The Codex Eyckensis (8th Century): Re-evaluation of the 20th Century Restoration and Conservation Treatments

The Codex Eyckensis was originally written at the scriptorium of Echternach (Luxembourg) in the 8th century and was brought to Aldeneik (northeast Belgium) by Saint Willibrord. This restrained pre-Carolingian codex is a splendid example of the dynamic confluence in the 8th century of the insular formal idiom and the artistic characteristics developing on the European mainland. After a drastic conservation treatment in 1957 with heat sealing plastic foil, the Codex Eyckensis was fully conserved in the 1990s by removing the Mipofolie lamination and reconstruction of the missing areas with parchment pulp. Since then, the manuscript was kept in the crypt of the Saint Catherine's Church, a place with a highly unstable climate. After 25 years, the need for a reassessment of the Codex Eyckensis became clear as new possibilities for in-depth research have developed considerably. In the present survey, the condition of the parchment and the stability of the leafcasting with parchment pulp was evaluated. Multispectral imaging and material technical analyses aimed to shed light on the condition and the creation of the writing and illuminations within. As part of this new survey, undertaken 25 years later, the codex has been reassessed using nondestructive analytical and imaging techniques. Able to link conservation information of the past with new data and evaluating protocols applied at the end of the 20th century will contribute to the future preservation of the Codex Eyckensis. During the campaign in the 1990s, no material technical analyses had been carried out. The combination of x-ray fluorescence spectroscopy (XRF), XRF mapping, and Raman spectroscopy has now been used to characterize the materials and inks used in the Codex Eyckensis creation. The removed Mipofolie foils have also been archived since the treatment of the early 1990s. These foils were highly adhered to the parchment, and it was not possible to remove the foils without removing some small paint fragments. These were analyzed using complementary but destructive analysis techniques aimed at the identification of organic components (binder/colorant). In addition to the analytical data, imaging also contributed to the condition evaluation and material characterization. Within the framework of the Reflectance Imaging for Cultural Heritage (RICH) project, a multispectral, multidirectional, portable, and dome-shaped acquisition system was developed to image in photometric stereo. Visualization of pigments was realized based on reflection maps. These findings were evaluated using the data obtained in a laboratory setting in addition to the data obtained through XRF, XRF mapping, and Raman spectroscopy.

The new assessment and technical study of the Codex Eyckensis reflects the complex material and conservation history of the 8th century codex. As the treatment was well documented 25 years ago, the new data is adding multiple layers of information. This research provides new insights into the origin and the creation of the illuminations and contributes to the in-depth knowledge of the oldest manuscript kept in the Low Countries of Europe. The study gives reflection to the dynamics of conservation history and the importance of ongoing data collection, revealing new challenges in technical documentation with recent imaging techniques and nondestructive analytical tools.

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