairing the glass (fig. 6). Especially the latter is a long drawn-out process, so finding a time-saving method will be crucial to the desired success of this method as otherwise it will not be acceptable for the client on financial grounds.

Suggestions are being invited and will be most welcomed!