

# Research and Restoration of the Medieval Murals in Estonian Churches

HILKKA HIIOP, ANNELI RANDLA

## *Summary*

The aim of the current article is to give an overview of the research and restoration of the medieval murals in Estonian churches from the early 20th century to the present day. The focus is on the work of Viktor Filatov in the 1970s. The article also maps the needs and possibilities of further research and conservation.

The history of discovering, researching, appraising and restoring medieval Estonian architecture has not yet been written. Wall paintings in medieval churches are no exception. The current article attempts to offer an overview of the work that has already been done, although the overview is by no means comprehensive. The authors aim to delineate the main developments and point out possible future topics of research.

Estonian medieval churches were decorated with ornamental, architectural and figurative wall paintings with larger compositions. The paintings have suffered damage in wars and fires, as well as because of changing theology and fashion/taste. The majority of medieval murals known today were painted over during the post-Reformation centuries, and by the end of the 19th century they were totally forgotten. Quite by accident, some fragments came to light during the late 19th century renovation work in the Muhu and Karja churches.

The first study of the wall paintings was conducted in 1913 by the architect and art historian Johannes Gahlnbäck, who uncovered and copied the murals in the Muhu and Karja churches. Gahlnbäck published a thorough overview of the work undertaken, describing the paintings, and analysing them from the point of view of style, iconography and technology; he also suggested a relative chronology, i.e. all the methods subsequently used throughout the 20th century. Several of his art historical views have survived to this day, while others have been altered in accordance with the more extensive discovery of paintings.

The mechanical method of uncovering the murals Gahlnbäck used is also still used; consolidation technologies were

not known at that time. It is remarkable that he worried about preserving the paintings and emphasised the effect of interior climate in the buildings, offering various methods to improve the climate.

The declaration of the Republic of Estonia considerably changed the local academic life. The prevailing Baltic German cultural policy was replaced by a Scandinavian orientation. The first art history professor at the University of Tartu, Helge Kjellin, came from Sweden. Besides teaching, he was also involved in restoration. Kjellin worked in 1923 and 1924 in the Karja church, continuing Gahlnäck's effort, and in 1924 he worked in the Ridala church. Kjellin published the results of his extensive building-archaeological and art historical research in Karja church in a monograph in 1928. As an art historian, Kjellin described, systematically and in great detail, all the revealed wall paintings regardless of their significance in the design of the church. He also documented the colour traces found on sculptural details. This was followed by a stylistic, comparative and iconographic analysis of the motifs of paintings, which became the chief method in our art historical research. The most problematic were the 'magical' signs found on the vault of the chancel, which in fact offer various possibilities of interpretation even today.

It is of utmost importance that, in restoring the Karja church wall paintings, Kjellin considered the church as a whole, and securing the survival of decorative finishing was for him connected with the constructive side of the church, as well as with providing and keeping the right interior climate. No less important was the presentation of the church as an aesthetic entity, which was the

reason for reconstructing the destroyed ornamental painting fragments.

The wall paintings in the Ridala church were also discovered and restored by Kjellin, although there is no description or analysis of that work. The paintings were probably reconstructed quite extensively.

After a long gap, the paintings again attracted attention at the end of the 1950s. On the one hand, this was connected with researching medieval art for the *History of Estonian Art*; on the other hand, the dismal condition of the paintings necessitated quick restoration.

The first new data acquired in the course of field work and their interpretation was provided by Villem Raam. In his article published in 1966, Raam thoroughly analysed the new finds, the most sensational of which was undoubtedly a décor fragment of the exterior of the Kaarma church, proving that the exteriors of churches had also been decorated with paintings.

The next important period in exposing and restoring medieval wall paintings is associated with the activities of two professionals: Viktor Filatov, a leading expert at the Moscow State Artistic Restoration Central Worksop, and the chemist Antonina Ivanova. They worked in the Valjala, Muhu and Kaarma churches between 1969 and 1976. Large-scale work was carried out under their supervision, mostly by unqualified young Estonian artists and art historians.

The paintings were exposed mechanically, and fixed locally with polyvinyl acetate (PVA) dispersion glues. The surfaces were repeatedly impregnated with organo-silicate resins, in an effort to strengthen the layers of plaster and paint, and to make the surfaces water-repellent. To achieve reversibility, the retouching

was carried out with a water-based binding medium. As a rule, the employed technique could be clearly distinguished from the original (retouching with either vertical strokes or cross-hatching).

From the contemporary viewpoint, the evaluation of the technical restoration methods of Filatov and Ivanova shows them to be rather controversial. It was a time when the whole of Europe was in thrall to the possibilities offered by scientific achievements and synthetics, which seemed to solve all preservation problems. The results of this enthusiasm occasionally became evident only years or decades later, when some of the used substances proved unsuitable in the context of historical substance, real environmental conditions and the passage of time.

The negative effects in Saaremaa became evident during the restoration work. Massive crystallisation of salts in newly restored areas occurred in both the Muhu and Kaarma churches, and the surface layers (including the paint layers) peeled in Muhu.

We can now blame Filatov for using unsuitable and excessive synthetics but, on the other hand, the effectiveness of restoration work and the impact of the substances primarily depend on micro-climatic conditions. The conditions in the Saaremaa churches, however, were critical when Filatov started and when he finished: in places there were no windows, the roofs leaked, the churches had serious humidity problems, and green algae was everywhere.

Although the restoration method in all three churches was similar, the results and consequences varied. The problems in Muhu have turned out to be rather extreme, whereas the conditions in Kaarma and Valjala do not seem to be so dramatic.

The technological method of Filatov-era restoration now appears controversial and, as elsewhere in Europe, has caused numerous negative consequences, whereas the quality of his activities theoretically and conceptually cannot be underestimated. His method was at least as up-to-date as the technical side of restoration, and in this case in a positive sense. The manner and method in which the whole process was graphically documented could be a model for today's restorers. The condition of the paintings before restoration and all stages of work were recorded in great detail on a scale of 1:20 on millimetre paper; in order to map the preservation scale of the paintings, contact copies of the surviving colour fragments were produced with tracing paper (1:1).

Besides the quality of documentation, Filatov's contribution to restoration on a theoretical level is highly esteemed. This primarily concerns the analysis of values expressed via the aesthetic presentation of the paintings or the reintegration method. In cases in which the reconstruction was justified, the restorer's additions can be clearly distinguished from the original, as he used tone-lighter pigments and/or cross-hatching or vertically running strokes, both deriving from *tratteggio*. When the reconstruction was hypothetical, 'neutral retouch' was preferred. The choice of the retouching medium relied on the principle of reversibility, and thus a water-soluble binding medium was used.

Filatov should, first of all, be evaluated in the context of his time. His work can, in any case, be seen as scientific conservation-restoration, based on modern principles and developments. Unfortunately, the results in the physical sense have occasionally proved irrevocable –

in unsuitable climatic conditions the 'science' corresponding to the spirit of the times, in this case synthetic preservatives, might have destroyed the murals instead of preserving them. The gravest mistake made at the time was to uncover the paintings in conditions where the problems of the architectural environment in the church could not be solved.

A new period in wall painting restoration was contemporary conservation-restoration, starting with a change in polity and the relevant cultural politics in the early 1990s. New economic opportunities emerged, international professional know-how arrived in Estonia and people's awareness of values increased.

This period was marked by a dramatic kick-off in 1993 in the Muhu church where, on the initiative of the church and with foreign financial help, large-scale renovation work was undertaken by the Swedish construction company Skanska Sydost AB. At some point, the whole process slipped out of the conservation authorities' control. As a result, the choice of unsuitable materials, improper work methods and an unqualified workforce caused irreparable damage.

Today's wall painting conservation has mainly been done by two restoration companies: *KAR-Grupp* (mainly Anneli Miil, Mare Tael and Sirje Sorok) and *Rändmeister* (wall painting specialist Eva Mölder). They have tackled emergency repairs on the already uncovered wall paintings in the Muhu church and in the vestry of the Kaarma church.

In the course of urgent architectural restoration work in churches, a number of new polychromy finds have been discovered, partly cleaned and conserved, for example in Pöide, Hanila, the Kaarma nave, Martna and Püha. Both companies

prefer the conserving, archaeological approach, and do minimal reintegration or tackle wider aesthetic presentation. They primarily attempt to preserve paintings uncovered underneath the layers of lime in complicated micro-climatic conditions. Each object requires a different method, depending on the condition of the church and conservation needs, but the conservation technology can be summarised as follows: paintings are usually uncovered mechanically, plaster is fixed with lime-based consolidants, paint layers are fixed with Ledan, and the lack of binding substance is compensated for by acrylic emulsions. Retouchings are carried out minimally, mostly only to integrate the added plaster fills into the surrounding wall space.

No expertise or conservation method really works unless it is accompanied by regulation of the micro-climate of the building as a whole. The newly restored surfaces are again and again covered by green algae, which is the first sign of the climatic instability of the building, and a huge amount of moisture in the walls; several churches have problems with the crystallisation of salts on the surface. Another problem is widespread bacteria that cause the finishing layers to turn pink.

The main task today is still eliminating the consequences rather than the causes, trying to find a way to repel micro-organisms on a short-term basis. Although extensive architectural restoration work has been carried out in churches since the late 1980s, the interior climate has not significantly improved. Eliminating the causes is much more complicated, time-consuming and expensive; the causes of humidity are also still partly unexplained.

The positive side of today's conservation and restoration of wall

paintings includes the somewhat increased number of analytical studies and, especially, a changed attitude regarding materials – the work no longer includes only the paintings but also the entire interior rendering. Attention has also been paid to working out conservation methods. Within the framework of some conservation work, chemical analysis of pigments and binding media has been carried out, and in most cases stratigraphical studies have been undertaken as well. Unfortunately, these efforts are cursory, forming just a part of the conservation work documentation, without any interpretation to give it proper meaning and value. There is also a significant difference between the two companies dealing with murals: *Rändmeister* invites art historians to take part in their conservation work (at least as consultants), which has made it possible to study the finds more thoroughly later. As a result, the cooperation between conservators and art historians has produced work that relies on the synthesis of historical, stylistic, iconographic and material-based information about the historical rendering and décor in the Hanila, Kaarma and Martna churches. How effective the study of materials can be is evident in the analysis carried out by Werner Schmid and Hilikka Hiiop in Valjala in 2005. They analysed the original materials and technologies of paintings, which enabled them to re-interpret and specify the existing art historical views.

Learning from the drawbacks of the past and present conservation practices in Estonia, and relying on European practices, wall paintings and the entire historical finishing should, in fact, be primarily tackled by considering the building as a whole. Uncovering new

wall paintings in a situation where the financing, planning and realisation of the work do not take into consideration the whole building, but are limited to the layers on interior rendering, can endanger the survival of one of the most precious sections of our cultural heritage.

Although the share of (scientific) research in contemporary Estonian conservation of murals has increased, we should actually focus on preventive research that deals with the potential conservation problems of original materials and their contents before any action is taken, and not try to eliminate the consequences. Restoration as a whole should become fully research-based, as it is in contemporary European conservation practices elsewhere. Each conservation project should be preceded by scrupulous study, and financed as a separate stage of the work. This process should address the building in its entirety (micro-climate, structural problems etc.), methods of uncovering and conserving the paintings and an analysis of original materials and technologies.

*Translated by Tiina Randviir  
proof-read by Richard Adang*